

**BUFF
COLORATION
IN POULTRY
2008**

BY DANNE HONOUR

BUFF COLORATION IN POULTRY 2008

NOTE (Original done in four parts, part 1 1983, part 2 1984, part 3 1986, and part 4 1990) (Poultry covered here includes chickens and excludes other types of poultry) The purpose of this printing, is to furnish breeding information and direction in breeding “Buff” colored varieties in our breeds of poultry. All four parts were combined for the first time in 2001 and this revised edition contains many more additional articles for 2008. No other booklet contains more articles on buff color breeding and history.

A buff of buff. A connoisseur of beige. An admirer of manila. An enthusiast of camel.

Edited and Published by Danne J. Honour

Dedication; This book is dedicated to the breeders of Buff colored poultry both past and present; who fell in love with the buff color and it's most fascinating beauty and unique breeding Danne J. Honour 1983

(TABLE OF CONTENTS INCLUDED IN THE BACK OF THE BOOK)

HOW TO BREED BUFF IN COCHINS

BY H.N.HANCHETT

Nov.1904 R.P.J.

For the color of males, I favor a medium shade, perhaps a trifle darker than the color of a new gold coin; he should be even in color and with rich buff under color. Wings and tail should be as near solid buff as possible. The females; a shade lighter color than the male and buff to the skin. A pullet with white under color in neck is almost, sure to be worthless as a breeder.

The extremely light color bred so commonly a few years ago in order to get clear wings and tails, is giving way to a darker, more sensible sound, and to my mind, more beautiful shade of buff. These very light, lemon-colored birds usually "go all to pieces" in color as cocks and hens, and seldom prove satisfactory breeders.

We have never favored the lemon buff yet have no difficulty in producing plenty of solid buff birds that have sufficient strength of color to make them strong breeders as well as fine exhibition birds. Black and white in the plumage are defects, which all breeders of buff fowls are seeking to eradicate. We consider white the most serious and would rather breed from a bird showing some dark in wings and tail, than from one showing white. Never breed from a bird showing white which had a sire or dam with the same defect.

BUFF ORPINGTON COLOR OBSERVATIONS

(From the A.P.J. yearbook 1913)

In Buff varieties the term "tri-colored" applied to cockerels in which should be of one uniform shade, but the hackles and saddles and tails are much darker, and the wingbow is darker still.

In Buff Orpingtons it is impossible to breed 100% cockerels sound in flight, with corresponding perfection in the pullet's tails. How those points run together and what connecting link? Generally the yards that breed the soundest tailed pullets often throw the most cockerels faulty in flights and yards where the pullets show a tendency to darker buff in tail, will breed cockerels sound in flights. Some breeders say to mate sound tailed pullets and cockerels; this is a mistake as there must be a blending of dark and light somewhere.

BUFF COLOR FEEDING

(From the A.P.J. yearbook 1913)

Yellow or red maize will make most white fowls more yellow than white maize. Hempseed will darken the ground color of a moulting Brahma hen. The constant use of iron, whether natural chalybeate streams or given artificially, tends to intensify color of legs and plumage. Cayenne, constantly administered throughout the whole period the feather is growing, converts yellow into deep orange. Sunflowers (seeds) help put a gloss on the plumage.

HOW A FANCIER PRODUCES BUFF COLOR

BY GEORGE J. GABLE

LEGHORN WORLD March 1919

The production of good Buff Leghorn color is a most fascinating problem. I have experimented with most every kind of a mating from the, old orange color which is a thing of the past; to lemon-buff, and found the latter will, when mated properly, produce a good percentage of very good colored birds. These lemon-buffs of course must be sound, free from white. A little black ticking in the tail will not hurt, but the mate must be clear and the following year another clear colored mate used on the offspring. Two birds mated together with black ticking in the tail will produce offspring almost black in tails.

If your birds are strong in wing and tails, mate clear colored birds together. When using a lemon-colored male with rich under color, see he has a good strong breast and very clear ground color. If you use a dark male, use females just a little lighter. This mating will produce some good colored cockerels, and also some very mealy pullets worthless as breeders. A very small percentage of pullets will be of good color from this mating.

A good mating is of a high colored male; one of good soft medium shade from head to tail, with rich under color, good breast, wings, coverts, and tail; sound color same shade as breast. Mate a female clear and sound, free from mealy or shafty feathers, with exactly the same shade as the male's breast. If I had only one such female, make a pair mating. I have for several years made pair matings with very good results. With pair mating you will know just how your birds are bred, and it is a good way to learn how to mate up buff birds.

THE COLOR OF BUFF COCHINS

BY DR. J.J. HARE

(R.P.J. 1908)

Buff color is made up principally of yellow enriched and darkened by brown. The constituents of brown are yellow, red, and black. Buff color being a

brownish yellow, it is composed of a large percentage of yellow, together with small and varying proportions of brown, or red and black; according to shade. Orange is not brownish yellow, but reddish yellow. The additional word ochreous to orange conveys the idea that the red of the orange should be toned down by a little ochreous or brownish yellow. Rich, clear, orange ochreous color; corresponds closely to the Standard rich golden buff color.

Lemon buff is a beautiful light yellow, but to be beautiful it has to be seen under the most favorable conditions of shade or reflected light. Direct strong sunlight, however makes Lemon buff look weak and washy. This color readily fades. Rich golden buff or yellow tinged with brown is much stronger and more durable a color as seen under all conditions of light and weather.

The dark buff favored in England is because it does not show weakness of color under their brightly lit show halls. The dark buff shown in the brilliantly lit up shows with glass on all sides and roof; brings out the beauty and depth of the dark rich buff.

The shade of buff is affected not only by the amount of light in the exhibition building and whether the light is direct or indirect; but also by the very material used to bed the fowls. By chance I bedded some buff fowls with coarse clover hay instead of the usual white straw, and the buff color was much improved and enriched.

MATING BUFF ROCKS

BY C.L. PENNSYLVANIA

(R.P.J. 1908)

My best success in Buff Rocks has come from double mating. For cockerels I use a male of a dark even shade, a shade darker than golden buff. I don't use males with any white or gray in wings. Females with an even shade of buff as near the color of the male's breast color as possible. A little pepper in the female's tail will not hurt, but you can't get them too clear or free from dark.

For pullet breeding I use a light colored male with smooth surface color, good under color, and clear tail and wing color. (A little white or gray in the males' wing flights will not hurt in pullet breeding.). The females for pullet breeding should be as near the male's shade in buff as possible. If we were to use hens that molt their new feathers the same as when pullets, we would not have so many faded out hens.

For single mating of buff color I use a good golden colored male with good under color and clean tail and wings. Females with good rich golden color and plenty of sound under color. This mating will breed a large percentage of good colored cockerels and pullets.

BUFF LEGHORNS

BY HERBERT H.KNAPP

R.P.J. 1927)

In 1910 I started with Buff Leghorns. This strain, which was developed in Denmark for production, was large, hardy and disease resistant. They had no other Standard qualities. I spent years eliminating poor type, short backs, and high tails. The color was bad; brown in the tails of both the males and females predominated. The majority of the males had very dark wingbows. Legs were short but they were deep bodied and excellent layers.

I did not want to cross my line with others to improve color, as I thought it might ruin the grand egg production I had. Without adding a drop of blood, we have transformed our Buff Leghorns into birds of real beauty, which closely conform to the Standard. Back and legs have been lengthened and a beautiful golden buff color has been established. The most effective culling for color was done just as the chicks came from the incubator. Small brown specks nearly always appear in the heads, that later show dark in the main tail feathers.

The consistent elimination of such chicks for 16 years, along with rigid culling of breeding stock, has solved our color problem. We were able to fix a shade of buff that comes back strong after the molt too, by special matings. We always had large numbers to work with. Dan Young once asked me if it was better to start with fancy stock and develop production or the other way around. My opinion is one process is about as good as the other, the big point is that they both require years of time.

ADVICE FROM BREEDERS

A.W. Rudy writes; As a general rule the dam stamps size, type, and constitution, while head points and color (buff) follow the sire. The proper shade of buff and the one that will hold, is a golden buff. A lemon color is beautiful when new, but will not last as a few months exposure to the elements will fade it. The orange shade is easy to breed, but it becomes patchy. To get uniform buff, avoid extreme matings. Under color should not be over looked. Under color too dark or deep in very dark birds will throw black in wings and tails. (1905).

J.J. Bleakly, writes; In females select for evenness, and freedom from shafting or mealiness. Never use a male with white or light under color in the neck. Never use females whose surface color on the neck or hackle, is the slightest shade darker than the color of her wingbow and back. (1911)

Maurice F. Delano, writes; Cockerels from an extreme buff mating, usually average slightly better quality than pullets. The contrary is true of a

proper buff mating, as it is easier to produce sound colored pullets in quantities than sound males. (1906)

S.T. Bartlett, writes; The tendency is for offspring to be a slight shade lighter than their sires in buff varieties. (1906)

T.S. Hewke writes; the cause of lacing in the back and wingbows of buff females is the use of males having two colors in hackle and saddle (feathers with dark centers with lighter edges). Males of exceptional high color, not “hot color”, but those with great luster; often produce laced females. (This is flat buff laced with lustrous buff) (1915)

BUFF LEGHORNS OUT WEST

(Poultry Item - 1910)

BY F.A.TECKTONIUS

I bought the best stock I could, paying attention to strain development rather than to building palaces for the birds. I was careful to test out birds for foreign coloring, then balance the color as nearly as possible, keeping away from imperfections-smokey, spotted, or white feathers. We have now a color that is uniform to a fairly large degree. In tail and wings sometimes there is present white or black and occasionally both-especially in the males. In females no great amount of trouble in getting proper color throughout them. Mealiness results from mating of extremes. Where white shows in one parent and dark chestnut in the other, these colors will appear in the wings and tails of the chicks. In matings where the plumage is not extreme in foreign color, the disposition for the color features in buff breeds is towards blending.

BUFF ORPINGTON COLOR

(R.P.J. book “Orpingtons”1911)

BY H.H. KINGSTON, JR.

The golden rule in breeding buffs is; the male transmits type and color, the female transmits size. Like all good rules, it has exceptions .Do not breed birds widely different in color, a golden buff male mated to dark females will never produce exhibition specimens. You never can breed good color from a male with red on the wingbows and almost white under color. In cockerels select even surface color, good under color, clear buff wings. The darkest cockerels will show some black in main tail feathers, but none should have white in any section. In selecting hens after fully moulted, sort out the largest, which have moulted out a rich even buff, taking for granted they have been culled over for

other defects as pullets.

For pullets, pick out the largest and cull for defects. Cull those that show any trace of mealiness or shafting. Pick those with even surface color of rich golden hue and mate with the best cock bird of a shade or two lighter. If you do not have enough good females for a pen, mate up only two or three of the best and you will be rewarded in the fall.

Aim in all matings to compensate the defects of one sex by good points in the same section of the other. I have learned through costly experience that the shortest route to success in breeding buffs, is to buy stock from one reliable breeder whose birds have been wining for a number of years. After getting such stock, stick to it, and when you need fresh blood, go to that same breeder for it.

EARLY BUFF WYANDOTTE COLOR

(R.P.J.book"Wyandottes"1911)

BY F.W. PROCTOR

It has been equally as difficult to clean up the black (from R.I. Red blood) as the white (from the Buff Cochin-White Wyandotte blood) Feather legs and green or willow legs, are easily got rid of. The slate under color of the R.I. Red offsets the light under color in the Cochin that made the Buff Wyandottes. The Cochin-made Buffs come in for the size and color that has made the present Buff Wyandottes. The Golden Wyandotte had within itself all the requirements for perfecting the Buff variety, giving the necessary patience to eradicate the black pigment and evolve it's red equivalent; using Golden specimens in which much black lacing was lacking. The slate under color being objectionable, a short cut was a White Wyandotte cross. This was done by Mr. Drevenstedt, with success but lacking depth of color shown by other strains. The use of white required to be balanced by additional red, which the Buff Cochin blood affected.

The earliest Buff Wyandottes established a vogue for a deeper tone of color than had been most approved in the Buff Cochin. The new Buff Leghorn from their derivation went to the light extreme. Then the color fashion for Wyandottes followed the Leghorn; presenting fewer immediate obstacles to a uniform color tone. This extreme then gave way to the permanent ideal of a true buff.

Analysis of buff. The darker being a black-red, of which the R.I. Red exemplifies, and the lighter a modified Pyle whose white tendencies are the negation of black. A natural affinity between the pigments most perceptible in the red (or buff) coloration, entails black in the degree that red is developed. Buff in its most approved phase constitutes that logical medium between it's black-red and Pyle manifestations in which neither a black nor a white tendency offers any serious obstacle to the exclusive production of red pigment with due blending (distribution) this degree of red development becomes buff, a

discriminative term as this color yields a distinct sensation, in no way suggesting red.

A practical trait of Buff Wyandottes, derived from its Cochin ancestry follows its superior density of plumage. There is a constant relation between the color of feathers and their physical structure that has been little recognized, the buff of all colorations, having the fullest feather development. The buff has superior plumage protection from cold.

MATING BUFF ORPINGTONS

(From R.P.J. book Orpingtons 1911)

BY MAURICE F. DELANO

No fanciers have a harder color to produce in its perfection, than those devoting their energies to perfection of buff color in the various breeds. There are a very few fanciers of any breed that do not admire a buff bird of the true golden shade and of even shade.

White showing in under color of hackle, in wings, and at the base of tail, is a fault that will take years to rectify completely and not lose on richness and even surface color. Minor color defects that are fast disappearing are: red wingbows in males, penciling or ticking in females, bluish legs, yellow legs, and mealiness and patchiness in both sexes.

Among the first principles of color mating there are a few points I wish to make most emphatic. Never use extremes of color. Never use females showing mealiness over the wingbows. Never use a reddish female with the web of the feather very pronounced (shafty). Never use a male with a red hackle and at the same time white in under color of hackle.

From a color standpoint, take into consideration the known qualities of their direct ancestors, when mating buff birds. Select even colored females, ranging from the same shade as the male to two tones darker. (Do not use females over two tones away from the male in color). The lighter males are mated to females that are absolutely sound in under color in every section. It is not necessary to use dark females with the lighter males, as the lighter females that are sound under will have the necessary strength of color pigment to mate with a male of known origin. Darker males are usually very sound in under color, yet the same rule applies, and females mated with them are even and rich in color, with sound under color. Give preference to hens that have moulted right as to color.

COLOR MATING BUFF LEGHORNS

From R.P.J. book "Leghorns"

BY AUGUST D. ARNOLD -written 1900

Most of the birds imported at the time (1890) were of uneven color, and possessed as much white in the tails and wings as they did buff. Many had blue, and others willow legs. By a few years breeding we succeeded in getting black in tails, instead of white; which was preferable at that stage. In a few more years a great improvement was noticed in color of wings, tail, also leg color. We have noted off leg color particularly where under color is ignored.

Do not mate light birds together as the "cottontails" are apt to sport. It is better to breed darker birds together than light ones. Mating medium color together for a season or two will produce good results, but it is safe to keep on the dark side. As good mating as we know of, is females of dark buff with male one shade darker. We say dark buff; we do not mean red but a medium dark. A medium buff is what we should strive for Evenness of color too, is of greatest importance; all sections should be one even shade.

BUFF LEGHORNS

(From R.P.J. book "Leghorns" 1911)

BY J. COURTNEY PUNDERFORD

We cannot be too particular in mating, for on this depends the success or failure of a breeding season. It is much better to have three breeders all having the required points, than ten with off-color, bad combs and general defects. Never use a male with decided white showing in tail or wing feathers; a little smoke in tail is not a bad defect in a breeder, but of course a clear tail is the thing. Have as deep a bay eye as possible. An even shade of buff is desired with no decided red on wingbow or back. Be sure to keep away from red shade. Now select your females to fit in with your males and have them strong where your male is weak. Be sure of this, as it will help counteract his faults in the offspring. Do not use females having shafting or those much lighter or darker than the male; otherwise mealiness and off-colored youngsters will be the result. Buff demands shade and plenty of it. I use a nice grassy run, which is entirely covered by burlap and a coop with a burlap window. The grass keeps their feet yellow and in good condition.

BUFF LEGHORNS FOR SHOW

(R.P.J. book "Leghorns 1911)

BY WILLIAM H. BUSHELL

I like to breed from a male with clear buff wings and hackle clear golden buff clear down to the skin, and then you can expect good young stock. In picking out females to go with this male get them as near an even color like the

breast of the male and clear wings. If you are breeding to a light colored male, some dark bronze in wing feathers will do all right. Females to go with the dark tailed male may have the tips of the tail feathers a very light buff.

I like a good deep under color in females and in the dark male a very strong under color. In using females with very light buff feathers in tail tips, I keep the smut out and produce the rich golden buff. Some claim that Leghorns are wild and you cannot keep them in a ten-foot fence. I keep mine in a four-foot fence. It is the people who handle the birds that are wild, do go among your birds quietly and feed them out of your hand. Teach them from the start that you do not intend to hurt them and do not try and catch them to show everybody who comes your way. If you take a stranger into your yard with you, you go first and take some food they are fond of, get them all around you and show people how nice and tame your birds are.

BUFF ORPINGTON COLOR

BY WM. BARRY OWEN (Owen Farm)

From R.P.J. Jan.1912.

Buff color should be entirely free from any suspicion of reddish quality or cast, and it is in every case this reddish quality or cast, that causes a buff bird to be darker than Standard. Never mate extremes of color to produce a buff bird of ideal shade. A light male and dark female will almost invariably produce birds that are mealy, or a mixture of light and dark, not the smooth, all one color surface which is so necessary and desirable. The ideal mating to produce good birds of both sexes, is a male of good rich, golden buff type color with plenty of pigment; quills showing a good strong buff shade, under color as near equal in strength of surface color, strong under color of hackle (particularly down to the base), with clear solid buff tail as possible. From such a mating you may be sure of getting both sexes fit to go into the exhibition room and win.

MATING FOR BUFF

(From the Feb.1920 A.P.J.)

William Hobbs of Sunswick Farm, mates a Standard colored male to Standard colored female to produce good pullets in Buff Orpingtons. He can use a male a tone rich in color, mated to females with medium light hackles, to produce good colored males. (Tones of color indicated above present comparatively slight differences.)

Maurice F. Delano, mates rather strong colored females to Standard males and produces good cockerels. In breeding pullets, the following illustration will be of interest. Mr. Delano imported a light buff cockerel that won first at New York, 1906. His white did not show at N.Y., but he was such a

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

soft shade that he got white, almost showing on the surface of his hackle. He, however, was the sire of first prize pullets at N.Y., Cleveland, and Chicago, the next year. The competition was tremendous. This male sired a number of really beautiful pullets. Successful breeders of buff today are breeding a rich golden buff and the soundness of buff in Orpingtons is due to intensity and strength of color carried.

BUFF MINORCAS AND COLOR

BY LINDGREN BROS.

(From R.P.J. 1913)

In large birds such as the Cochins or Orpingtons, a little dark in the tail feathers is hardly noticeable, but the reverse is true of the Leghorns and Minorcas. Their sweeping sickle feathers and well-spread main tail feathers, make it imperative that they shall be solid buff throughout.

In mating our pens we use only males that have solid buff color in every section, of a uniform shade throughout, with rich under color. A little bronze in our females is not considered an objection, and we have found by experience that this is necessary to retain good under color. Solid colored birds on both sides are used for producing solid-colored pullets. A solid-colored male and female, with a very little bronze in the tail, are used for producing solid-colored males with good under color.

MATING BUFF LEGHORNS

BY JESSE J. WHEAT

(Leghorn World Feb.1919)

To get an even shade of golden buff, one must use birds of the same shade, year after year. Always select a male of the same shade all over. I find we get the color more from the male bird and shape from the female. Never use a male with light hackle and red wingbows, as this kind will never produce an even buff. Use a male with rich under color as this helps produce even-colored females. Use females as near the breast and body color of the male, you will get more even-colored birds. The size and shape of the comb, I find a great deal of this is accomplished thru the females.

MATING BUFF LEGHORNS

BY FLOYD P. PURDY

(Leghorn World Feb.1919)

I find the chicks get their shape from the female, excepting the length and furnishings of the tail, which most always come from the male. For color I select a male the nearest to my ideal, with neck, back, saddle, and sickle feathers; near the same shade as their breast and body color. It is sometimes best to use a male of little darker than ideal (with some smoke or chestnut in tail). I select a female as near the male's breast and body color as possible. If the male is strong in under color I use a female of lighter shade. If the male is weak in under color I use a darker female with strong under color. Never use a male with short shanks or a short back.

BREEDING BUFF MINORCAS FOR COLOR

BY EDWARD F. SCHMIDT (1920's)

A male not even in surface color will often produce a mottled surface color in the females he sires. (A male with hackle and saddle several shades darker than the rest of his surface color.) Your breeding males must be even in surface color with all sections blending, and rich under color. A light male will sometimes produce a few good colored pullets. A little bronze in the tail of either sex, mated to clear tailed mates, will help produce rich under color in males. Do not mate together color extremes.

The best system to follow is to select a male that is strong in under color and mate him to females as near Standard color as possible. Light or lemon-buff color is extremely hard to hold. Buffs are here to stay and it is up to the breeders to increase their popularity by showing beautiful birds with a wonderful sheet of rich golden buff color, with sufficient strength (richness of undercoat in males) to reproduce it's excellence in a large percentage of the offspring.

In selecting a buff male bird to breed from, I am in favor of the rich golden buff .An entire sheet of surface color being of the same blend, with rich under color and sound hackle. The females should be free of mealiness, the wings free of foreign color, especially white. The open wings should be the same shade of color, matching the surface color of the bird.

If I have a male of deep shade, I select females for him, just a shade lighter in color, and if you follow this year after year you will get an even flock of buffs. From such matings you will occasionally get an even buff of a lighter shade than the parent stock; and so get them the Standard color. Those intending to start breeding a buff variety want the best to be had and a uniform flock of evenly colored birds will always find ready sale. Buff color, when it is a rich, even, golden shade; is most desirable and attractive and its admirers are many.

HOW TO BREED FOR COLOR IN BUFF LEGHORNS

BY C.M.HERREN

In breeding for the buff color in Leghorns, one must bear in mind that the buff of this variety is not a dominant characteristic, and that both the white and black have stronger tendencies than the buff. A tendency toward either one must be counter - balanced by the other. The buff color breeding in the Leghorn is more difficult than in Orpingtons, Wyandottes, or Rocks. Since these three have been able to go to the Buff Cochins for color without going so far away from type.

Mealiness is simply a reversion to the early Buff Leghorns. It is an ancestral inheritance, which will occasionally crop out. All that we can do is to lessen the tendency from generation to generation until it has almost disappeared. Few of us are so fortunate as to have our buffs free from the lighter shading in the web of the upper sides of the tail and wing feathers. If free from the lighter shading, we are apt to find a little smoke or pepper or both. Anyone so fortunate as to have birds with wings solid buff, main and secondary flights, coverts and quills, with tail feathers correspondingly good; the question of mating for color has been materially lessened for him. There is always a tendency for some of the offspring to become offshade, either going to dark or to the light.

When a breeder has determined the shade he most desires and he finds neither male or females right to reproduce this shade, he may take stock of the females, choosing those nearest the desired shade giving attention to evenness of surface. If the females are a little light, choose a male that is a little dark with depth of under color, good quills and even throughout. If the females have light tails select a male with a little smoke. Check the male's hackles, back, and saddle feathers to see that there is some color to the quills. If dark females of similar color to the above male, were mated to a male of this type; the offspring would be nearly red with pepper in the tails. If you have females too dark, use a male just a little light. This mating will not be as satisfactory as mating lighter females and a darker male; as far as producing a large percentage of good colored offspring. As a parting shot, let me emphasize, "breed for evenness of color rather than shade."

PULLING FEATHERS

BY DANNE J. HONOUR 1982

When pulling tail or wing feathers, it must be done several months before a show, in time to grow back and even longer for sickle feathers. These feathers should be cut off about an inch and one half, from the feather socket. Then allow this stub to dry the quill out for about two weeks before pulling the stub out. This will prevent bleeding and will not damage the feather socket. More than one bird has bleed to death from pulling a fresh-living tail feather. The extra

trouble and time in drying out an old feather, will be time well spent on top birds, and the new feathers pulled in this manner will have a much better chance of being the proper color too. It is best to plan on the new feathers taking extra time in coming in, as to not have them grown in enough for a planned show. The smaller body feathers are not likely to bleed and do not have to be dried down.

MATING BUFF LEGHORN

(From R.P.J. Dec.1912)

BY JAMES COURTNEY PUNDERFORD

I am not an advocate of the light buff or of the extreme dark, but there is a happy medium. Select your chosen shade of buff and breed to it, never mating extremes; for mealiness and shafting would be the result. I am a crank on quill, that is, I want my breeders to show a buff quill practically up to the hilt, shading slightly as it nears the body. With this great asset in your breeders and soft under coloring, better surface color will always be produced.

Some matings I have culled down to as low as three females and one male, simply because I could not get every section, both in male and females; to exactly harmonize. By all means have a small mating like this, every bird possessing Standard requirements; than a pen of fifteen females and a male with many specimens being off either in type or color.

DOUBLE MATING BUFF LECHORNS

(From A.P.J. Feb. 1915)

BY J. COURTNEY PUNDERFORD

To produce exhibition males: The male should have not over five points to comb; the blade should be small and setting well off from head. Deep bay eyes. Golden surface color with strong under color and buff quill. Well up on his legs with good back and well spread tail. Should have no white in any section. A little pepper is preferred to white. Mate such a bird with females that have, small neat comb, good bay eyes, well spread tail and color about two-shades lighter than the male. Females should be a bit rangy. Both sexes should have deep yellow shanks.

To produce exhibition females: The only difference in male used for getting pullets would be to use a specimen with not quite such deep color, both surface and under. Females to go with him, similar to above mating; keeping in mind to have the females two shades lighter than the male.

BREEDING BETTER BUFF LEGHORNS

BY MRS. CHAS. R. HUME

Select a pen of your very best females, excluding all that have any white or dark in wings or tails. Then buy the very best male you can afford from a reliable breeder. Get one strong in points yours are weak. Pursue the same lines and you will have a good flock. If your birds are not good in under color, use a male with extra fine under color .If you have even one female that has the rich under color; use her and hatch every egg you can from her, and you will get some fine chicks if she is rightly mated. I dislike reading that it makes no difference regarding under color, for my experience is that it makes a big difference. Soon if under color is ignored you will get a lot of “cotton-backs” under the surface and spots of white appear through and mar the surface.

BUFF COLOR & HOW TO BREED IT

BY T.F. MCGREW (1920)

The top color of both male and female always should be more rich and brilliant than the balance of the plumage. This comes from the natural glossing over of the top plumage. One feature of the greatest importance is the laying on of the color as close and dense as to present a strong surface color, which should be upheld by a shade of under color sufficiently strong. Specimens carrying the richest under color, other things being equal, should be given preference. This means that where specimens are shown, each of which carried an unbroken shade of color throughout and in every section, and had true type for the breed; that the preference should be given to the ones of this kind having the best under color. There is but one way to sustain true buff color; to have the surface color properly under laid with a shade of under color that is sufficiently strong.

My experience with buff goes back to 1862 and my Buff Cochin strain “Gold Dust”. William Cook, now dead; agreed with me on buff color. He made Buff Orpingtons, he made them buff and kept them buff to the end of his days. He knew more about buff than almost anyone.

The safest and best of all selections for breeding buff color, will be hens in their second year that have the true shades of buff surface and under color. Such hens mated to a sound in color cock bird. The second best, would be the same hens mated to a cockerel fine in color and from a pair that was equally good or better in color than the cockerel. The true test of buff color is the first full molt. Pullets and cockerels that have shed out the old and have grown a new coat of feathers that are sound and true are safe to count on for reproducing the same sound color.

BUFF COLOR

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
BY FRANK F. CONWAY (1921)

Let me point out the folly of continuing to breed a lighter shade of buff from which one could hardly avoid getting a larger percentage of off-colored flights, tails and under color. Also mealiness on wing butts on females. I felt that a lemon color was not stable enough to hold out, as it is natural for a buff to breed and fade lighter. In mating to produce buff color, to maintain this soft golden buff color, I always aim to match my breeding pens to resemble one color. Both the male and female side, if possible; that is I match the breast, wing butt and shoulder feathers of the male, to the color of the females. I choose hens that have held up in color, and not gone shafty and patchy. I never use, unless it cannot be helped, a male or female showing weakness in tail and flight feathers. Considerable attention is paid to soundness in under color throughout. I have followed this system, which always has thrown a good percentage of even colored birds of each sex.

Type, which signifies the breed to which the color belongs, is one of the most important considerations. It is not always possible to select -breeders to carry all desired points, but whatever you do, avoid the same weaknesses on both sides. If you find you have only 3 or 4 females of an ideal to mate with a selected male; DO NOT fill up the pen with other females that may not suit the set-up and style of the male. Make small matings that contain WHAT FITS together properly. The most successful breeders get their best cockerels and pullets by breeding only 3 or 4 females to a male, especially when mating adult birds of 2 or 3 years old. The most successful breeder; is a fancier who studies his birds, keeps records year in and out for reference, taking the time when mating up his pens; spending days instead of hours. It is not always the winning bird that produces winners, unless such winners are also properly mated up. Unless you shade your buffs from direct rays of sun and protect them in rainy weather, your entire endeavor will be wasted. If you desire to exhibit buff and win, shade them early at least before the adult feathers show through the chick plumage.

BUFF COLOR BREEDING

BY C.S.BYERS

(From Oct.1922 R.P.J.)

In Buff Orpingtons no breeder can "hold" dependable buff color (including hackle, wings, and tail, free from white), without the permanent use of specimens rich in under color in every section. This richness of under color is of such basic importance that it would be a "crime" and would spell complete color wreckage if it were disregarded by judges in shows and by breeders when mating for reliable results. Mating good surface colored birds together with disregard to under color will not produce good results.

POINTS TO BE OBSERVED IN BREEDING BUFF LEGHORNS FOR COLOR

(From the book "All About Leghorns 1922")

BY C.M.HERREN

Select both males and females for evenness in shade in all parts except that the tail of male may be a full shade darker than that of the other sections. The male should have strong under color. The under color of females may be less pronounced. The shafting of main wing flights and main tail feathers must be solid buff. If in the male they are deeper buff than the web, so much the better. The shafting of the feathers of hackle, back and saddle of male must show strong coloring, that of female must show at least a fair coloring. (Good color of shafting is relative to the surface color). A bird of quite light surface color should have correspondingly light shafting and one of dark surface color should have correspondingly dark shafting. If the females of a mating are all of the exact shade desired in the females of the young, and then select a male that is a full shade darker than the females with which he is to be mated. This gives the best color mating.

If females are lighter than the color desired, select a male of at least two shades darker and hold strong for deep under color and shafting. In such a case, just a hint of smoke in tail of male will not be amiss. If the females are darker than the shade desired in the female offspring, and especially if they have strong under color, a male of the same shade of the females or even a shade lighter, may be mated to them. Mealiness will not result from this color mating as was formerly thought. Mealiness is simply a reversion of earlier ancestral traits. The last two matings will not give so large a percentage of good colored young as the first, but often must be resorted to in consideration of type, station, and other factors.

BUFF LEGHORNS

(From the book All About Leghorns -1922)

By GUY HATTEN

For profit do not pass up the Leghorn and for a beautiful color that is a pleasure to breed, get the Buffs. You will ^{never} tire of their color. I pedigree practically every chick, knowing the dam and sire of the chick adds much interest as well as a great breeding knowledge, and also enables me to improve my matings each season. You can tell your sound colored birds from 5-8 weeks old; even the shade of color is discernible. After a little practice you can tell almost exactly what your chicks will be six months later. This enables you to

cull your birds very early without danger of picking out the wrong birds.

Nerve specialists prescribe rooms painted warm yellow or buff. It takes three degrees less heat to keep occupants comfortable in a room painted buff than it does any other color. I have cured myself of many a case of nerves, by going to the chicken runs and studying my Buff Leghorns.

BUFF LEGHORNS AND HOW I LIKE THEM

(May 1924 Leghorn World)

BY GEORGE W. REX

I prefer the medium shade of buff. I like it soft enough to show evenness in all sections and a golden hue to show richness of color. A male bird that does not have under color to the skin, I consider worthless as a breeder. A bird that is soft and has enough color to molt out as a cock bird, I value as a breeder.

In females I like a soft medium satin color. A female that is dark and loaded down with under color will breed uneven cockerels. To breed good buff color one must know what colored birds to mate together so that their color will blend. Dark and light colored birds do not produce well unless they are from the same strain and bred on the same lines for a number of years.

The Buff Leghorn female does not possess the depth of under color as some of the larger buff breeds, for the simple reason the larger birds are loose-feathered while Leghorns are tight feathered. I find that a medium colored bird will stand the sun and rain a great deal better than a dark bird will. In conclusion I will suggest that all breeders breeding the light shade, arrange their matings to add just a little more color and all breeders breeding the dark shade decrease one shade. It will benefit all of us because both Eastern and Western buff breeders can then send their birds anywhere in the U.S. and the birds will be sure to blend in color.

WHEN IS A BUFF LEGHORN BUFF

(APRIL 1924 Leghorn World)

BY C. M. HERREN

The East breeds a lighter shade of buff and the West and South. favor the darker shade. The breeders should be careful they do not approach the danger line bordering on red when they insist on the darker shades of buff. Many of these dark buffs, especially in males, are beyond the border of buff and in the realm of red. One reason for this insistence on darker buff is the person may plainly see an under color. Mr. Hatten has called attention to the fact that in females, the hen does not show so much under color as the pullet. For those

unable to discover under color in HENS, compare the buff feathers to those of White Leghorns, and you will discover a decided buff in under color.

We are often told that we must beware of the “too light buff, for it is apt to breed white. I find it is less dangerous than the too Dark buff, for the dark buff will more easily become red than will the light become white

MY EXPERIENCE WITH BUFF LEGHORNS

(May 1926 Leghorn World)

BY MARCUS L.DAVIDSON

I have bred the Buff Leghorn for 14 years. Prior to this time I had bred Bantams and it was not until this time, age 17, that I was allotted a place to raise large fowls. Since then I have tried out a dozen varieties. I finally discarded all of them but the buff varieties, which is my favorite color. I think there is nothing prettier than to see a big class of Buffs in the showroom with that beautiful even golden buff color and think we will see the day when buff color will again predominate in the showroom.

The Buff Leghorns are fine layers, and lay as early as 4 months without any forcing. I am surprised to see some of them start to lay on free range at that age, and the cockerels indeed make fine broilers and always sell more readily than the Whites. I made my first showing in 1912 at our local county fair and was sure proud of my win. Every year since have shown in hottest kind of competition and won well.

Have started out with a few of the leading strains in the country and have line bred them for many years and have acquired very little new blood since. I believe in breeding my winners. With but few exceptions, all my winnings were bred here on the farm. I like to show my birds in the keenest competition and like to see the best bird win no matter whose bird it may be, as I believe in good judging. Nothing hurts a breed more than poor judging. We still find in some shows, judges not familiar with what constitutes buff color. Again I would like to see men in the judging field who have been breeding Buff Leghorns for many years, men who know buff color and its value thoroughly, as well as type which comes first.

BUFF WYANDOTTES

(March 1921 A.P.J.)

BY MRS. ELY BROYLES

Bufs grow lighter with age, and to secure a buff hen, a pullet must be bred with sufficient color to allow a lighter shade for the hen; and not become too light to maintain a good color through the breeding season and up to the next

molt. The average person likes “color” in his flock.

The requirement is for that level, even shade of color for all sections alike, back, breast and neck; without mealiness or shafting. The one time difficulty of black in the tail and wing has been greatly reduced; but solid buffs are not so common as to be plentiful. When good color and type are found and size and vigor are sought, then difficulties are doubled; the birds of best color are often undersized, and when a wonderful type is produced, color may be lacking.

Zest is added to the production of buffs by the difficulties to be overcome.

MATING BUFF COCHINS

(From Poultry Press about 1960)

BY MORT COOPER

Pay the price for a true bloodline to reproduce, hold that line, and breed that line still better. Select in order, type, size, and lots of fluff and feather. Accomplish this, then you have the rest of your life to establish color. The shorter the back, the better cushion and better Cochin tails. The broader and fuller the breast, the better the tilt. I bred big ones to big ones and get big ones.

Careful linebreeding and selection over a period of years, will overcome any stubborn obstacle. The solid buff color of the tail will come, if you hold that line. Do not give up and all black and white will disappear.

In mating, first select your most outstanding female. Make sure she is up to the Standard as possible. Use her as your model. Then select your nearest approach to her, and the next, and the next. Stop at six. There are weak points here and there in all, but come as close to Standard requirements and a uniform mating as is possible.

We maintain the male represents 60% of your next generation. In a male really get down to business and be critical. If you do not have the correct male, you will gain two or three years in your breeding, by securing one. We must have a medium sized bird, low down, big strong legs set well apart, with a wealth of booting and soft hocks, deep full breast, short wide back, all the cushion you can get, with still a cushion shape tail, strong bay eyes, short straight comb, free from side sprigs, strong under color, and evenly blended top color from tip to tip. Wherever white appears in dark colored birds, each new generation is apt to increase 50% or more in some areas. Avoid white if at all possible. Remove all females having the same defects as the male.

WHAT I HAVE FOUND OUT ABOUT BUFF LEGHORNS

(From Poultry Tribune Dec. 1926.)

BY DR. L.E.HEASLEY

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

Color is necessary to establish the variety, yet the form and frame must represent a Leghorn. No breeder is ever used by the writer regardless of perfection, unless the ability to lay a great number of good sized eggs were present. It is not so material exactly what shade of buff the bird carries, so long as the color is uniform. The Leghorn back line, tail carriage, and abundance of plumage, are points that should ^{receive} more emphasis in breeding

There must be an artistic eye, and observation. of details coupled with an ideal towards which you are working. So few breeders examine the plumage color sufficiently close to prevent disaster in the second season. Upon close observation, there is no solid buff bird. but what will show upon minute examination of tail and wing feathers the tendency towards either a lighter or a darker color and this fine distinction is absolutely necessary in putting together matings to insure the next season's product to be an improvement.

If there is any one color that needs to have the benefit of concentrated blood, it is that of buff. The longer they are properly line-bred the less fading and more true they continue after their first molt.

I caution Buff Leghorn breeders not to get away from the large bodied bird we used to know 15-20 years ago, that laid chalk-white eggs of good size. Many present exhibition strains have seriously lost in size of body and egg, which handicaps the Buff Leghorn commercially.

BUFF COCHINS (1925)

BY FRANK PLATT

The color should be an even shade of golden buff; a level shade of bright buff is most desired. The hackle, saddle, and wingbows of the male should be "lustrous" golden buff. The breast of the male, back and body of the female should be one tone of golden buff free from any streaked or patchy appearance. In Buff Cochins, type is of first importance and this is largely dependent upon plumage; a short hard feathered bird is always deficient in type. In males the breast and sides of body should match evenly and blend into a lustrous hackle and saddle. Under plumage as buff as possible. Birds with light colored quills running through their feathers produce shafty chickens. The breast and body of the male should match the color of the female as near possible. The sun fades sometimes females, however if they carry the right kind of color in neck with rich under color in the long feathers on sides of body, they will produce nice cockerels.

BUFF ORPINGTONS (1925)

BY FRANK PLATT

Females should have a smooth texture of feather, a stringy or rough web of feather over her cushion being objectionable. Color should be a soft medium

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

shade of golden buff, not so light to be lemon or so hot as to carry any red pigment. The more brilliance or life in buff color the better, select females that are broad and square across the shoulders, with the right color in neck and sound under color in fluff at sides. If hens are faded in back color, select ones with sound buff wings.

Peppering in main tail of females is allowable, but pick an ideal male to mate with. Such matings will produce good color in offspring. Do not mate extremes in color together. Color must be toned up gradually and red males mated to lemon females will NOT produce a medium shade of buff. If the male is a little whitish in under color of hackle, but has rich even buff breast, he will produce some good colored pullets. Do not expect to produce soft even colored pullets if the male has an uneven color in his breast; mealy or washy breast color, or if the feathers are edged with lighter buff.

BUFF ROCKS

BY FRANK PLATT (1925)

Ideal buff is a rich golden buff of a rich medium tone. Lemon is not buff, nor is buff so rich it partakes of reddish orange. It should be one even shade over the entire bird forming a sheet of unbroken color and when handled the buff runs into the downy part of the feather near the skin. Light or whitish under color is not good. The wing flights and tail should be solid buff, but a little black is not a serious fault; in fact this excess of color may serve to make a male a better breeder of sound color.

In Buff Rocks the male should have a sound colored breast as free as possible from whitish edging on breast feathers. His neck, wingbows, back, and saddle, should be one even shade of rich golden buff. The under color of the neck and over the hips should be pure buff, if white shows in under color it will be in these sections. Males with red wing bows or pronounced white in wings are not good. Select females of good size and type. Females should have good colored necks with deep buff in downy portion of the soft feathers on sides of body. Reject males that are leggy, have narrow body, or long narrow heads. Sometimes white appears as a result of poor growing, crowding damp quarters, under feeding, lack of range, or lice. In order to produce a lustrous sound buff, it is important the young are well grown. Both young and molting birds have an advantage when protected from the sun by range under the foliage of an orchard or bushes.

BUFF WYANDOTTES

BY FRANK PLATT (1925)

The color should be a rich golden, soft toned buff in all sections. There should be life or luster to the surface plumage. Sometimes the under color is

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

especially good but the surface of the females are rough in texture. A Wyandotte hen should have a smooth, well-webbed surface on her feathers, a stringy feather is objectionable.

Select Wyandottes of adequate size. Size should go hand and hand with conformation of body. Do not tolerate a narrow bodied, short-keeled pullet. Select for good heads, well-arched neck, rounded breasts, full underline, and nicely spread tails. The males breast color should be like the color you desire to produce in your pullets. The male's breast should be a rich even buff free from white lacing around the edge of the feather and free of light shafts in the center of feathers. He should be pure buff in wings and tail. If he is light in under color at base of hackle it will not prevent him from breeding good pullets. Select females with good buff necks, with lustrous buff on the edges of neck feathers; with pure buff wings and main tail feathers. If females are faded in back color, examine the long soft feathers on sides of body at rear of legs; see it is of a deep tone of color. Such females will produce good cockerels and if mated to a male with good breast color, will produce good pullets. Do not breed from a female showing slate under color or black ticking in neck.

BUFF LEGHORNS

BY FRANK PLATT (1925)

True Leghorn shape and a level sheet of lustrous golden buff color. A uniform soft level buff is attained in both sexes. One peculiarity of the Buff Leghorn female is very light under color. This is not a defect in the sense that very light under color would be in Buff Rocks or Buff Wyandottes. Select a male. rich in buff under color and free from white in tail. He should be buff, not red on the back and wingbows .If your females run too light (being lemon in neck hackle and inclined to show white in tail) a richer male from a richer colored hen, even if he carries some pepper in main tail; will help tone up the color. Select females of ample size, pure white lobes, and not too big in comb. Their tail coverts should **EXTEND WELL OUT ON THE MAIN TAIL FEATHERS, AND IF THEY HAVE EIGHT MAIN TAIL FEATHERS ON EACH SIDE; INSTEAD OF SEVEN.ALL THE BETTER.** The legs should not set too far to the rear of their body, and should not be too short. From such females you will get cockerels with nice heads, good station, well-balanced bodies, and **TAILS NICELY CARRIED AND WELL FURNISHED.** Do not breed from males that are too squatty, or fine in bone. These little birds often have short toes and small yellowish earlobes.

BUFF MINORCAS

BY FRANK PLATT (1925)

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

This variety has had little trouble with extremely large combs, unlike other Minorca varieties. Earlobes should be rather large and smooth and females should have a double fold in front comb. The male's neck should be long with a hackle that flows well over shoulders. The back, wide at shoulders, long, and sloping downward. Tail carried low, moderately long tailed covered nicely with sickles and coverts. Male should have well-rounded breasts, full in front. Females with good posterior body development. Legs long, strong, and well spread.

Select birds with substance of body, rangy and with moderately tight fitting plumage. Small females with soft feathering will not produce good cockerels. Do not mate color extremes. If the male is deep in shade of buff color, select female's one tone lighter. He should have rich creamy buff under color, but not whitish under color. In under color females resemble Buff Leghorns and do not carry as strong under color.

In breeding to lengthen the legs and secure good station, a hen that shows plenty of lower thigh and has good length of shanks and toes, is valuable. A soft golden shade of buff color is desired in this variety. It should be uniform level color, all sections of the plumage matching.

BREEDING BUFF WYANDOTTES

(From Wyandotte Harold, Feb. 1930)

BY B. HAZELTON SMITH

As a lad at a county fair, I was attracted by a nice display of Buff Cochins and ever since have been a lover of buff. I bred Buff Cochins for a while, but did not like the extreme heavy feathering and feathered legs. Poultry papers at the time printed much on Buff Wyandottes and Buff Rocks. I decided on Buff Wyandottes, and in 1893 I sent for a \$20 trio in the East, from Mr. Buffington. This trio of a Wyandottes were in a way like Light Brahmas, that is they had as much black in the tail and wings, and as much penciling on the hackle. I was pleased to have this much of a start at that time. By a persistent method of linebreeding I began mating for shape, color and eggs. Careful linebreeding, paying as much attention to the male part of the mating as the female side.

BUFF WYANDOTTES

(From Poultry Item, Oct. 1926)

BY J.H. DREVENSTEDT

I have judged hundreds of Buff Wyandottes in past years. The hardest

problem in the past was in spotting the true golden buff surface color. Too many reddish-buff birds were still to be found in the show rooms up to about five years ago, when breeders, exhibitors, and judges drifted away from the darker hued buffs and made the golden buff color their ideal. Today we find but little variation in shade, albeit a few fanciers still are apt to mistake a very light almost mealy color, for a rich golden buff. Today Buff Wyandottes are sound, clean buff tail and flight feathers. Black and white pigmentation being conspicuous by its absence. To establish this sound buff color proved no easy road. There were too many different strains of mixed ancestry to work with 30 or more years ago.

BREEDING FOR SOUND BUFF COLOR

(From Poultry Press, Sept.1978)

BY WILLIAM L. ZEIGLER

Our first selection is for TYPE. Unless we have birds of Wyandotte type, we cannot and will not get Wyandottes. Study your Standard so you know what good type is. Never use a bird of poor type in breeding pen no matter how good it is in color. Your next step is selection for color. Here is where many breeders differ. We have found the best results are obtained when you match the breast color of the male with that of the females. Your males give you color and females type. Learn what true buff color is. It is a hard color to describe. Years ago, buff was said to match the color of a gold coin. Today you rarely get to see a gold coin, so it is not the best description to give. However, you get the idea, so select a rich golden buff ;one that does not lean to lemon or to a darker shade near brown.

Select a male bird rich in buff color, the proper shade all over. It is the male who transmits the color to the offspring .He should have good under color in all sections, if possible. You may find your male may show lighter under color at base of neck and tail. The richer and better carried down the buff is, the better breeder your male will make .So draw your lines very closely when selecting your male for color .A light buff anywhere, is an indication of weakness. Select your females with good sound neck color Note the long feathers on the sides of the body towards the fluff. You want them well webbed and a good deep tone of color. If these two sections in your female are right, you have a breeding bird of real value. Be sure your females match your male as closely as possible in color. Watch feather quality closely. Use birds with a wide-width of feathering; narrow feathering will bring a rough feathered bird.

Both male and female should be free of shafting (the quill of the feather being lighter than the web). This feature is very objectionable and hard to eliminate once it gets a foothold. This is especially true with the male. Make sure he is sound and came from a dam that has been sound in color. Make notes

and study your matings. Try pair matings. A lot must be gained through experience. You must know your birds, study them study the Standard and keep records. If you are not sure about a bird, it is better to discard it, than spoil matings.

MATING BUFF WYANDOTTES FOR COLOR

(From Jan.1930 Wyandotte Herald)

BY RALPH W.STURTEVANT

To the experienced breeder, solid colored birds without a particle of black or white in wings and tail, are not difficult to attain; but solid buff specimens that are of uniform color, blending perfectly in every section, free from mealiness and of a nice soft shade from head to tail, are difficult to get. Too much care cannot be taken in the selection of breeders and mating the pens. Many fanciers, not always beginners, spoil their entire season's stock by mating birds of extreme shades of color.

A very dark specimen should not be used with a light colored one, as most of the offspring will be very uneven in color, show mealiness and shafting, while if stock of nearly the same shade are mated the average lot of youngsters will be more uniform.

The exquisite even, soft, rich, golden shade is what we want. The many shades that the buff color is capable of showing, is one reason why the difficulty of attaining perfection in the color is so great. In males this is much more marked than in the females; because the males are richer and more brilliant in plumage coloring. The most common color faults against which we should work to eliminate; dark hackles, light colored bodies and chestnut in the tail furnishings. We have found that in carefully line-bred stock, the birds with the best surface color usually have very good under color.

BUFF WYANDOTTE BANTAMS

(1931 A.B.A. Yearbook)

BY HAROLD B. WIDEMAN

Buff is really hard to describe as we have several shades. The Standard calls for an even shade of rich golden buff, which we interpret to mean a soft lightish buff with a golden hue. We are careful not to breed too light a buff as they lack strength to reproduce and we can expect to get faded out birds. Neither do we breed too brown a color for if used we are sure to get red or a brown color. Therefore choose as breeders only the ones with the even soft: buff with the golden hue. Pick your breeders with the same shade of buff. It is sure failure

to breed light colored females with a dark male or the other way around. Sure, you may get a few fairly good birds, but the percentage of good ones will not pay for your trouble.

A couple of pointers we have found by experience in the rearing of buff chicks; first of all cleanliness. Keep them free from lice as a certain louse lives on the juices that put color in the feathers and when these juices are sapped away we will have faded out feathers and the bird has a mottled appearance, just as a female loses the color of legs and feathers after she has laid several eggs. Keep buff chicks out of extreme heat of the sun, provide plenty of shade or we will have the same trouble as with lice. Sometimes when a chick is nearly mature and we find a foreign colored feather in wing or tail; if it is pulled we find it will grow back a perfect feather. Many times this is caused by lice or possibly an injury. Therefore, an otherwise good bird is saved and given a chance to show its merits.

STAY-BUFF, BUFF ORPINGTONS

(1933 Standard-Bred Poultry Assoc. Yearbook)

BY FRANK CONWAY

In my younger days I was an admirer of Buff Cochins. They were my fathers' hobby and many a winner I have watched grow up. The Buff Cochin has still a warm spot within me. It was probably on account of this golden hued color, its lustrous rich plumage showing up so admirably in the show room and green lawn where in the evening they were allowed to roam at will; that I inherited a desire to experiment with Buff Orpingtons along similar lines that had gained for my father success at poultry shows.

It was about 1913 that I commenced my present line of Buff Orpingtons. At that time color was a much vexed question. Many shades of color, some "hot" colored others the light lemon shade. Others had a "strawy" cast and "brassy" birds eventually moulted into washed out appearance. A color too lights a shade to remain permanent, resulting in considerable white in flights and base of sickle feathers, under color of females and neck hackles of males. Females would also come with a mealy appearance across the wing and shoulders, being more pronounced as they got older. It was seldom that a buff female would moult into the same shade as a pullet, and males would become lighter on breast feathers and darker on wingbows.

My nucleus trio; the male was two shades lighter, but proved to be a good breeder of the color I was working towards. The hens were about two shades lighter than they were as pullets. (It was my experience that buff color bred then, had a tendency to breed lighter and naturally fade out with age.) Both hens were free from mealiness and straw colored hackles. My method of breeding in the following years was to grow out the birds until hens and cocks, using only those few that retained the color they possessed as pullets and cockerels. The war

stopped my breeding. After returning, I got back a trio, descendants of my old line. I raised a number of chicks and next season I had two pens mated. One for the production of exhibition cockerels and the other for exhibition pullets. The male for the pullet pen was a darker shade, sound in flights, good under color, and good colored tail feathers. He was mated to sound colored females with surface color blending as near possible to the male's breast and neck hackles. The male for the cockerel pen was mated to females of a darker shade of buff surface color and about the same shade as in the male's hackle, tails coverts, and matching his wingbows. It was in this way I was able to strengthen the color of the females very materially.

To avoid too close inbreeding, and to add partly new blood from time to time, a non-related hen was used in certain matings, and her blood used only when it contained 3/4 of foundation blood and 1/4 of the new blood. Body type was given as much thought as color. I selected those of that stood on a pair of stout legs that were placed well under the body, and balanced the bird. I never did advocate an Orpington that possessed that forward tilt which gave the resemblance of a full breast but when held up to a balanced position, his breast shape would cut away underneath. Birds of this kind were thrown off balance due to the legs being set too far back. By breeding for a longer keel bone and lengthening the body slightly, avoiding a cushion effect at base of tail, I was able to develop the underline resembling a wide letter "U" which I consider just as important as the back outline.

The problem for many breeders was the fact that pullets when moulting into yearlings, would vary in shade of buff color. To overcome this, I set out to develop my line, so birds would each year molt into the same shade of buff as carried during their first year. This was eventually attained to a marked degree by breeding from 3 and 4 year old hens that had retained their pullet color, gradually eliminating all those that did not hold this color.

HOW TO USE THE WHITE LEGHORN TO IMPROVE THE BUFF LEGHORN VARIETY

BY CYRUS M. LEWIS (1981)

I secured a Buff Leghorn cockerel with good type, good lobes, and good color. He lacked in body size and had narrow sickles and wing flights. I mated this Buff Leghorn cockerel with a White Leghorn hen that had excellent Leghorn type and marvelous feather quality. The first generation looked like poor White Leghorns. Some had yellow in hackle, a couple were barred, and two or three had just a little black ticking. Type was mostly real good, but a few developed squirrel tails. The pullets averaged a pound heavier at one year than Davidson's Buff Leghorns.

I then bred the best typed of the first generation pullets, back to their sire; the pure Buff Leghorn male, now a cock. I got from this mating a few with good type, size, buff color and broad feather. I then mated the best together-brother

and sister. I produced a Champion Buff Leghorn with excellent type, size and color, with wide feathering. This was about 1960. I later gave my formulae to create a Buff Leghorn to Bob Beitel. He worked it the wrong way by using the White Leghorn male, and it did not work out for him.

BUFF COLOR

BY JOHN H. ROBINSON 1923

Buff and red result from the elimination of black as a separate color, with the distribution of red to the parts that were formerly black; and from such a blending of black and red in uniform distribution throughout the plumage that they appear as one color. The black remains to a slight extent in most red fowls and usually appears to some extent as gray in buff fowls. Yellow, red and brown fowls with more or less black and white in the plumage, give the foundation for buff and red. In buff the shade intermediate between lemon and orange-buff was accepted as the most desirable color described as "Golden Buff".

The lightest buff color has a tendency to become ashy or whitish. Mating birds of this light shade in breeding develops the weakness of color, making an unsound buff. To maintain color birds of a darker than preferred shade of buff color must be used, in general, strong under color goes with strength of black in the black sections. (In R.I. REDS the desired under color is red or salmon, but dark birds have a strong tendency towards slate under color.) Slate under color may take the form of a bar across the feather-shading lighter at either side. Unless stock-having slate is bred with great care to avoid its appearance in the surface color, it will crop out in black flecks and spots in the web of the surface color.

There is no color in fowls so hard to produce and hold as an absolutely sound buff all over the bird and the same shade in every section. There is no other color in which the common faults of color as they develop with lack of care in breeding, and to some extent even after long careful breeding, are so conspicuous and objectionable. The ill-bred buff or red is motley of shades of its varied ancestors. It is only by the most rigid selection and careful linebreeding that soundness and uniformity of color can be obtained.

The best results are obtained by mating a bird of STANDARD shade to one that is just enough darker so that the difference is perceptible, both birds being sound in under color. If the surface is weak or uneven and the under color strong and sound, a bird will generally breed according to its under color when mated with one of good even surface color. Birds that are lighter or darker than STANDARD, should be mated to offset their tendencies, but within TOLERABLY NARROW LIMITS". Anything in the nature of an extreme mating is to be avoided. Extreme matings generally give birds with different shade of color in different sections and feathers of different shades in the same section. Slate in the under color in slight amounts is not objectionable in breeders, but care should be taken to keep it well under control. In general, the

mating of birds with the same fault in the same section in under color, whether white or slate, should be avoided.

Shafting, the shaft of the feather is lighter color than the web. Shafting is more conspicuous in buff color than any other, and the breeder of buff should work to eliminate it. All faults have to be worked out slowly. When it comes to holding what has been obtained and putting the finish on color, a breeder must have great patience. It is better to tolerate faults like shafting and mealiness, where color is otherwise good, until faults can be reduced by slow selection.

If the general tone of buff is too light or too dark, breeders should mate nearest to standard culling his very lightest or his darkest birds, as the case may be. Old birds that hold their color well, neither fading badly with exposure or each succeeding molt, are the most desirable as breeders.

Red on the backs and shoulders of the male is a color fault. To get the red out of the backs of males, the lightest females with good bright even surface color of the same shade of back and breast, should be mated to males free from red as they can be had with uniform shade in all sections. In the breeding pen good under color will get you more good even color than breeders with good surface color but not so good in under color. Buff and red varieties are derived from the black-red type₁ by blending and reduction of the black and red. With both black and red present in certain amounts, there is a tendency for these pigments to separate and arrange themselves as in the black-red type. The black tends to go to the wing and tail feathers; the red tends to go to the feathers of the hackle and back.

Uniform color and shade of color are of equal importance towards satisfactory results in breeding. Systematic breeding from nearest the desired shade and the compensation principle used section by section, will keep color very close to STANDARD color. Early in breeding Buff Leghorns the color was so reduced in buff pigment that the color began to breakup into traces of white throughout the plumage. When this stage was reached it was necessary to "feed the stock some dark color by using dark birds in some matings. This feeding process often caused such lack of uniformity that the breeders stock was not found in the show rooms again for one or two seasons. Extremes in mating works against blending and towards mottling of shades, but slight shades do work towards toning up or down the progeny color.

Black or white, if strongly marked, greatly mar the appearance of a buff bird, even in the eyes of a novice. Many people are severe on birds which are dark in the hackle and which differ pronouncedly in shade from the back. Often a judge compares the shade of buff in males, by bending the head back to the saddle and compares the degree of perfect blending in these (sex feather) sections. Buff shows better in the showroom than in strong, clear outside light. Under color is often lighter than the surface, but there are exceptions. Strength in under color may offset the weakness of surface color. White under color is often found in very light buff specimens. Slate in the under color is a fault usually found in a breeds; early stage and less of it in long established breeds. In Buff Leghorns, it was about 1900 before a uniform shade of buff was produced.

(White and black were prevalent in wings and tail and males had reddish hackles, back and saddles.)

BUFF COLOR AND BUFF LEGHORNS

BY MR. & MRS. LISTER KAY 1899

Black and White are synonymous and also red and yellow. Given a black fowl, match it with white, and you get black, whites or grays. A red matched with white will often eliminate the red and leave a yellow, but as it is natural (for the cocks especially) to have black tails, when white acts on this part it does not produce yellow or red, but it's function being either that of white or black, it will often vary to the former being the weaker color and sometimes a bluish-gray. The use of yellow or red tails was needed to remedy the white tail problem, even if it came in another breed. A breed long bred for the proper color would be more prepotent for sound tail color.

BUFF COLOR BREEDING

BY HARRY M. LAMON 1920

The male's under color should be as sound as possible and particular attention should be paid to soundness of under color in the hackle and at the base of the tail, and to the wing quills, to see that they are sound buff, not white. A male with good surface color, but with weakness or even white in under-color, may produce nice colored pullets, but rarely a cockerel sound in his wings. A male with a little smoke in the short wing coverts or secondaries is not a fatal weakness in a breeding male, but one without this is preferred. Extreme color matings produce many mottled and mealy chicks. Females without mealiness on the wingbows are important. The use of mealy females will produce color problems, such as white in the secondaries of males. It is a common error to leave out of all matings any birds with real strength of color pigment. This leads to a loss of color. Few sound colored cockerels will be produced from a mating, and while the females will be better in color, most will molt too light as hens. Birds of stronger color must be bred carefully and perhaps only occasionally, but they must not be discarded entirely or the flock will lose in color. In R.I. REDS smut is apt to occur in under color of both sexes. Never use a smutty bird if it can be avoided, a male with smut that is mated with a heavy colored female is apt to produce offspring with black in the surface of pullets and black laced hackles in cockerels.

Sometimes double mating is used in buff color. The cockerel mating, the male should be standard and absolutely sound in color, free from black or white in wings and tail; also free from reddish cast. The cockerel mating, female's

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

general surface color should be slightly darker than that of the male's breast, (Darker shade than ordinarily sought for in females.) Important point is that these females have as rich and deep an under color as possible extended clear to the skin. In many instances such females will have almost as good an under color as the male. This mating will produce exhibition males while most of the females will be too dark in surface color.

Pullet mating: (A male with deep color on wingbows and shoulders will offset mealiness in females, so a pullet line male may not be as even colored as the cockerel-line male.) The males' breast should be the same shade as the exhibitions females' general surface color. His breast must be free from shafting, or else the pullets will show shafting throughout. The male will be lighter in surface color and lighter in under color than standard. Females must be free from mealiness, shafting, and patchiness. The under color should be lighter than cockerel-line females.

MATING BUFF

BY FRANK PLATT 1920

Buff is a modified red, it is a red toned with white. Birds of the Lemon- Buff color, the color runs out in the first generation of the customers breeding. The general popularity of buff diminishes when the lemon-buff color is bred and sold. All permanently successful breeders of buff-color have bred a rich golden buff. Those breeders who fancy the lemon-buff color, produce a few more good birds than they themselves require, and instead of their breeding carrying a strength of color that enables it to reinforce the flocks of customers and prove beneficial and popular in the hands of buyers, they themselves must secure reinforcement from breeders of rich golden buff birds.

A few constructive breeders, laid emphasis on a sound buff color that would feed and reinforce the true buff surface color, and in picking males that would produce good females they examined the breast feathers very carefully and reject any male that did not have an even sheet of buff color the entire length of his breast, free from white shafts in the feathers and free from whitish lacing around the breast feathers. The all buff females have resulted from the continued use of such males.

In under color our male will show his strength to transmit his color to his offspring. The richer the better. Weak spots in under color tend to be under the hackle, at the base of the neck, base of the tail, and base of the breast. White anywhere is weakness in color pigment and mealiness, IS THE BEGINNING of a tendency towards white. Shafting is a weakness of pigment in the quill, which shows as a lighter shade in the web on the surface. Black is a sign of strength-of color. It is not good to have it in the wings, but a little in the tail is safe as a reservoir of strength. Breeding buff year after year without black to hold it will finally cause the color to fade out and white in the wing and tail will finally show.

The male's breast should be free from shafting, for it is the part of his plumage that corresponds to the female coloring. Mealiness is a defect, as it needs strength of rich color in the male to over ride it and many years. Lacing on females (brilliant edging on each feather), often produces birds free from shafting and not darker but brighter in surface color. Some breeders wanted to get away from this lacing; others didn't think it was much of a defect. Tones of color indicate comparatively slight differences. LIGHT and RICH, to breeders accustomed to lots of quality do not mean lemon and red. When extremes are mated together the offspring show patchiness and unevenness.

BUFF COLOR

BY J.D. NEVIUS 1905

Never tolerate in any of your breeding stock, the red wingbow on either your male or female. Under color is of the greatest importance. A male should nearly always have good rich under color and it is better to have good under color on both sides of the mating. A strain that has been bred with care in selection of surface and under color is more apt to produce and maintain a good, sound, even shade. (White in the wings or under color has a tendency to produce lighter surface color in offspring, while black in the tail or wings had an influence in the opposite direction, and is apt to produce dark body colors.) Shafting is hard to eradicate, but persist in using birds with good under color quills of the feathers buff both on surface and under color underneath. Breed from birds with a rich buff (not red) quill, and you will be highly satisfied with the results. I don't object to a little pepper in the tail of the female breeders, as this is needed to retain rich surface color. If your birds are too dark, a small amount of white in the male will tone this dark color down. White is a serious defect, but it will tone down dark buff in a season or two if used carefully.

BUFF MINORCAS

BY CYRUS M. LEWIS (1981)

Some Buff breeders prefer to have pepper in the main tail, as it seems to keep white from appearing in the plumage. They look upon white as a weakness, for it invades the under color, eventually the tendency is to run out in surface color. When using pepper, have it in the tails of one sex only, preferably female and try to reduce the amount annually. Sometimes male birds of otherwise good color, but showing white primaries or white in one or two sickle feathers, may produce fine colored pullets. Seldom are good colored progeny produced from a mating containing females with any noticeable amount of white in wings or tail.

There are indications that in some instances, slate in under color of females (Buff Minorcas), when bred to a male that has strong buff under color you can deepen the buff under color in the female progeny. Breeders would at

times make use of gray under color, and it seemed that eventually the gray under color and pepper tailed birds would later produce the best under color lines. Each year the birds showing the defect were mated back to good colored birds bred from good buff colored lines. When buff birds of strong gray under color are mated together, black comes in the surface color; some feathers being nearly black. Extra black would show in wings and tails. Gray under color in buffs sometimes shows up when inbreeding or introducing new blood.

LOUIS PAUL GRAHAM AND BUFF COLOR

BY I.M.ASBJELD

(From Breeder's World 1932)

From the very beginning of his poultry activities he had been in contact with buff colored fowls and involved in many discussions attempting to settle on one buff color. At first Buff Cochins were shown Lemon, and Cinnamon Buff. Buff Cochin bantams were red (males) and clay colored (females). The Danish Buff Leghorns were nearer to a golden buff. Buff Cochins too, had brown (or Chestnut) in the tails and wings. Some of the Lemon colored birds had white in these sections.

Being an Artist he experimented with colors and mixed many shades of buff, finally settling on what's known now as golden buff. This was accepted by Nevius and McGrew and ignored by the Sharpe Bros. He also advanced the theory that in paints, white was added to red and yellow to make buff, therefore it seemed reasonable that in breeding, it was better to use birds with white in wings than those with brown or chestnut. Nevius and McGrew both proceeded to follow this breeding and very quickly we had golden buff males and females with clear wings and tails. August Arnold and others in Buff Leghorns worked along the same lines, also the Buff Wyandotte and Buff Rock men. Richard Oke was a strong exponent of this color and it was largely due to his educational efforts that Buff Orpingtons became so well bred in color.

Nevius and McGrew dropped out of active Buff Cochin breeding and for years practically no one but the Sharpe Bros. showed Buff Cochins. They never accepted the golden buff as the correct shade of color, (chiefly because theirs were English Cochins which at no time were ever golden buff in color); consequently all other buff breeds rapidly distanced the Cochin in golden buff. Cochins today are still too orange in surface color, although quite clear of chestnut or white in wings and tail.

This theory of golden buff color was proven by McGrew. He produced the first golden buff, **BUFF COCHIN BANTAMS** ever by crossing the red buff Cochin Bantams of that day with the (then creamy) White Cochin Bantams bred by A.P. Groves of Chestnut Hill, Pa.

COMMENTS ON THE L.P.GRAHAM ARTICLE

BY CYRUS M. LEWIS (Feb.17, 1981)

In regard to the article by I.M. Asbjeld, in reference to buff color, I will say it is interesting and has some merit. However, in breeding for color, it is not as simple as mixing color pigments and dyeing feathers .It is true that in some cases, one can cross red fowls with There is a chance the right combination would come up the first generation, possible but most unlikely. Lemon colored-white in wings and tail, you could come up with an all buff bird, but it takes usually many generations of selective breeding.

A DEFINITION OF BUFF COLOR

BY A.O. SCHILLING

(June 1922 RPJ)

Rich golden buff is defined in the glossary as not so dark as to be reddish or so light as to appear a lemon shade, but a modification of orange, having a golden hue.

COLOR BREEDING – THE BUFFS

BY C.M.LEWIS 1979

(NOTE: It is with special permission from the author, Cyrus M. Lewis, that we are reprinting the article “COLOR BREEDING - THE BUFFS”. A few notes about Cyrus M. Lewis; Cyrus H. Lewis is a member of the American S. C. Buff Minorca Association and a former member of the old International Buff Minorca Club. He holds an A.P.A. Judging License, and bred Buff Minorcas for some forty years. Cyrus won many awards on his outstanding exhibition strain of Buff Minorcas, often winning over all other breeds. Lewis states, “that the strongest under color he has ever seen have been on his own Buff Minorcas. He has shown at least one hundred hens with Buff under-color as deep as the surface and several even darker Buff under color than the surface color. He states that when you get Buff quills down to the skin, you have reached the ultimate. Cyrus has not had Buff Minorcas since the 1950’s, but has been most helpful on supplying the history and development of this truly American in origin variety, the S.C.Buff Minorca. Danne J.Honour 1980.)

BUFF color was originally developed in Asia where the “sun” color was much admired. Further improvements and standardization took place in Europe (most notably in England) and America. True BUFF color occupies a unique position among the various so-called colors and color patterns found in domestic poultry. The fancier can take the Jungle Fowl (*Gallus Bankiva*) or the Black

Breasted Red Game and by utilizing White, Black and Silver Sports, which have been known to occur, then re-crossing and inter-crossing, can obtain nearly 100 combinations and pattern colors. As this article is on BUFF color, I will not enumerate the various patterns, most of which are non-standard. On the other hand, a truly BUFF colored bird cannot be bred in one's lifetime, by using the wild color of the Jungle Fowl nor do I know of any case where an all BUFF bird has ever appeared as a mutation.

It is true that some strains of BUFF Plymouth Rocks evolved from Rhode Island Reds, but this was due to the influence of BUFF Cochin blood used along with Red Malay and Brown Leghorn to create that strain of "Reds". Red and Buff colors have a common factor, in that they both carry the gold gene. However, in Reds the gene for extension of color (Black) is major factor acting in conjunction with other color determiners, such as dilution and distribution of color, whereas the influence of "Big E" must be kept to a minimum in Buffs. Most Reds, including Rhode Island Reds, are parti-colored birds and are required to carry some Black, especially noticeable in the tails. Correct Black markings in wings are most important. It is exceedingly difficult to produce Reds, such as in all Red Leghorns, where the aim is to eliminate any Black in plumage. The "Big E" gene must still be present, acting in conjunction with other pigmentation factors to hold a red color. It is conceivable that BUFF color could be produced by eliminating the gene for Black entirely from the all Red Leghorn, but I know of no instance where this has been done. On the other hand, Reds have been produced by maximizing the "Big E" in BUFFS by selecting fowls showing Black in tail and wings and dark BUFF color.

Over in England, although a large portion of BUFF Orpingtons were simply an incorporation of the old "Lincolnshire Buffs", these BUFFS were a combination of BUFF Cochin, Yellow Shanghai and the common fowl of Kent, Sussex and Surrey counties, which undoubtedly contain some of the bloodlines of present day Dorking and Sussex fowl. William Cooke, himself, of Kent, England, stated that he used BUFF Cochins to originate his strain of BUFF Orpingtons. He had previously developed Black Orpingtons - the first fowls to bear the ORPINGTON name.

The fancier can transfer BUFF color from one breed to another, but he cannot create BUFF from crossing or combining other patterns without the use of a BUFF fowl. Nearly all other breeds owe their BUFF color to the BUFF Cochin, either directly or indirectly. BUFF Leghorns were originated in England by crossing White Leghorns with Yellow Danish. They were a pale BUFF variety with only a small percentage of BUFF Cochin blood. For a long time BUFF Leghorns were prone to "run out" in color and to show white in wings and tail.

Early BUFF color, as bred by the different fanciers, shows much less variation than formerly. The AMERICAN STANDARD of PERFECTION calls for the surface plumage to be an even shade of rich golden BUFF with under color matching the surface as nearly as possible. Many breeders fail by producing a BUFF color of too light a shade, Light color is easier to breed in an

even shade all over, especially in males and can be quite beautiful and may win if of superior type. Bert Sinter, former professional baseball catcher and Poultry Superintendent of the' Columbia County Fair in Oregon, produced what he called a "cream Plymouth Rock", using as a basis his prize-winning White Rocks with BUFF Rocks. These were a most delicate shade of color.

Sometimes a very light shade of Buff with a silvery cast can be produced and is most pleasing to the eye. I feel that the most satisfactory color is a soft golden color approaching the shade of an old gold coin. One should strive to have one even shade all over. The topcoat of the male carries a lustrous sheen, but it is most desirous that the male breast color should be of the same shade. Most males will be one or two shades lighter in breast, but the aim is for the breast to be of equal strength in BUFF color. The female should likewise be of one even shade. The hackle may carry some luster but should not be darker (as is so often the case) nor be lighter than the body plumage. In mating, it is usually the practice to match the breast color of the male to the back color of the female. An exception would be when a male of excellent type has good top color but very poor breast color (almost white) as was once the case of some early day BUFF Wyandottes, which carried a top cross of White Wyandotte blood. In cases of this kind, females should be used approaching as nearly as possible the top color of the male.

If one's birds are too dark or too light, it usually does not work to mate extremely dark BUFFS to extremely light BUFFS, in hopes of producing a medium shade of BUFF color. This usually results in either one of two undesirable traits (sometimes both) mealiness, in otherwise uniform color or various shades of color on the individual bird. The better way is to mate birds of one shade lighter or darker, depending on which way you wish to go, and take three or four years to attain your ideal shade. If such birds cannot be obtained, the extreme mating may be used, but one must be prepared to do considerable culling, keep records and not expect ideal color for several years. A breeder should aim to produce one even shade of BUFF over the entire plumage. While Black or White is not considered foreign color to the variety and are not disqualifications, both should be eliminated from the breeding pen, if one wishes the best in BUFF color. Also birds showing red or bluish feathers should be eliminated. It is not unusual for BUFFS of indifferent breeding to produce males carrying a reddish or "hot" color over the wings and chestnut color in the main tail or saddle and females having bluish or whitish tails. Some females carry blackish specks in the main tail.

Males, as described above, should not be used, unless no better can be obtained. Males carrying white in sickles or main tail are highly undesirable. Their use only results in weakening the strength of color in the progeny. Sometimes males appear of superior breed type but show some white in the primaries or in the secondaries, although bred from stock with BUFF wings. These, if otherwise fine color on surface and of strong under color may be used occasionally, as they will produce fine female progeny, provided the females are also of good type and are absolutely sound in color. They may also produce

some good colored males, if they can be mated to females bred from generations of males carrying good Buff primaries and secondaries. Females, carrying white or bluish color in wings or tail, should be considered wastrel and should be used for market purposes. Some breeders like to use females with some pepper in tail, as they (the breeders) feel that this prevents white from appearing in the tail. If these females are of superior type, they should be used and mated to males whose dam carried a clear BUFF tail. If one can produce fowls that have strong BUFF color in the under color, carrying strength of color in the quills, there is no necessity to use pepper or dark color in tails of males or females. Sometimes BUFF females appear with a nice tone of color but carry a lustrous lacing. This is a fault, but not a bad one, and such females are useful in producing lustrous males. Light shafting occurs frequently in BUFFS, although not as serious as mealiness, mottling, black, white, blue or red, is a fault and, if this is the only color fault, will not preclude a typy bird from winning. However, to produce perfect-colored BUFFS, all the above faults must be eliminated.

Today the new fancier can usually secure BUFFS of reasonable good color. If he is careful in his breeding operations, he should have little trouble maintaining good color and yearly increase the number that approach perfection. By a process of gradually eliminating birds carrying certain faults from the breeding pen and, at the same time, selecting for rich BUFF under color in both sexes and birds that carry BUFF quills down to the fluff color, improvement can be obtained. The optimum is to secure breeders with under color as rich as the surface (too many females have virtually white under color) and feather quills that carry BUFF color down to the skin (this is seldom found). Both of these qualities can be attained but require much study and experience in the art and science of breeding, but once secured will greatly enhance your ability to produce the finest in BUFF color.

THE BUFF COLOR

BY HENRY P. MC KEAN

(From Poultry Press of 1945)

How over-debated the color buff has been. True golden buff is a very soft and rather light color; but intensely brilliant and alive for all its softness and lightness. Buff, when good buff, is one of the most beautiful colors to be seen in our poultry. True buff has nothing whatsoever to do with red-cinnamon, or lemon yellow. No combination of red with lemon will result in buff. There are dark buffs and light buffs, yes, but these are not red or lemon.

Golden buff is "golden and "buff". Buff is technically a dull drab affair, soft and rather flat. Buff must be even, the one and same shade throughout from head to tail. Golden denotes the very life, brilliance, or reflectivity; being bright, alive.vivid and having the reflective ness of glittering gold. The true meaning of golden buff.

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Under color is very important to the production of good buff and I have found that birds which might be said to be too light but which had good under color, were better producers of actual color than dark birds which failed underneath. Dark birds having under color should be used most sparingly if at all and light birds failing in under color should be used in like fashion. Proper color intensity and its' transmission, is dependent upon under color much more than upon surface coloration. If more color is wanted in surface color, birds should be combined with as deep under color as possible. If less color is wanted in surface color, birds should be combined having less depth of under color.

Good red eyes and a good wide feather are qualities of real importance to any good family of buffs. Do not buy culls, as good buffs are available. There are birds to be had of good type in combination with reasonable color so that the use of extremes is in no way necessary.

BUFF COLOR TEXTURE

BY FRANK W. ENGLERT

(From Poultry Press 1934)

In the past ten years breeders of Buff Orpingtons have bred away from that soft golden color and instead to breed a color from one to two tones darker. Winning birds are in most cases very even in surface color especially males. If you really know your color and observe closely you will note the surface is about as soft in texture as a chunk of pig iron. Under color tone matches the surface color, but lack of feather texture is conspicuous .In hens you will note a tendency towards softer feathering on the surface, but still that lack of texture. The beautiful soft tone of exhibition buff with its' SILKY texture, is the tone and texture of feather that produces the truest golden color.

CHICK COLOR OF BUFF BREEDS

In buff breeds the chicks are buffish in down, but shades vary from very light to very dark, frequently a lighter shade on ventral than on the dorsal surface. Some chicks show dark brown spots on top of the head.

BREEDING BUFF WYANDOTTES

BY WILLIAM L. ZEIGLER 1956

Buff color is one of the most beautiful of all with which to work when one gets it right. Sensitive to every change in the condition of the bird's health, it responds just as quickly towards special care. It is, of course, no use to try to

condition out shafting mealiness or black; but to a good, smooth, even shade of buff,' there is still a little something more, you will find a wonderful help in the proper conditioning. There is a great drain on the bird's vitality while the feathers are growing, so give special care to the health of your birds at this time. It will pay off for you. Perfect condition in the health of the bird means that when the work of making the feathers is over, the forces which have been forming the feathers are directed to the addition of luster, sheen and brilliance so desirable in Buff Wyandottes. In the female, the "finish", as it is called, usually precedes, by only a few days, the laying of that first egg. Every egg laid detracts somewhat from the show condition of the bird. So try to bring the bird to the minute of show time. If the bird is coming along too fast, a change of quarters will often deter egg laying. If the bird is not coming along fast enough then a stronger ration is needed.

An excellent aid in conditioning a bird is "Hot Dogs". The meat seems to be seasoned just about right to be a mild stimulant for the bird. Start with a small portion; gradually increase it until the bird is getting an inch and one half of meat each day. The comb color should come from health; it is the fowl's health certificate. Eye color improves slightly in condition. A scrubbing and oiling of the legs is helpful. Buff color will fade in the sun; so if you want good non-faded buff color, give them plenty of feed, water, and protection from the weather and sun. In selecting your breeders, remember that the male gives you color, the female size and shape. See that the male is as near perfect in color as you possibly can get. The neck hackle and saddle, breast and fluff should be all one shade, allowing for the natural luster of the male character plumage. His under color should be strong to enable him to transmit color to his young. The richer and better carried down, the buff is the more valuable he will be as a breeder. Light buff is an indication of weakness. A male with some black in the tail may prove valuable from time to time to add strength and depth of color. It should be used with caution. Some have found that females with some pepper in tail can be used to strengthen color. Beware of shafting (the quill being lighter than the web.). Never use a male with this in breast, or in any section, the color of the male's breast controls and governs the color of your pullets. Select your females with regard to size and type. Make sure you don't use a little undersized female because she has color and think you can overcome this with a big cockerel. You get nothing for shape. Mate females whose color closely matches the breast color of your male. Never use females of different or extreme shades from that of your male. Remember, you will make better progress, if you mate just one or two good birds in a pen, than to use a dozen ordinary or poor ones. One mating will give you good individuals, while all the others will give you wasters.

BUFF COLOR TIPS

BY D.J.HONOUR 1973

To hold a medium buff you have got to use males with a medium buff color. The males should have as much under color as possible and yet show very little difference in wingbow, saddle, and hackle compared to other areas; taking into consideration the luster that goes with these sex-feathers. You must stay away from males that show red or red-orange in wingbow, saddle and hackle. Don't use a male with shafting in the breast feathers. Don't use a male with mealy wingbows, white in wings or tail; unless otherwise exceptional. In general males that have some white feathers can be used at with caution. They can be used to tone down dark buff surface color, provided the dark birds used have good under color. Females with white in surface color, wings, or tail, should never be used.

Buff color will yield towards lighter or darker directions, slowly by selection. If you use reddish males, and your females are dark and often with pepper; you will not get good color from them. The way to improve dark buff stock is to purchase a good colored buff male and use on your dark stock females. Then backcross to the good colored male, using his lightest daughters. This mating should produce some good color, look for good colored males to carry on your breeding. If this mating does not produce good enough color, mate the same male back to his grand-daughters (the lightest ones).

My experience shows light buff to be more useful than dark buff. You can add more color faster and with better results, to the washed-out light color buff, using medium buff males. Light buff is often even, where dark buff is uneven in general shade. Shafting is the white quill running out into the surface color of the feather web. The white quill is an extension of light or white under color. Dark colored buff birds that have white under color really show lack of quality and a dark buff with buff under color is better for breeding to a lighter mate, than a dark buff with white or very light under color bred to a lighter surface colored mate.

Buff under color is important in breeding buff surface color. In some strains the buff male will carry some under color and the females almost none, being nearly white in under color. If the birds with light under color also have light surface color, you should start selecting for a darker medium buff surface color. Gray under color in buff varieties does crop-up, and will often upset the breeder who sees it. The gray under color however can be a very helpful thing in building up a nice rich buff under color. A bird that shows gray under color as a youngster will many times also have pepper in the wings and tail; but as they mature much or all the gray color will disappear on many birds, but traces of pepper will remain in the tail. These birds must be marked when young to be sure they had the gray under color. When using this gray under color, it must be kept on one side of the mating and the offspring again mated to a clean buff mate. It takes a few years but it works to build rich under color. I mention the gray under color in buff because it sometimes happens that you cannot locate stock in your breed with outstanding buff under color. Gray under color in buff is not new, but many do not seem to know about it .In a way it is something like smut in the under color of red varieties and Red breeders have long known how

smut can be used to strengthen under color and also the black markings of the red surface color in addition to making the general tone of-the red surface color darker.

A very bad defect, which seems to carry through from generation to generation is, black markings in the back surface color of buff females. These black markings look like faint penciling or crude lacing; often it shows in mature plumage of females. This may be an extension of gray under color or perhaps the first step in a black quill. This black marking of the back sometimes appears along with gray under color, but I have seen it with strains of general good buff color that never show any gray under color. If you get females with the black surface markings on the back (I have not seen this yet on a male), I would not use her under any conditions for breeding as it will carry through in her female offspring, to a large degree. Sometimes you will note such markings of black in the tail of females, and these can be used with good results as breeders.

Buff color should be inspected very close, as there are small differences in the feathers of each section. It is possible to double-mate buff color, ultra-perfection in buff color could result in each sex. Buff color, produced with great care in the selection by double mating, would be most difficult to beat in the show room. The danger of double mating seems to be that it is carried on to the point where it makes two sub-varieties. Buff color is subject to change by the sun and, to a less extent by rain, wind and frost. Protection from direct sunlight is helpful. Shaded runs or confined birds with screened window light (curtains) will help buff color. The orchards, woods and tall grasses provide shade. The runs should have morning glory, grapevines or sunflowers planted along the fences. Green feeds and grass have long been known to add vigor and color to the buff breeds.

I found that pair matings to be very helpful in producing improvements, when the pair was carefully selected and the chicks were wing-banded and toe marked. This method of pair mating really surprised me in results. Other matings were made to and often the offspring of these pair matings were used to head the general matings the next year. Size and type must be extra good on the female side of each mating. Sometimes a male of good color, when mated to females of good type but off in color; will produce good color and type offspring. The reverse usually does not work.

BUFF MINORCAS

BY MARCUS L. DAVIDSON (1977)

Due to my age, I have sold all my Buff Minorcas . I added Buff Minorcas about 1924.They were Schmidt stock. I bred Buff Minorcas for 50 years but never in any number. Under color in my Buff Minorcas usually could have been stronger at times but I had size, good surface color and always could win and

sold a lot of winners. If possible I would try and breed the best under color I had, if other qualities were good. I never worried about it, as they were good enough. Pepper or salt in tail; never mated up Buff Leghorns that showed it, as I never had. much trouble, so had plenty to breed from and sell No problems in under color in my Buff Leghorns. In the Minorcas, they were not as sound in tail color as the Buff Leghorns, but try and pick when mating, ones with as good tail color as possible. I would rather have a little pepper than a lot of white. Try to get good colored wings in males and breeders free of white. Too much under color in some buff breeds lead to dark surfaced females and uneven top color in males. It takes time to get a strain of Buff to breed true. My birds were line bred, but must watch it inbreeding, you will soon lose out.

BUFF LEGHORNS

BY A.A.OSWALT

(From the Leghorn World Mar.1925)

Are you breeding birds of Standard size and weight? If not you had better start right now for birds with no size of body can not get by the judge in the shows any more. Judge Lamon at the last Madison Square Garden Show made it clear that birds showed at that place must be of good-sized body and up to Standard weight. In selecting the female, let us pick out the best type possible and pay strict attention to the feathering of same. See that they are well covered up at the base of the tail with tail coverts extending well back over good wide and long tail feathers-this is a great help in getting heavy furnished tails on the males. She should have a well spread tail, for a pinched tail is a bad defect on a show bird. Pick your females that have good wide feathers on the breast for they are a lot more pleasant to look at than the little narrow stringy feathers you see on so many Buff females. Use good full-breasted females, so many in both sexes are shy in breast giving a flat appearance. See too that you have good yellow legs on your breeders; this is one of the beautiful sections of the Leghorn. We all know that the pigment will fade out of the legs, but not before a large number of eggs are laid, there is no excuse for showing pullets with weak colored legs and trying to make one believe it has come from heavy egg production.

The beautiful head points of the Leghorn female is of vital importance. See that you select as good a head as possible. Stay away from the double folded comb for it is a serious defect to get in a flock. Choose a good five-point comb that is fine in texture, good and smooth-not too large. See that she has a good prominent red eye, a nice smooth clean face, small neat lobes, and good yellow beak.

Now we must select a male bird that is near the Standard requirements as possible; he must have type and color with a good long back, low spread tail, good width of feather and well covered up at base of tail and a wealth of furnishings. The more furnishing you get the better; for one never sees a Buff

Leghorn male with too much covering over tail feathers. Another point we must not overlook is male head points (a weak section on Buff males). Let us choose a male with as small a comb as possible; see that it is smooth and free from thumb marks. Also keep in mind the big prominent red eye, a good clean face with stout yellow beak, neat wattles and good white lobe.

We know that we cannot get all the good points in one bird. Mate up the best of your flock, seeing that each female is strong where the male is weak and vice-versa. Do not mate together the same weakness because they are winners at some show. It is better to have a few choice specimens mated properly than to have a large mating just thrown together. If the breeder will just pay a little more attention to the Standard and forget what they think ought to be, they will make it a lot easier for the judge and will not have so many kicks coming into the showroom. Show more of your birds at shows, ask the judge questions, and find out the weak points of your birds. More valuable information can be obtained at shows than anywhere.

PRODUCING STANDARD BUFF COLOR IN WYANDOTTES

By WILLIAM C. DENNY

(From A.P.W. Sept. 1915)

Buff fowls have always fascinated and held the attention of poultry fanciers since 1849 when the "Cochin China" first reached American shores from Shanghai, China. Generally speaking when a new family of a breed wearing Buff colored plumage has been introduced it has met with instant favor and maintained wide popularity. In the early 1890's poultrydom was threatened with a "yellow peril ". In rapid succession Buff Leghorns, Buff Plymouth Rocks, and Buff Wyandottes, were introduced and quickly became quite popular. While it is probable that each being a family of a widely known breed helped them to find favor,'tis also true that their color had considerable to do with this.

Of the three varieties, the Buff Wyandotte for a time made the greatest strides toward perfection. One of the most successful pioneer breeders was George Brackenbury of Auburn, N.Y.; who built up a strain from Golden Wyandottes, Buff Cochins, and cream-colored sports from White Wyandottes. Other strains, which had considerable R.I.Red blood, were originated later on. The present day Buff Wyandottes are of amazing quality compared with those of 10 - 15 years ago. The best strains are now of a uniform golden Buff, while solid Buff specimens are not as common as houseflies, they are no longer the much sought for but never seen that they once were. In strong competition in the show room, can be seen both males and females with solid Buff wings and a solid Buff tail.

BREEDING BUFF WYANDOTTES

By DR.N.W. SANBORN

(From R.P.J. Aug. 1908)

The color problem has bothered breeders of Buff Wyandottes. It has been a source of trouble to owners of any of the buff varieties. I have come to the conclusion from my experience of 14 years with Buff Wyandottes, that the way to get solid buff birds is to breed from stock of solid color. That is easy to say, but where do you get such?

There are a few and scattered through the states; in some yards and are not all worth breeding. Only a part of these all-buff birds will reproduce themselves. When you get a pair of buff birds that throw solid buff chicks every time, they are worth a small bank account. . If I were starting new with Buff Wyandottes I would seek out a man who had a few of these "buff breeders" and pay him his price for a trio. I should pin my faith to yearling hens and a well-matured cockerel of the same line of breeding. I would watch my chicks from the first coming of the wing feathers. And cull, cull, and cull.

THE GENETICS OF BUFF

By DANNE J. HONOUR (Jan. 1984)

To those breeders that depend a great deal on Mendelism or genetics, the buff color is a real stumbling block. I have looked into the genetics of color and color-patterns. Bits and pieces can be put together to tell you what buff is not, or what it could be. I have many such pages of notes, which reveal hardly anything more than more questions and confusion. What it all boils down to is that buff seems to be a multifactor trait and the different tones too, being due to modifying factors.

Selection for the shade of buff that you are after seems to be the route, rather than figuring out the genetic components of buff. Buff color is sometimes crossed with other colors. Here is where a little genetics can be of some help, knowing how the other colors behave. There are cases reported where buff has been crossed with blacks, blues, recessive white, dominate white, pyles, light brown, and dark brown. In most all of these cases good colored purebred buff males were used to backcross. , for about 5 generations, with successful results buff color-wise. The foreign color was brought in on the female side in the cross. When the reverse method was used, the foreign color being on the male side and crossed on purebred buff females, the outcomes have been often failures. Either complete failures result in color or the final color is much too red, as in cases using a black male. Dominant white on the male side has many times proven a failure, while the reciprocal cross works. The important thing to remember is to backcross from 3-5 generations using good colored buff purebred males each time.

One study done by Warren in 1929 on R.I.Red color, I found of interest and perhaps has some merit with buff color as well. (Mr. Knapp in another article said he did some effective buff color selection by culling at hatching time based on down color.). Warren selected during a 4-year period, a light colored strain and a dark colored strain of R.I.Red. Down selection was found more effective on the light shade than on the dark strain. After 2 years both groups were breeding true to shade with few of a medium shade in either strain. Then after 4 years the two strains were crossed. It was concluded that variations in shade of down color, is inherited by a single gene, but neither shade "light" or "dark" was dominate.

In going over dozens of articles on breeding buff, it can be noted the importance of good color in the male. It is often repeated to stay away from the males showing reddish shades in back, wingbows, and saddle. I too have found this true. I was able to produce a good colored strain of Buff Minorcas by using a few nice exhibition colored buff males of an inbred line. These males were repeated in years of backcrossing. The original females were hatchery stock of very poor (too dark) color. This could be called grading up, but it proved the value of using good colored males. I also tried the reverse; using good colored females of the inbred show line, with poor colored hatchery stock males, results being very poor.

THE SEEN AND THE UNSEEN IN EXHIBITION POULTRY

BY JOHN H. ROBINSON

(From R.P.J. Aug. & Oct. 1922)

The general understanding of breeding to an ideal Standard is that it is a striving after the impossible, which is satisfaction with something near perfection. The fact is that the expert breeder gets perfection (according to a reasonable application of that term perfection); in some qualities in most of the birds he breeds, in many characters in many birds, and occasionally in all characters of a bird. Where so many characters are involved it is very difficult to get perfection in all at the same time. Hence while the ideal is not impossible, it is always improbable. The possibilities of getting perfection in any character, or group of characters, vary inversely with the number of characters considered. That being the case, if we try at the same time to breed to rigid specifications in both surface color and under color, we plainly decrease the probabilities of securing the finest possible finish in surface color.

Proper consideration of under color is essential to success in breeding. To make a fad of under color is a sure way to prevent normal progress in the improvement of surface color. The most successful breeders of surface color have been those who never allowed themselves to make the error of sacrificing quality that is seen to quality that is not seen. To do this is not to make a fad of

surface color, but only to give it due consideration. By no process of sound reasoning can we make the invisible equal to in value to the visible in exhibition poultry. Surface color is a primary matter, under color secondary. Those who regard them as of like importance do so because they suppose that certain marks or shades in under-color are naturally correlated with desired qualities in surface-color. It is doubtful whether there is such a thing as "natural correlation's in color patterns of birds. They seem to be capable of endless variation. The correlation seen in Standard varieties were made by generations of careful breeding. Many of them tend to break up whenever selection to maintain them is relaxed. Like properties in surface color often occur with very different under color. In such cases the under color serves as an index of the degree of reserve pigment in the plumage, showing whether it is absent, sufficient, or superabundant. Thus it may be a guide to the breeder in mating, but as in the proper balance of characters and qualities in the breeding pen, each and every degree of pigmentation of under color that can exist in a bird approximating perfection in surface color is desirable or undesirable in a particular case, according to its' complementary relation to the under color in the other side of the mating.

Under color should not be considered at all in judging exhibition birds. A perfect surface color makes a perfect colored bird regardless of under color. Perfect under color in an exhibition bird cannot offset the smallest fault in surface color. To my mind the most impractical and impossible thing in handling Standard poultry is to undertake to judge an individual bird for breeding value, for the breeding value depends not only upon its individual characteristics but also upon its ancestry, and upon its mates. The only rational way to judge birds for their breeding value is by their progeny.

It is absurd to judge the individual specimens for breeding value, by a rapid inspection by a judge who is not supposed to know the breeding of the bird; not even the strain to which it belongs. Any bird of high exhibition quality is presumably a valuable breeding bird if its' pedigree is good and it is mated right. The value of such a bird to the person who bred it often is determined by some particular fault rather than by general excellence; because of the tendency of that fault to appear in his stock or because of possible latent faults which make the bird undesirable for use in his breeding pens. Yet the very fault that excludes a bird from consideration as a breeder in one yard may be what makes it peculiarly serviceable in another, where its defective character is defective in the other direction.

In answer to Mr. C.S. Byer's observations on relation of under color to surface color, I only partially agree. In the matter of buff, it would appear from Mr. Byers' statement that he would absolutely exclude from consideration as a breeder any bird not "rich in undercoat in every single section," yet I can hardly believe that he intends to take this extreme attitude, and I feel very sure he would not wish to be understood as stating that a breeder could hold a Standard shade of buff color in his stock while using regularly breeders that were relatively "rich" in under color, and none lacking this quality. That system of

breeding generally works out a progressive darkening of the surface shades. That may not be an inevitable result of it, but it is the general result. We see it in dark buff fowls, and we see it even more conspicuously in the transformation that have been made in Barred Rocks and R.I. Reds as a result of continued breeding for strength in under color.

BUFF COLOR TENDENCIES

BY S.T. BARTLETT

(From R.P.J., Jan. 1907)

Until a male has molted once as an adult you cannot positively pass on his quality. The color pigment in his blood may or may not be intensive enough to stand the strain of adult moult. A bird of color that holds his or her own from year to year is a mine of wealth to the poultry man.

If it be a buff variety it is well to bear in mind that the tendency is for the chicks to be a shade lighter than their sire. A bird a bit darker than desired for the exhibition pen may be quite the thing in the breeding pen. Do not make the mistake of mating extremes of color in buffs. If you do you will not strike a happy medium between the two; but your chicks will in all probability be a badly discolored lot. Shaftiness, mealiness, and most other color ills in buff come from extreme color matings.

BUFF COLOR BREEDING PROBLEMS

By EZRA CORNELL

(From R.P.J. book THE LEGHORNS 1911)

The best buff color to be found today is on Buff Leghorn females. No other breed of buffs is so absolutely free from all foreign color or possesses a more even shade of buff. The Buff Leghorn has more of a metallic luster than the other buffs, but it is due to their having harder closer fitting feathers. Many breeders have been much retarded in getting a fine plumage by laying altogether too much importance on under color. A bird with a smoky or foreign under color should be discarded, but the best. Buff Leghorn females I have seen have had the lightest under color. The Standard says, "Other things being equal the specimen showing the richest under color shall receive the preference." This may be all right, but be absolutely sure that other things are equal before giving a deep under color any preference or consideration.

Leghorns have comparatively hard, close fitting feathers. In such feathers the coloring matter concentration is in the surface or harder part of the feather; this is according to nature that under color in buff be lighter than the surface color. Take brilliant feathers and lay those in sunlight over a darker under color

and you will deaden the color. The rays of light pass through the surface plumage and on striking the light under color are reflected, much intensified which gives plumage its' extreme brilliancy. If the rays of light on penetrating the surface were to strike a dark under color they would be absorbed and the surface color deadened. This applies especially to the females, the males have a deeper under color but not so apt to be solid. A male should have sound under color, this is important but it makes little difference if light or dark. The shade often corresponds with the shade of surface color. The reader will see no inconsistency here, because the flowing plumage of the male is not as hard as that of the shorter female plumage.

There are three ways of deepening under color, all of which are undesirable in the case under discussion (deadenning the surface color). First, by deepening the surface color, which is merely overloading the plumage with coloring matter; second, by loosening up the feathers and getting a more fluffy plumage; third, by getting a mealy surface; which is nothing more or less than a separation of the primary colors which combine to make buff and which must be thoroughly blended if you are to get a good buff.

SUCCESSFUL METHODS OF BREEDING BUFF

BY FRANK L. PLATT

(From the A.P.A. book "Wyandottes". (Date 1919)

Few colors have stimulated more interest, or attracted more breeders than buff, and the golden hue of a fowl's plumage continues to arouse enthusiasm among experts and novices alike. What is the ideal buff color? There are many shades of buff, a few of which are easily described as cinnamon buff, reddish buff, orange buff, golden buff and lemon buff. The Standard calls for but one of these, rich golden buff. There has been more controversy over the correct shade of buff than over any other color which fowls possess. Buff itself is commonly defined in the dictionaries as a light yellowish color. The word yellow however, does not describe the soft tone of buff. Buff may vary and appear in different hues, so golden is used in the Standard text to qualify the word buff, and describe the shade desired. The word rich is then added. This attributes the quality of luster to golden buff. A color of the right shade is not alone sufficient. There must be a luster, the color must be vivid and bright the particular tone of buff is often a subject of controversy. It is hardly possible to disarm all argument by defining an exact tone or shade. The standard calls for rich, golden buff and the subject will not yield to further definition. The Standard makers agreed upon rich golden buff, as the best expression that language afforded and they wisely added an even shade, a harmonious blending of buff in all sections is most desirable.

Bufs fade, particularly the females. The sun and rain sometimes cause the feathers to become what is known as washed out. While deterioration takes

place in the plumage of all fowls and the moult is nature's provision for supplying the fowls with new and beautiful plumage, the effect is particularly noticeable in buffs because the soft tone of this color makes it especially susceptible to wear. The brightest buff is found on the hackle, back and saddle, wingbows, of the male; for the structure of the feathers of these sections of the male is favorable to luster. The neck is the section of the female in which the feather construction is like that of the male. Therefore, one of the requisites of the female, to produce the charming quality of buff color admired in the male, is a rightly colored hackle.

The breast feathers of the male have a smoother structure than his hackle and saddle feathers and, like those of the back and breast feathers of the female, the barbs are perfectly and completely woven together. Accordingly, a male should be picked for breeding whose breast carries the same color as the females' back, for the back and breast plumage of the pullets may be anticipated by the color of the males' breast plumage. The back of the female may show some sheen, but this quality is usually limited to pullets. These females commonly fade in color of back and breast with the first moult. The under color will often remain good if it was good when the bird was a pullet; and this strength of under color is an indication of good breeding value. The strongest toned buff under color will always be found lighter than the surface color; however a strong surface color may be accompanied by light under color. In this latter case, it seems as if the color pigment had run to the web or surface, and its' concentration there had left the fluff or under plumage weak in color. The hackles of males are often weak in under color, some white showing at the base of feathers. Some pullets are quite light underneath in the back section, yet quite pretty on top. These weaknesses of under color are serious defects. A bird in which the buff is nicely distributed between the web and fluff of the feathers may fade on the surface, but upon being handled, the rich tone of the under plumage will prove to be preserved. Black is always found with red in the plumage of fowls and it would be difficult to find a red specimen free from black. When the red is weakened by dilution with white, the black stubbornly cleaves to its' old domains, the tail and wing. It was some years before a clean buff plumage was bred, although clean wings and tails were sought with eager desire by every breeder. Pure buff wings appeared in pullets, then in cockerels, and the breeding of birds in which the color was nicely controlled led to the production of pullets and then cockerels, that were clear buff in tails. As the advancement was made, breeders were doubtful as to the breeding value of clear wings and tails once they were produced, for it was the common opinion among breeders of buff that the color was inclined to run out and should be strengthened by breeding birds that showed some black ticking in tail. However, pure buff males and females are now mated together, due caution being taken against weak under color and white in the quills of flight feathers.

Some buffs show white in the web of the wing primaries and secondaries, also in the main tail feathers. White is a fault detested by every breeder, although it is not possible to bring it so completely under control that every

specimen reared will be free from traces of white, but buff itself is intermediate between red and white. White may suggest three things, that the bird is a cull, that the buff color has run out in breeding, or that constitutional vigor has been reduced by crowded dirty quarters, improper feed, or vermin.

Sometimes the distribution of buff in a feather is uneven due to the stippling of the buff with a lighter shade of buff, which produces a mealy effect. Shaftiness is also due to an incorrect distribution of color, the shaft or quill of the feather being lighter or darker than the web or fluff. These should be of an even color. There should be one color over the entire bird, allowing for that difference in brilliancy due to structure of feather and not to pigmentation. If the breast is two shades lighter than the back, while the wingbows are reddish, the bird, taken as a whole, might possess the right quantity of color, but it is unequally distributed and the sections do not blend harmoniously. These features of unevenness may result from breeding a dark male to light females or vice versa.

It is not advisable to mate two widely different shades of buff together; the result too often is unevenness of color. Breed Standard colored birds together. Let a little peppering or black ticking in the tail suffice to enrich the buff of the progeny, when enrichment is necessary.

MATING TO PRODUCE BUFF PLUMAGE

BY ARTHUR C. SMITH

(From the A.P.A. book PLYMOUTH ROCKS- 1919)

In the early breeding of buff varieties one finds advice as to how to double- mate for buff color. Nowadays, little double mating is done to produce buff or any solid color. Double mating for buff was excusable and perhaps advisable in those days, because of the unsettled condition of the buff variety, their composite character and short existence. Also to overcome glaring faults, such as dark neck, dark or red shoulders, black in tails and in wings, and a wide difference in color of males and females. White in tails and wings too. With these faults and others to breed out, is it any wonder the early breeders adopted the quick method of correcting one defect by using its antidote, a defect of opposite character to counteract it, and to try to correct in one sex at a time? The early breeders did succeed and admirably in improving color and this improvement removed the necessity of double mating.

The best standard buff nowadays has been produced by the single mating system. This is done by mating together nearly standard colored specimens of both sexes. Other breeders, on account of the tendency of buff to lose color, would prefer that one sex or the other in any mating, be a shade or two darker or richer than that which is regarded as ideal or standard. One of the tendencies of buff color is to become too light. To offset this, breeders select specimens for one sex in the mating that are a little richer or stronger in color. Breeders do not

find it advisable, however to go too far in this direction. Faults and tendencies towards faults must be corrected, but not over-corrected. Many color faults in the progeny are attributed to too wide a variation in color of the parents.

Extremes of buff color mated together seldom produce a mean. Patches of dark and light buff found on the same specimen, mealiness, light or dark edgings; are all attributed to the mating of extreme buff shades. W.W. Browning takes the view that buff is largely yellow modified slightly by red and white and black is nowise a component of buff; and choosing between two evils (black and white), white is to be chosen. Among the faults caused by breeding from specimens showing black are: lacing, ticking in the neck, black in tail and wings, smutty under color, and a muddy surface color. Black will not counteract white. You get plenty of red and white without breeding for them, but either red or white is more readily bred out than black. This view has also been taken by other experienced buff breeders such as A.O.Schilling and M.F.Delano. With this some breeders differ, and while both opinions are held, it is admitted that black is difficult to breed out and keep out. As for white in the wings and tail, the same may be said, though the amount of white can be perceptibly reduced from one generation to another by selection. Black in tail and wings may be bred out in time. The breeders should not expect to eliminate any great amount of this strong colored pigment in one generation. There is a general impression that black can offset white. This is perhaps true in a very small number of the progeny, but the tendency is towards the production of both black and white. The safe rule to offset either black or white is by selecting each generation those to which these undesirable colors are not present, or those with as little of either as possible.

The correct shade and evenness of color are qualities of most importance. Evenness, if not too far removed from the desired shade, is perhaps most important. When persistently selected for generations, this quality will correct such faults as mealiness, shaftiness, light edging, and will influence the color of main tail feathers and flights and secondaries.

A method of mating by the best buff breeders is to protect themselves against a relapse to lemon, cream, and other undesirable shades formerly common. Breeders use a male that is one or two slight shades richer than what is considered rich golden buff. Sometimes the strength of color is maintained by the mating of standard colored buff males and females for the greater number and a lesser number of females that are a shade or two richer than standard buff. For evenness of color and other requisites, such females must be fully as desirable as standard specimens. Under color is secondary to surface color, and while quite perceptibly lighter; some strength is demanded in all specimens for breeding. The quill particularly is required to be buff to the skin and as near in shade of the surface color as it is possible to select, other things being equal. By breeding from such specimens, shaftiness is eliminated or reduced to a minimum.

MATING BUFF VARIETIES

BY S.T. BARTLETT

(From R.P.J. book WYANDOTTES 1910)

Select a male that is most nearly of one uniform shade all over, whether that is lemon, orange, or any other tint you may call it, should be chosen rather than one that has as many different shades as he has sections in his anatomy. Common color defects are: red hackles, red saddles, light color across back, black in main tail and secondary wing feathers, and white in flights, white at base of sickle feathers, and white in under color of hackle or saddle. In our opinion, white is much harder to get rid of than black. White we consider worse than black in breeding male, unless it is an aged male. White should never be tolerated in a cockerel.

If you mate a red hackled male to a female with the same defect you can expect the same defects, only worse in their young. A male with a dark tail should be put with a female with a clean tail. The same is true of the wings. Until a buff bird has matured, one cannot tell what he will be in the matter of color. Some elegant promising cockerels are poor specimens as adult birds. A cock that has held his color through his moult as an adult is a valuable bird.

EIGHTEEN QUESTIONS ON BUFF WYANDOTTES ANSWERED

BY T.S. HEWKE

(From A.P.W. Sept. 1915)

1) Q- What do you consider the most common defects in the color of the present day Buff Wyandottes?

A- Mealiness or mottled plumage. Birds possessing this defect should never be used in the breeding pen. If you use such specimens it only helps to perpetuate their defects and if we cannot breed for improvement, we had better not breed at all.

2) Q-By what system of mating can such defects be overcome?

A- By always mating birds of a similar shade of color. Never mate a dark male with light females or vice versa.

3) Q-Have you been able to produce standard colored Buff Wyandottes, males and females from a single mating, or is it necessary to double mate?

A-Yes, I have produced many standard colored birds from single matings. If I were to lose in shape or color I would resort to double matings to restore it.

4) Q- How would you mate to strengthen color in a strain that shows a strong and persistent tendency to produce light or so called lemon buff?

A- I would select a male especially strong in under color as well as in surface color and mate him to the best-colored females I had. If I only found 2

or 3 that I thought were of the proper shade or that approached the proper color closely, I would not add inferior colored birds but use the small mating and carefully mark the progeny.

5) Q- What steps would you take to improve color in a strain that showed a tendency to produce males and females darker than standard color?

A- In a case of this kind I would use double matings to improve the color.

6) Q- In ordinary cases would you consider a dark or "hot" colored male the proper one to mate with a female lighter in shade than standard color?

A- No. The use of such a male would tend to produce mealiness or uneven colored offspring.

7) Q- What is the cause of smoky buff tails in males and females? How can this defect be improved, if not done away with?

A- Breeding from birds that are weak in under color in this section. Never use males or females with grayish under color.

8) Q- Would it be proper to mate a male showing chestnut color in tail to females with a tendency towards white in the same section?

A- In my experience such matings have proven very unsatisfactory. The extremes in color are too great to produce satisfactory results. If necessary to use such females I would prefer to mate with a male that was of nearly the proper color in this section.

9) Q- Is it advisable to use as a breeder a male with excellent surface color that shows white in under color of either neck or saddle or both?

A- As a general rule it is not advisable to use males with the mentioned color defects in these sections. The results in using a male of this kind will depend to a large extent upon the color of the females with which he is mated. They should be exceptionally strong in color in these sections.

10) Q- What causes mealiness in the surface color of females? Would you use a specimen with this defect in the breeding pen?

A- The use of light colored males with dark colored females. If the specimens were exceptionally good in shape, would not hesitate to make such a mating.

11) Q- What causes shafting in females? Would you use a specimen with this defect in the breeding pen?

A- By mating over strong colored males with very weak colored females. Such matings are not advisable and are always very unsatisfactory. As our aim is to produce an even shade of buff in both sexes, we should confine our matings to birds that approach the desired shade as closely as possible. It is always advisable to make one small mating of the best-colored birds and discard the others, but often in our anxiety to produce large numbers we overlook the danger of using birds with what we sometimes term slight color defects. I would advise against the use of such females.

12) Q- What cause lacing in back and wing bows of females? Would you use a specimen with this defect in the breeding pen?

A- This is caused in a majority of cases by using a male having two colors in hackle and saddle, that is a male in which the hackle and saddle

feathers show dark centers with lighter edges. Males of exceptionally high color, not "hot color", but those with great luster often produce laced females. I prefer not to use a male of this kind.

13) Q- Can satisfactory results be expected through mating, season after season, solid buff males with solid buff females?

A- This depends to a great extent upon your breeding stock. If you have been breeding in line until you have so established a "buff blood" line, you can safely mate solid buff colored birds together with satisfactory results. If you have been careless in your breeding and your line of blood is not well established or if you have at some point introduced foreign blood, you may experience trouble. Therefore when starting out with a buff variety it is advisable when a male and female that closely approach the standard color are produced, to endeavor to start a line by using them as a foundation. It is a slow process, but there are no short cuts in color breeding; on the other hand, the results of one season are often discouraging, but if you persist it can be done. One thing must not be overlooked and that is shape, never mate solid buff together unless they are of good shape. We cannot afford to sacrifice shape to secure nice, even buff.

14) Q- Describe the color of the male and female of an ideal mating for the production of standard buff color.

A- I can only answer this from a linebreeding viewpoint. Where the strain is well established a male and female of a rich even golden buff.

15) Q- Would you use a male or female to improve the quality of color in a strain?

A- In my experience I have found that the best results are secured from the male side.

16) Q- Is the present shade of buff color, as found on the winners at leading shows as described in the standard, a permanent or non-fading shade of color?

A-By permanent, I take it that non-fading is meant, and. I am firm in my belief that such buff color has not yet been produced. It has been my experience that birds of even stronger color than the standard calls will fade if exposed to the elements. I have found that there's also a natural fading with age. This may in a degree, be due to heavy laying or other physical causes. I have found however, that a majority of the best colored females will regain their good color after the moult, many of them being as good as a pullet in this respect. I suppose this to a certain extent can be said to be a permanent color.

17) Q- Is it possible to improve surface color by special care and feeding, and what method do you use?

A- Not to any great extent. Good care and feeding will to a certain degree help to preserve the color. The care of the chicks from hatching to maturity also has its influence on the quality of color. Many good chicks are ruined by indifferent care and feeding. I believe this is true in all breeds.18)Q- What special care do you give a prospective exhibition specimen during the molting season? Do you find it necessary to pluck the old feathers when a bird is

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
molting unevenly’?

A- To keep a bird that is intended for exhibition in good condition. They should be protected from the elements and in the case of a male bird I like to pen them by themselves. I prefer a shaded grass run during the open season and always see to it that the quarters are kept clean and sanitary, also try and keep them in good health and vigor. Occasionally I find it necessary to assist nature by plucking a few old feathers, but do not make this practice a general rule.

THE GOSPEL OF TRUE BUFF COLOR ON DOMESTIC FOWLS

BY W.H. CARD

(Published privately by G.A.Cook and Willis S. Crandell, about 1922)

Buff color on the plumage of domestic fowls is one of the great breeding problems and, we may say, riddles of the ages. Out of the days of Confucius, through the centuries of Oriental life, comes this enigma of what is the True Buff Color, as found on the plumage of domestic fowls. Its’ color, aura, puzzling and elusive in its blending hues, in changing lights and shadows, mingles the uncertain with the positive, with the concomitant division of opinion in the minds and conception of its admirers. Drevenstedt, one of our best authorities on the color patterns of domestic fowls, in writing of this color, and states “There is only one true buff shade of color, and that should be for all varieties of fowls”. In short, Drevenstedt tends to convey the thought, which is absolutely correct, that buff is the same color in any language, or on any buff breed, from any country; that the day for lemon, cinnamon, or orange, passing as buff, is past; that true buff is a golden hue of a soft radiance or melting luster, with no sign of hard, metallic glint; in fact, it has the soft, intangible, and elusive hue of minted gold, with the same brilliant quality, but reliable and permanent when once attained and fixed by long-linebreeding.

The laws of colors reveal that it is a combination of reds, browns, yellows and white, toned to an Oneness of color, by persistent selection towards the desired shade and fixed by linebreeding. The Chinese had the true buff color perfected centuries before the present civilization, yet had to follow, the same natural laws that govern the reproduction of kind today. Weir, writing of this color, tells us that the Chinese call the color Kinkee, or Gold-flower, the Chinese gold-flower being the exact color of the true buff as seen on the plumage of domestic fowls. The color of a twenty-dollar gold piece, or minted gold, as viewed in a North light, is the same as the Chinese gold-flower hue, or the true buff of the Fanciers’ desire.

In spite of its elusive or intangible character, the shades of kindred colors, which are so often mistaken for the true buff by untrained eyes, are at once detected when a careful comparison is made with the gold-flower or minted gold

luster, and soft-toned brilliancy of the correct hue. The lemon shade has a weak, washy, or dulled tone, and the cinnamon or red, has a metallic, hard, or harsh glint when placed beside the gold-flower hue, which comparison should at once fix the character of the standard buff color without quibble or argument in the minds of even the novices.

Nevertheless, the problem still prevails and, after a careful analysis of the situation, it is found that the question of the correct hue is not so much the reason for the many differences of opinion as WHAT constitutes the Major or Minor points in buff color value in placing awards on buff fowls. It is a common fault with novices, who are in the vast majority, to magnify the minor sections, and minimize the major sections; hence, the arguments which lead nowhere except in an endless, aimless circle of conflicting opinions and notions. For instance, there are those of narrowed vision as regards buff color, to whom a gold hackle is sufficient to bedeck the specimen with the gold-flower hue from head to tail, regardless of cinnamon or red secondaries; red or cinnamon tail and lemon shoulders; plain to be seen on the one bird, except to the aforesaid prejudiced eye. Combine thus golden buff hackle with a rich buff under color, and we may even add all black main tail feathers to the above combination of shades, yet, such is the glamour of the golden hackle and rich buff under color, that the faulty major sections are ignored or glossed to a perfect shade of buff by the stunted eyesight of the prejudiced mind.

“The sin of all sins” is white in the under color, when, as a matter of fact, white has an affinity for buff and will fuse and create an even and superior buff tone on the surface, whereas many times a deep buff under color is simply an index of an over plus of the color pigment finding a too vivid expression in surface by cinnamon or deep buff shades verging on red. It is the Standard idea to have an even surface from head to, and including, tail for the true -buff plumage, yet the idea of even surface in the lemon or red shades should never be paramount to the correct shades in the entirety. For instance, a specimen of a deep, reddish buff, or rather of even cinnamon color throughout, should never be considered as buff color in placing awards, no matter how even it may cover the surface, because one must consider that specimens with cinnamon secondaries, and otherwise true buff color, are nearer the standard, even though uneven in surface, than the all red or cinnamon specimen of even surface. This holds good, but in a much lesser degree, with the lifeless lemon shade, lemon being simply a buff shade toned out by an over plus of white in the composition, or, to put it another way, toned out by poor pigmentation or fusing of colors which compose the true buff. Therefore, lemon is nearer buff than cinnamon, with its over- plus of red. The under color on buff fowls should never be considered as too important a factor or as a major point, except when all else is equal. For instance, a cinnamon specimen with deep buff under color does not represent buff color in the entirety, equal to the gold-flower surface over an almost white under color. There is no danger of over looking gray flights, gray main tail or white in hackle or saddle, by allowing an almost white under color; in fact, a specimen of even, true, well toned, buff surface, including wings and tail, hardly

ever has gray in flights or tail, or white in hackle, even though carrying an almost white under color, which is proof positive that there is no defective pigmentation to produce the objectionable white aforementioned. Thus, the under color is but a negligible factor in placing awards, and surface governs entirely. Summed up, it substantiates the scale of points, that on all breeds the surface color and type, or shape, constitutes 3/4 of the specimen and should be the prime consideration in all deductions in judging buff fowls, placing the under color of all buff plumage of far less value, in considering awards, than with Barred Plymouth Rocks or Rhode Island Reds. Coming back to the main thought of what is the true buff color, it is the Kinkee, or gold-flower minted gold hue in every section, on both sexes, glinting in soft luster in the males, and resting the eye in a subdued radiance on the females, but always the same beautiful color and shade, so well described as minted gold. To say more is superfluous, except to advise the novice to study and acquire this color tone and, to the prejudiced "vet" to forsake hide-bound, preconceived notions, and mistaken and unsubstantiated values of the different sections, as well as to learn the correct status of the major and minor points which control the judging of Standard fowls in general, and buff breeds in particular, that there may be a uniformity of opinion and placement of awards in judging all fowls of buff plumage.

One more thought in conjunction with the above. Remember, shape must be considered with color, and the specimen with the least defects in the combination of shape and color is the winner. The Standard advice that shape makes the breed, and color the variety, is not an inflexible, cast iron rule to be rigidly adhered to, willy-nilly, nor is it a rule of a 50/50 basis, but simply a working thought from which to form a proper judgment in ascertaining the least defects which prove the superior specimen.

BUFF COLORED PLUMAGE

By I.M. ASJELD

(Published privately by Bruce W. Ulsh, about 1930)

There is no color as beautiful on our domesticated fowls as that of the true golden buff as called for in our Standard of Perfection, and at the same time there is no color so hard to produce. Having bred Buff Plymouth Rocks for over a quarter of a century, it is with great pleasure to look back and see the great progress that has been made towards perfection in the production of buff plumage in our Standard breeds. During this decade much has been written by leading breeders and judges on the subject of buff color to aid the inexperienced breeder. It was not until the 1923 edition of the American Standard of Perfection that a definite definition was given as to what was meant by buff color as demanded in our Standard breeds. This definition remains the same in our latest

edition, and calls for a medium shade of orange color, having a rich golden cast. This definition is as plain as it is possible to describe. A little study by the interested student and he will soon have knowledge of the proper buff color.

The true buff plumage must be dense, rich, pure and mellow. When exposed to the direct rays of the sun it will show a rich brilliant golden cast, the hue of minted gold that is free from glint or metallic sheen. It must be of one even shade from the head to the very extreme tip of the tail, including the wings when spread out. That means every feather must be in perfect harmony in color. Absolutely free from any cinnamon or reddish tinge or that of a yellowish cast. There are but a few such specimens in our buff breeds and consequently they are rare and are prized very highly by the breeder. The inexperienced breeder should familiarize himself with the color so that he can measure and detect the very slightest variations that may exist. What the inexperienced breeder would term as a shade lighter or darker than the Standard shade, experienced breeders in most cases would term the same shade, two or three shades off. To measure these different shades of buff requires close study and good memory of what is the true buff.

Some years ago, a number of our best writers on the subject of buff color would suggest the shade of a newly minted \$ 20 gold coin. This color was indeed very beautiful but it was not the color for lasting qualities as that of the color we strive for today. In continually breeding towards the shade of a newly minted coin gave us many males that would show feather lacings of the same defect. In many cases this color (gold coin) would run out to the extent that many of the birds became lemon buffs, a color that was only suitable at its best in the show room, because when exposed to the direct rays of the sun and weather, the beauty of this color was soon a thing of the past. The subject of under color has caused many arguments in the show room as well as in the press; some say it makes a good bird better, while others would say it should only be considered when all other things are equal in placing the awards. From my personal experience as a breeder of buffs and making many experimental matings and a close study of the laws of animal breeding, I find that under color is one of the very most important characters to be considered in the mating of buffs to produce the desired shade that will hold its own. The ideal under color in my breeding pens is that of a buff that is very near the same shade as the surface color, being very rich and mellow, having a rich golden brilliancy.

Shafts of feathers must be pure buff on both sides, the entire length of the feather. This last named character is something that is hard to get, but it is very important if we expect to eliminate the light colored shafting, which we see so often, even in some of our best show rooms. In our study among the wild birds we find that so many cases the under color is what we poultry fanciers would call a foreign color to the surface color. This we have wondered at many times, that the surface color could breed so true with such an under-color of a foreign make up. Is it because the wild birds are of nature and that our buffs are a creation of man with the aid of nature and that is why we have to depend upon the proper under color if we are to produce buffs that will hold their own and

reproduce these characters to their offspring? In wild bird life we find that the greatest difference in under color from the surface color, can be found in the birds having the most close and hard feathering, while the greatest harmony in surface color and under color is when the birds are loose feathered.

This has been proved in our buffs in many cases. The breast feathers of the males are as a rule quite close and hard, with under color a rather light shade, while the same bird may have a wonderful under color of the body, where the tendency is to be rather loose in feather. The Leghorns are what we term close and hard feathered, and we find that the Buff Leghorns are not advanced in under color like the rest of our buff breeds. Thus the laws of nature are that the greatest difference in the surface and that of the under color exist in the birds having the most close and hard feathering.

Weather conditions play an important part in production of pure brilliant golden buff. Buffs when growing new feathers, if exposed to the extreme sun heat and dry winds soon lose their beautiful tone in color. Buffs, old and young alike, must have protection from exposure, when growing new feathers, the feathers must have time to mature and the oil and coloring matter that is in these new feathers must have time to set, if we expect to exhibit the highest quality of buffs in the show room or breeding pen. Our best buffs have been grown in seasons when the weather has been a little damp and the skies cloudy. The feathers then have been able to mature in one even blend of buff, without the direct rays of the sun and hot winds to bleach the immature feathers. When feather conditions are not favorable to our buffs when they are growing what we call their finish coats, we provide room for them in the barn, keeping them therein until they are thru moulting and oil and coloring matter of the feathers has fully set, until we expose them to the out of doors again, in this way we have had wonderful results in producing something that has really been magnificent in finish.

We find in so many cases, so many breeders are selecting and mating buffs that show no golden cast whatsoever, but with the tendency of cinnamon or reddish cast. Then on the other hand some are selecting and mating buffs that are of yellowish color, this latter color if of a golden cast is quite beautiful to look at, when at its best, but it is not the buff that our Standard calls for. The best buffs that we raise are those that show the best buff color in early chick-hood and are able to hold this color during their entire growing period.

PROPER MATING TO PRODUCE BUFF COLOR

BY WILLIAM P. WILLIAMS

(From the 1920 Buff Minorca Club yearbook)

I have been asked at times," Why do we see the ribbon on light or dark buff birds instead of the correct shade of medium buff? ". The answer is; shape first to establish the breed, then color to identify the variety of the breed. For

mating buff birds to produce a good quality of color in their offspring, the parent stock should come, by all means from blood lines firmly established in production of buff color. Nothing short of 5 - 7 years will establish buff breeding dependably. Birds of an even surface color are the first ones to pick out, and a close inspection for mealiness. If mealiness is found turn the bird down. The under color should be good even light buff, the wings should be free from foreign color. The wing should be the same shade of color all over when outstretched, and matching the bird's surface color.

I have produced some excellent birds from a male showing pepper in the wings and tail, however discretion was used in selecting his mates. Light color on the lower breast or dark feathers on the neck should be avoided. The male should be the same top color, taking male luster into consideration. Keep near medium sound Standard buff color in both sexes as possible. I have tried and made a success by carrying out this system of breeding Buff Minorcas. This lesson in buff color mating came from the famous Buff Rock breeder of many years; C.R. Baker, of Kansas.

IMPROVING BUFF LEGHORN COLOR ON A LARGE SCALE

BY HERBERT H. KNAPP

(From R.P.J. Jan. 1930 & Feb. 1927)

In 1910 I started with Buff Leghorns. This strain, which was developed in Denmark for egg production, was large, hardy, and disease resistant. They had no other Standard qualities. I spent years eliminating Poor type, short backs and high tails. The color was bad; brown in the tails of both the males and females predominated. The majority of the males had very dark wingbows. Legs were short but they were deep bodied and excellent layers.

I did not want to cross my line with others to improve color, as I thought it might ruin the grand egg production I had. Without adding a drop of blood, we have transformed our Buff Leghorns into birds of real beauty, which closely conform to the American Standard. Back. and legs have been lengthened and a beautiful golden buff color has been established. The most effective culling for color was done just as the chicks came from the incubator. Small brown specks nearly always appear in the heads, that later show dark in the main tail feathers. The consistent elimination of such chicks for 16 years, along with rigid culling of breeders, has solved our color problem. We were able to fix a shade of buff that comes back strong after the moult too, by special matings. We always had large numbers to work with. Dan Young once asked me if it was better to start with fancy stock and to develop production or the other way around. My opinion is one process is about as good as the other, the big point is that they both require years of time.

BUFF LEGHORNS COMMERCIALLY

BY F. S. SMITH

In Oct. 1911 I had for sale both fancy and utility stock in S.C. Buff Leghorns, in the R.P.J.; 15,000 young stock and 1,000 breeders. Among them hundreds of show birds to select from, all offered for sale to make room for next years stock. I developed a wonderful winter layer strain by hatching thousands of Buff Leghorn chicks out in the months of December, January, and February. By doing this year after year after year, it developed the winter laying ability to a maximum level.

THE DEVELOPMENT OF BUFF LEGHORN BANTAMS

BY J.A.DEBEE

(From the A.B.A.yearbook 1946)

In 1932 I started to breed a line of Buff Leghorn bantams by picking a small Standard Buff Leghorn male and mating him with a Brown Leghorn bantam female, old fashioned type-very dark with black legs. A cockerel from this mating was crossed back to the little Brown hen and one of his sisters. Another cockerel from the original mating was crossed with a Standard Buff Leghorn pullet. Also a pullet from the original mating was crossed with a Standard Buff Leghorn male. From these matings I used only the smallest and best colored birds. I used the Brown bantam hen for 4 years, always mating her to the smallest and best colored male. Then she died and I tried to breed these birds from the matings together for two years, but the size did not seem to be coming down. So I went to a lady who was breeding the old fashioned Brown Leghorn and I picked out a pullet bantam more on the order of Light Brown color. That was in 1938 and I mated her to the best cockerel, color and type, that I had. From then on I used the little Brown hen 4 years, always using her with the best male each year. I then began to cut the size of the birds. By the end of 4 years I had a few nice Buff hens and pullets to use in my matings that were as small as the little Brown hen, 26 ounces. My males were still a little large. I had a few nice clean buff hens and pullets with nice surface color, but most of them had white in wings and tails. As for the males, I got a few that were clean in wings and tail but were not very even in surface color, they were too dark on wingbows and back. So you can see it is quite a job to improve color and at the same time cut size. Mating best with best over several years has produced a good strain with males now weighing 26-28 ounces.

FAULTS OF BUFF

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
BY DR. N.W. SANBORN

(From the R.P.J. book "The Wyandotte", 1910)

Black and white in wing and tail have long been-serious defects. Wings have been much improved but tails are still open to criticism when examined. Unevenness in color in certain sections is very marked. Then there is too great a difference in shade of color of neck and breast. Under color is much too light in most show females to be real buff and these light birds make indifferent breeders. A breeder needs breeding pens made up of all buff stock, bred that way. It was not until I made up my pens that were free from black or white in every section, that I got percentages of chicks that half satisfied me. When I could carry this to the extent that my breeders were the "buff blood" kind, I had the satisfaction of seeing more improvement in color than I thought possible

BUILDING THE BUFF LEGHORN

BY DANNE J. HONOUR Oct. 1982

The Kay's of England were the originators of Buff Leghorns, as we know them. They used the common yellow Leghorn, which was on the order of a Pyle Leghorn. The Kay's had to use Buff Cochins to transfer the true buff color. In America, August D. Arnold started importing Buff Leghorns in 1890. Arnold paid \$2,000 for 58 Buff Leghorns in 1893. Five birds alone were over \$500. These were from Mrs. A.C. Lister Kay, of England. Mr. Arnold lived in Pa., and continued with Buff Leghorns until 1923 when he sold his entire flock. The American Buff Leghorn Club was started in August 1891, and the 1893 club yearbook contained a color plate of a pair done by the Artist Lee. Some of the most important early breeders of the 1890's were: Ezra Cornell, George Barnes, and E.G. Wyckoff. Ezra Cornell used a nice Sewell halftone made in 1899, in his ads. Ezra sold out of Buffs in 1902. E. C. Wyckoff had his Buffs until about 1906. George Barnes continued well into the 1930's and was a long time secretary of the Buff Leghorn club.

From 1900 - 1915 many new Buff Leghorn breeders joined the ranks. Among them, some of our most popular and important names: Ed Cornish, F.A. Tecktonius, William Heil, Harry Lamon, George Mair, F. S. Smith, Guy Hatten, Marcus Davidson, George Rex, J.C. Punderford, George Dietz, H.H. Knapp, Dr. L.E. Heasley, A.A. Oswalt, D.W. Lowry, James Sylvester, Joseph Benedict, Mrs. Richard E. Sims, Mrs. Charles Humes, Lea M. Munger, W. Crevorserat, Jesse Wheat, George Gable, C.M. Herren, L.E. Merihew, C.H. Leitner, Ernest Good, Theo. Austinson, Jacob J. Bedel, John W. Mink, W.H. Gaude, Floyd Purdy, C.D. Martin, Mrs. C. Phillips, William Mousky, John Quincy Dawson, and Jas. DeBee. Many other good breeders too, but too many to list. Some Buff Leghorn breeders are better known as string men; Louis Perry, George A. Montgomery, Francis Hanlon, and Guy Johnson. The Rose

Comb Buff Leghorn was at one time popular and a Standard variety. There were many R.C. breeders and two of the best known were H.J. Fisk and F.A. Tecktonius. Many S.C. breeders also bred R.C. Buffs as well.

F.S. Smith started breeding Buff Leghorns in 1900 and continued until the late 1930's. He was one of the largest breeders having at times 6,000 breeders. He also sold market eggs. H.H. Knapp started in 1910 and was another big breeder of Buffs, keeping 3,000 breeders and selling chicks in lots from 25-5,000. Both of these breeders had decent color and type, and showed birds. For years the S.C. Buff Leghorn was a very popular variety. The Whites have held the lead, while the Browns and Buffs battled for second place. Today the Browns have taken the second place and Buffs have become rare.

F.A. Tecktonius called his strain "the 249 1/2 egg strain". Tecktonius had good stock and won well from 1905-1914. He was a good promoter; his foundation stock in S.C. Buffs came from Arnold. Harry Lamon started out with Buff Leghorns in the late 1890's and he is given credit for really improving the Buff color. It was about 1900 before good buff color was seen and about 1925 before good type equal to the Whites was seen. Marcus Davidson became a great breeder of buff color. He started with Buff Leghorns in 1912 with foundation stock of Monmouth Farm. Marcus was a long time club president and bred Buff Leghorns until his death in 1978. George Rex started in 1900 with Lamon's strain. George Rex was very successful from the start and became one of the most outstanding breeders. Rex specialized in Buff Leghorns, and was winning big as far back as 1913. He continued until 1958, when he sold out to Marcus Davidson, because of lost sight. He called his strain "Rex's Blue Blooded Buffs", he died in 1965. J.C. Punderford had an outstanding strain known as "Monmouth Strain". John Lockwood was his manager and this strain won well from 1907-1915. In 1916 Mr. Punderford sold out, but the farm continued with Buff Leghorns until the mid 1920's. Dr. L.E. Heasley started in 1906 and bred mainly for production. His birds also made good show records. Very early he had egg records of 230 eggs as a flock average. He called his strain "Egg Basket Strain". This strain remained popular until the 1930's. Guy Hatten had a fine strain called "Hatten's Golden-Egg strain"; representing Golden beauty and Egg quality in modern Leghorn type. Guy started in 1915 and was a real promoter and exhibitor. In 1925 he bought a male from Floyd Purdy for \$250. In 1928 he had official egg records from 227-255. His farm was burned about 1931 and ended his Buff Leghorn breeding.

Floyd Purdy was a small breeder that started in 1909 and continued with his "Ever gold Buff Leghorns", until about 1926. Jesse J. Wheat started breeding his "Oak Ridge Buff Leghorns" in 1908. In 1915 he had records of 284 eggs. C.M. Herren started about 1918 or before and continued well into the 1930's. He was active as a promoter and showed his "Golden West Strain". He was a popular breeder and active in the Buff Leghorn Club. William Mousky was a very good breeder. He started in the 1920's and continued for years, a small breeder of quality, he died in 1958. George Gable produced some nice birds from 1917-1920's. George C. Dietz produced some good Buffs, starting in 1907;

he died in the late 1960's. Jacob J. Bedel started in the early 1920's and continued 'til about 1960. W.H. Gaude started prior to 1920, known as "Greenford Poultry Yards". John W. Mink showed Leghorns until recent times, he was active with Buffs in the 1930's.

John Quincy Dawson, of Coshcocton, Ohio; started in 1891, his strain was known as "Pioneer Buff Leghorns". In 1924 he stated he was the oldest Buff Leghorn breeder in the world, his ads appeared until 1927. D.W.Lowry of Va. was a small breeder in the 1920's and 1930's. At the 1929 M.S.G. show, Lowry had a hen described as "As good as ever seen". Jas.De Bee was of W.Va., and an active breeder in the late 1930's. Thornycroft Farm of Pa., advertised and won at shows during 1910-1920. James Sylvester of Mich., was a good small breeder. In his 1917 ad he says my Buffs have size and height of legs that compare with the Whites and small neat combs too.

The Buff Leghorn was at one time a very popular variety with very large classes at the most important shows. The depression hit the Buff Leghorn, perhaps the hardest of all the Standard varieties. Then some of the greatest promoters and breeders passed on. Many magazines folded, and attention shifted to egg laying contests. From 1930-1950 the remaining breeders went on with their favorites and produced Buff Leghorns with outstanding type, sometimes winning championships. It is during the period from 1925- 1950 that Buff Leghorns reached a high point in quality.

During the first half of this century the Leghorn went through many changes, as did many of our Standard breeds. To get an idea of the changes in Leghorn type, a glance in the old Standards will tell the story from 1905 until 1920 the Standard had illustrations of Buff Leghorns by Franklane L. Sewell. Sewell's drawings showed a small Leghorn in body size with a small tail spread. The concave Leghorn lines were present to a degree, but the comb was large in proportion to body size. Arthur Schilling did the 1922 illustration, this showed a Leghorn of a smaller comb, longer body, larger body, and fuller tail. Then a trend in White Leghorns began of over-refinement. Many Leghorns had very small combs with delicate points and narrow serrations. Often they lacked vigor and depth too. These conditions meet with a fast change in the Standard. The 1930 illustration of Buff Leghorns by Schilling showed a more robust Leghorn. It was increased in size and depth of body, the tail was made larger, the body was longer, and the comb was larger. The 1938 Schilling Buff Leghorn showed even more size of body, depth of body, and larger comb. The 1938 illustration was dropped from the Standard prior to 1953, as it still appeared in the 1945 edition. To me this was a mistake, as it was a most attractive illustration. I have heard many fanciers remark about this, many who do not even breed Buff Leghorns.

Some breeders prefer the 1930 illustration; I personally like the 1938, as it shows size, and a robust Leghorn. I feel this way because even today we see many Leghorns with over refined heads, undersized bodies, short backs, short shanks, and poorly furnished tails. The 1938 Leghorn illustration really still shows a most productive looking; vigorous, and modern type Leghorn.

NEW STRAIN OF BIG TYPE BUFF LEGHORNS

BY F.S. SMITH

(From "GOLDEN BUFFS" magazine, Feb. 1929)

You are aware of the great demand for the big English White Leghorn and their great popularity. I have developed the Big Type Buff Leghorn. Three years ago, I purchased 18 Buff Minorca cockerels with yellow legs and small combs, which disqualified them as Minorcas. They had good buff color and yellow flesh; I crossed these cockerels with 250 of my largest Buff Leghorn two-year old hens. Every hen I used was good color and type, and from my best bred-to-lay stock, sired from my government egg contest winners. Each hen measured 4 and 5 fingers capacity. I also purchased six big Buff Minorca pullets, with good buff color, having small combs and yellow legs. These I crossed with a big Buff Leghorn cock bird. I did this to get unrelated cockerels to use as breeders, so I would not inbreed. I have produced these big Buffs now for three years, paying strict attention each year to mating nothing but a good color, large birds, and the best layers. I now have a flock of near 3,000 with these bloodlines. I am the first breeder up to date, to have the BIG TYPE BUFF LEGHORNS. By breeding the Big Type Buffs, you get much larger eggs than a regular Leghorn egg, and more of them resemble the Minorca egg in size and color. When the hens are 2 years old they weigh 6 lbs. .Breeders have noted the larger hens will stand the cold weather better than small hens, and seldom get out of condition. The larger hens have more stamina and strength. Note the pictures in the Egg Contests, you will find the best layers are all big hens with more capacity to produce eggs.

(Note: In Poultry Item, Feb.1937; F.S.Smith, a specialist breeder of Buff Leghorns since 1897, has been breeding "Smith's Big Type Buff leghorns" since 1926.)

BUFF COCHINS

BY A.W.RUDY

(From R.P.J. Jan, 1905)

Just as soon as all black is bred out then white makes its' appearance. Of the two colors we much prefer to tolerate black than white, yet for pullet breeding some show specimens can be obtained by using a solid colored female mated to a male free from dark in all sections but may have white in both wings and tail. Such a mating will throw some grand solid colored females, but the males will be culls. In breeding for males we do not object to some dark in the

small primary wing coverts and some dark in main tail feathers; in fact such a male will, if mated to solid colored females, throw a larger and better percent of good cockerels than will a solid colored bird. A good proportion of solid colored males will come from such a mating.

Two solid colored birds mated together will usually throw a large percent of cockerels with white in wings, but grand colored females will come from such a mating. Some grand solid colored males will come also from this mating, but they will not prevail to any alarming extent. In general breeding, females should be as free from foreign color in the wings and tail as possible, the cleaner the better. As a general rule the dam stamps size, type, and constitution, while head points and color (buff) follow the sire. The proper shade of buff and the one that will hold is a golden buff. A lemon color is beautiful when new, but will not last as a few months, exposure to the elements will fade it. The orange shade is easy to breed, but it becomes patchy. To get uniform buff, avoid extreme matings. Under color should not be over looked. Under color too dark or deep in very dark birds will throw black in wings and tail.

MATING BUFF ROCKS

BY J.J. BLEAKLEY

(from R.P.J. Dec.1911)

Pay particular attention to the eye color. It should be a strong red or bay. If you get such eyes firmly established in your strain, it is easy to keep them, but if you get poor eyes you will find them hard to get rid of. Never use birds having "light" or "fish colored" eyes. Keep only females that show evenness in color from the rear of comb to the tip of the tail. They must be free as possible from shafting or mealiness. Never use a female whose surface color on neck or hackle is the slightest, shade darker than the color of the wingbow and back. A good general rule to follow is to select the surface color of the female to match the breast color of the male.

The male should not have any serious defects in any section, and should be as even in color as possible with a soft under color that is a trifle lighter than the surface. Beware of too light or white under color in the neck of the male. I found after years of careful records and experimenting that a clear, golden buff on hackle, back, saddle, and wingbows, with a solid buff tail and wing flights, color free from shafting, is possible to get. Although many of us are able to produce a good many such specimens, we still get many with wingbows a shade darker than the hackle and back, and with a brownish tinge to the tail plumage; often times a little peppering can be found in the main tail feathers. In these two sections there is still much work to do in order that we may produce a larger percentage of solid colored birds

BREEDING BUFF LEGHORNS

BY CYRUS M. LEWIS (June 1981)

I remembered F.S. Smith using the yellow-legged Buff Minorcas to develop his strain of extra large English type Buff Leghorns. Lester Boyd did the same thing with the imported English Buff Leghorns he had, which he crossed with his strain of Buff Minorcas. Sometimes the cross would through high tails or whiptails like English Leghorns. It would take a backcross or two, back to American type Buff Leghorns; to get the Leghorn type good and eliminate the coarseness. It would help size and egg size if done right.

Size in Leghorns was generally maintained by most breeders, by selection of large or extra large birds as breeders plus out-crosses with other strains. Gray under color in Buff Leghorns can show up when outcrossing and too by inbreeding. A Light Brown Leghorn breeder wrote saying he had spent years eliminating shafting in his birds and did so, but one year 90% of the offspring appeared with shafting, he had done some very close inbreeding.

MORE BUFF LEGHORN LORE

BY DANNE J. HONOUR (Jan. 1984)

Thomas Peer, owner of Fairfield Farm, was winning in Buff Leghorns in the 1900 - 1910 period. He was known too for his work with other Leghorn varieties like Silver Duck wing Leghorns. In this same time period Rodney Knapp had some good Buffs, as well as Peter S. Hurt and B.S. Buerlein. In addition to these, Arthur O.Schilling and his brother Bruno Schilling; were breeding S.C. Buff Leghorn standards along with Buff Cochin bantams. Mervin Wintrode also bred Buff Leghorns until 1915, starting about 1900.

In the March 1914 R.P.J., a most beautiful full-page picture of a pen of Buffs appeared. These birds must have been outstanding for the times. They were shown by Royal Farm, Little Silver, and N.J. The male heading the pen also won at the Palace Show Dec.1913 and a few weeks later at M.S.G. show. Two other breeders of the 1914- 1916 era were, Harvey G. Richards and L. Wagner owner of Orange Poultry Yard.

Bruce W. Lentz writes: "He bred Buff Leghorns (his first in 1915), showed Buff Leghorns, and Judged Buff Leghorns. August D. Arnold lived in Dillsburg, a. also. Arnold had a double decker poultry house. At one time I saw among his Buff Leghorns a very good. Male, I thought was far above average. Later that male was sold to Mrs. Phillips of Ridgewood, N.J. .She showed and won with him at M.S.G. The male had good furnishings, so many have very scant tail furnishings. While at Hagerstown, August Arnold and I were admiring one of George Rex's Buff Leghorn cockerels, nice size, nice color, and in fine healthy condition; when this bird stretched his wing open, the quills were buff, not light or white like many often have. Most Buff Leghorn breeders had almost a different thing about their strains. Rex's was smaller, while Theo.Austinson

had the largest strain of all. Rex's birds of 1914 - 1915 were a bit larger than those he showed in later years. Rex had good quill color, something many breeders did not have. August Arnold imported Buff Leghorns from Mrs. Kay of England. Later on Arnold dropped out of them and it was about 1919 that he got eggs from Floyd Purdy. Among the ones raised came the cockerel I liked, that he later sold to Mrs. C. Phillips. Mrs. Phillips was not a master breeder and soon let the breed go. The cockerel Arnold sold her however, won at M.S.G. and I mentioned this to both George Rex and Marcus Davidson; the day I visited George Rex while Marcus was also visiting George Rex. Both did not like the bird, as they said it was laced in breast, perhaps he was but the bird had much more length of tail and saddle than either Marcus or George ever had on any of their birds. Mr. Herren of Colorado, showed at some M.S.G. shows. They were a silvery buff color, short feathering, but good type. Austinson had heavy saddles and long tails, but some dark buff showed in tails, George Rex would not have any of that dark buff in the tails, and would not look at them more than once. Austinson's birds had much more feathering all over. George Rex always had his buffs in top show shape. Carry Henderson showed as Sunset Farm, used to breed good ones too, and showed at C.N.E. ", end of quote.

Guy Hatten's 1928 mating list had some interesting information, he bought a male that had won at the Chicago Coliseum show 1925 the bird was owned by Floyd Purdy and was sold for \$250. Mr. Purdy thought Guy was getting the best cock of the breed in America. Purdy regretted to part with this bird but decided that Mr. Hatten had a great many more pens mated than he did and it would do Buff Leg-horns more good in his hands. Hatten spared neither time nor money to have the best. Only an occasional bird would help us, if we can save a year or two breeding by buying a bird we do it. We are 5-25 years ahead of most Buff Leghorns right now. Those were Hatten's thoughts. In one mating he had the following description "A male with the best saddle and tail of any on our place, with outstanding number and width of main tail and covert feathers. He is mated to retain and improve this quality in his progeny.

Jesse Wheat sold his Indiana Buff Leghorn farm in 1924. He sold his entire flock of S.C. Buff Leghorns to Marcus Davidson and moved to Texas. In Sept. 1969 Jesse Wheat bought a trio from Mr. Davidson and started a flock of Buff Leghorns again. Louis Holm of Roseville Ont. Canada, had bred Buff Leghorns over 50 years by 1978. Ray Lee of Oregon had an inbred line he secured from Canada that had good show quality. Vern Sorenson had some of Ray Lees' bloodline yet in recent years. Another breeder of Canada was Archie Steel, but I know very little more of him, but he was well spoken of. Peter Krusell of Ridgeville, Ont. Canada has Buff Leghorns, a culmination of Louis Holm, Archie Steel, and Marcus Davidson bloodlines.

In 1927 J.H. Robinson wrote two interesting reports, which pointed out the Buff Leghorn color quality. At the Coliseum the Buff Leghorn class was the largest Mediterranean group with 84 birds. A class of extra ordinary color and quite uniformly good at other points. Very high-class birds coming from different yards. Uniformity in a medium shade of buff, the best class of a buff

variety that has ever been seen. M.S.G. also, Buff Leghorns were among the 10 biggest classes (77 birds). I know of no other Standard variety in which has shown as general improvement in color and type in recent years as the S.C. Buff Leghorn. Mr. Schwab also commented on this class, fine type, nice heads, even sound color, good finish. Buff Leghorns are showing improved shape and size each year. There is more uniformity in shape; the low down, short-legged birds are a thing of the past. Judge H.Lamon's work here in the East (M.S.G.), has had its' effect.

BUFF MINORCA NOTES

BY HOMER O. ENDERSBY (March 1980)

I am of the firm opinion that one cannot get buff color from other colors. You have to use buff somewhere and then throw out the off colored ones and keep going for the buff. White is bad I think, because it takes years to bring the buff in strong enough to eliminate the white. When you infuse other blood you are in for quite a spell of having anything but what you want. Years ago I knew of a man, at least heard of him, that was supposed to have taken a Buff Rock male and crossed over on a Buff Leghorn female. Then selected the best he could towards Minorca type. After that mating he then used the best Buff Minorca male he could select from his original hatchery Buff Minorcas. He had problems with yellow shanks, five point combs instead of six, red earlobes, or red lobes edged with white. I recall after about five tedious years he came up with some fairly decent Buff Minorcas .I saw some about that time in one of the shows, maybe his, with fair size, fair color, except they were sort of narrow across the saddle and did not have the good back and tail development of the exhibition Minorca of today. I have been told that by selecting females with as much, and as rich buff under color, and then use a male with darker main tail feathers (running to the brown shade) ,which are not good exhibition birds; that this will increase the buff under color. Also if your females have white quills in the wing feathers, you will almost surely have light or white under color particularly in the back near the base of the tail.

BUFF MINORCA NOTES

By JOSEPH CONRAD HESS (Feb. 1979)

I had some of Mr. Davidson's ;color good all over buff ,no pepper, no white or off shade from his birds ,but they could have been larger. I like a bright gold to them. I got some birds that were supposed to be show stock, but they were not; being off color and size not up. I used them very little. I hatched what I had, so through selection and crossing I think I came up with a good bird. I

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

have very little off color; they get out and run, but are not the great layer, but a very large egg. I had to take what I could and work with them. I only crossed within my flock to see if they would do something I want. If you hatch enough you can come up with some good birds. In breeding it all comes down to one good hen, and have a good cock bird; breed in, or out what you want, which you may or may not get. I think the first thing a breeder lets slip in a chicken is its' size, then the white or black feathers in the Buff Minorcas. Size in about any breed seems to run down.

GOLDEN BUFF COLOR

BY F.L.SEWELL (1914)

Many colors and patterns of plumage have been bred. most magnificent of all appears the golden buff. In sunshine or shadow, in early morning or when the sun casts long shadows over the green lawn and meadows, the golden buff seems to be the materialized dream of pioneer breeders. Nearly every type of fowl at some time or other is produced in this fascinating plumage and when it is attained, the best birds have brought almost fabulous prices.

TRIBUTE TO A STANDARD-BRED POULTRY BREEDER

BY ELLIS DeLANCEY (1948)

To breed a good chicken, duck, goose or turkey; a good animal of any kind, requires thought, skill, observation, study, and genius. Not so much, perhaps as to be a finished sculptor or painter, but breeding perfect models in form, grace, and plumage, is an accomplishment in the fine arts as well as to perpetuate their similitudes in marble, or fix them on canvas. It requires just as many years of study and work to be a good breeder of poultry as it does to become a sculptor, a painter, a physician, a financier or a lawyer, or to achieve success in any vocation. Poultry raising is a study, a field of recreation, an economic factor in our daily life, the products of which are an essential part of the food, which we eat and hence, contributes to our well being. A standard-bred poultry breeder is a master-craftsman”.

BUFF COLOR - MY FAVORITE

BY D.J.HONOUR (1986)

Buff color has been a favorite of mine for twenty years now. My “Buff Color” booklet (Mating and breeding of buff color poultry) is, as far as I know, the only work, which records the many breeds in this interesting color, buff tendencies and the history of buff color.

The different buff breeds in these articles should help keep the history of

each, and may prove helpful in case they need to be recreated. These articles should provide a good history of how the color has changed over the years. The main reason however, is to help those wishing to breed the color; it is nice to have a place to turn to when you have a question. Maybe you will want to know how to counteract a color defect. This buff booklet provides many instances on how defects were overcome in breeding.

The important thing to remember is, this booklet can only be a general guide to breeding this color. Every strain of buff is different and so results will vary. Keep this in mind when you find articles differing on the same point.

I wish I had this information on buff breeding, back twenty years ago when I started; it would have saved me much trouble and expense on the trial and error method

DEVELOPMENT OF BUFF COLOR

BY A.C.SMITH (1919)

To fully comprehend the faults of buff color and the difficulties of eliminating these faults, an understanding of the evolution of buff color in the plumage of domestic fowls would be helpful, even if it is not wholly necessary. That the bright, clean, uniform and pleasing shade now described and required by the Standard for all recognized buff varieties was not the result of a decision arrived at or a selection determined upon quickly, but rather that it was the result of a gradual development in the tastes and education of those exponents of true beauty as revealed in the buff varieties, becomes most apparent after a brief perusal of any of the authentic descriptions of our first importations or early American and English productions of Buff Cochin, which was the original buff fowl of all lands, so far as known, and which descriptions we take in order that comparisons may be made with the present standard description of these varieties; or, more clearly convincing yet is a comparison of these descriptions of the early importations and native productions with living specimens of the truest color types. Judging from these comparisons, the almost incredibly wide contrast between the two must have developed gradually, and this evolution is perhaps nowhere better or more clearly indicated than in the successive editions of the American Standard of Excellence and its successor, the American Standard of Perfection, brief extracts from which will be sufficient, not only to make this point clear, but to show the progressive steps by which the present popular buff shade was acquired.

Color requirements in the 1875 edition are placed on each section along with the shape requirements for that section, and in some instances strangely mingled, and only on a few occasions do we find the color requirements of one section identical with those of another; "rich clear buff rich abundant, clear buff hackle - rich, clean buff a clear, deep buff", are the color descriptions found on some sections for the male. Sections such as wings and fluff have no color description for plumage, except that wings are required to be "quite free from a

All the evidence that we may obtain from the successive Standard descriptions indicates that the greatest advance that has been made in nearly half a century is most clearly brought out by the difference in the descriptions of the color for the tail section. In 1875,”a rich, dark chestnut, or bronzy-chestnut mixed with black - dark chestnut preferred ‘, needless to say there is no admiration expressed for chestnut colored tails, to ignore completely those that contain any amount of black, in either males or females of any buff variety at the present time, when the tail is expected not only to be buff, but to be of the same shade as the rest of the plumage. This description of color for this section remained practically unchanged until the 1898 edition became effective, which fact, together with the knowledge that this admixture of black and the existence of chestnut shades even at the present time in the tails of many specimens, emphasizes the well known difficulty of producing clear, golden-buff tails.

The color description of the female in this 1875 edition shows greater uniformity, being restricted to such expressions as ‘rich buff- clear, rich buff-clear, pure buff- and in color buff.” Even then the description required a tail,” in color, buff.” In the female, the description required a tail,” in color buff” without modification. Evidently, females with clear buff tails were not unknown even in those days, and judging from the different Standard descriptions of male and female, must have more frequently occurred in females than in males.

In this connection, it may be well to note that the short lived 1874 edition also required a uniform clear, deep buff throughout, tail included. It may be surprising to learn, now when buff necks are the rule, that the 1874 edition contained the following sentence: “a clear, buff hackle preferred, but a slight marking on the end of feathers of neck not a disqualification.” This modification was not discontinued until 1898.

Prior to 1898, a marked difference of opinion as to what constituted real “buff” had existed. It was seldom that the judges agreed upon the exact shade that was most desirable or the most beautiful. The lack of uniformity in the shades of the winning specimens when judged by different persons was commented upon and deplored by the breeders. These discussions led to the appointed special sub-committee by the Standard Revision Committee for the 1898 edition; which among other duties, was to determine just what real buff color was, and then to describe it comprehensively. As a result of their investigations, we have the Standard phraseology, descriptive of buff color as found in the 1898 edition for all buff varieties, five in number, very nearly as it is in the present edition. This description was a distinct advance in that, it decided upon “golden-buff” as the most desirable shade and the most accurate and expressive terminology; and it demanded “one even shade throughout”, that is, in all sections but allowed under color of a lighter shade, though restricting the force of this clause by further qualifying that “all things being equal, the specimen showing the richest under color shall receive the preference”. The word “richest” was interpreted to mean the darkest. This was the beginning of an admission that under color in buff varieties was naturally and would always be

lighter than the surface color.

The 1898 Standard description was better than the one that preceded it by ten years, in that it demanded a plumage which required more skill in mating to produce, because absolute uniformity of color in all sections was required, while chestnut tails in males were still allowed in the 1888 Standard, though more uniformity was demanded in this edition than in those that in turn preceded it. From this form of progression, we perceived that a general tendency toward acquiring uniformity of color in all sections existed continuously from the date of the first edition until it became a requirement of the 1898 Standard. The term “golden-buff” was more accurate and descriptive than “rich, clear, deep buff “, and as a descriptive term, met popular approval is amply attested by the fact that it has continued to be the descriptive color term in all subsequent Standards. It can be wondered that it was not used before in the Standard, since it appears in the description of hackle, back, wings, and saddle feathers of females in the first or 1874 edition. The term is used in early books, notably Burnham’s” New Poultry Book, in 1871, from which we quote the two following extracts; “The color of the Buff Cochin is more of a golden hue than simply buff, The under shade upon the downy or fluffy portions of their plumage is pale, but to look at when in their best feather, they are of a rich, luminous yellow shade, sometimes aptly called lemon-colored. In the cock of this variety portions of his plumage are red, or darker, as the wings, neck, hackle, etc., but the yellow color prevails in both.” To show how early this desire to produce specimens even in color of all sections developed, we quote further from the same work;” A very desirable recommendation to the Buff Cochin is that the fowl be strictly uniform in color” Contrast the description of male and female, which is almost identical, found in the Standard of 1898 and the subsequent editions, with the descriptions found of the importations from foreign countries a little later than the middle of the 19th century, and we can recognize the wonderful skill of the American breeders, even had this been their sole accomplishment.

In years past, a diversity of opinions existed as to what constituted a golden buff, and at an earlier period, the same diversity of opinion existed as to what shade of buff was most desirable. Prior to 1898 Buff Rocks had varied from cream to very deep shades that were often so deep that red and even brown cropped out on the wingbows and even on the back.

The description as first found in the 1898 Standard, and the agreement upon this shade was the result of extended research and investigation of certain prominent breeders of Buff Cochins. It has met general approval, as shown by the fact that the slightest change has never been suggested. Aside from its beauty, this shade of buff is one that can be bred from and reproduced with much more certainty than some of the delicate shades that were popular years ago. Further more, it is a shade that holds from year to year, while the light shades in vogue years ago lose color very appreciably with age. This fact lends aid to establish and maintain the popularity of the rich, golden buff of the last three Standards.

COMMON DEFECTS OF BUFF COLOR

BY A.C. SMITH (1919)

Rich golden buff, it is not the cream, nor lemon, nor is it the deep buff shade so common during the early years, which bordered on red in the males and cinnamon or brown in the females plumage. It can hardly be described as a mean between these extremes, yet it approaches it. Golden buff suggests that the surface of both males and females be the same color as unalloyed gold. The best way to grasp the idea of real golden buff is to see a specimen nearly ideal in color.

Birds that are even in surface, including wings and tail are produced quite often, but while endeavoring to breed such specimens, many that are uneven in surface color to a greater or lesser degree are produced. These variations include too dark, and too light necks; dark wingbows in males; mealiness in females, more often on the wing bows than in other sections; shaftiness, especially noticeable in females; light colored edges, sometimes referred to as straw edging on females; dark edging often on the backs of females; the shade of top surface darker than the breast and fluff, most often in males, besides defects in color of wings and tail.

During the early years an even colored male was rarely seen. This was particularly noticeable in both the extremely light and extremely dark specimens. The chief fault in the strongly colored specimens was the highly colored wingbows, which were often decidedly red instead of buff. This defect is not seen at the present time in males of ordinary merit. The very light buff, usually more explicitly designated "lemon buff", males have been received with highest favor in the show room at times, but have of late years passed into discard in favor of a "golden buff". The invariable tendency of lemon buff males is to fade and lose color after the first year, or after the first moult; to become too light on the back and breast and to breed a large portion of males too light in these sections. Light colored females now known by the description of "cream" were also popular in sections of the country, but only for a short time. From a breeder's standpoint, these are as undesirable as the lemon males.

Mealiness is quite common in females, in the wingbow or coverts, though it is found in other sections of females and in breast and fluff of males. No specimen that has this defect can appear to be even in surface color; this is a most serious defect because it is very difficult to breed out. It consists of rather small specks, spots, or stipples of lighter color. It is not always so pronounced that it is noticeable by casual observation, but easily detected upon examination in the hand.

Shaftiness is another fault that causes uneven color. When shafting appears, it is caused by the shafts of the feathers being lighter than the webs. They are objectionable because with them an even surface is impossible. It is more noticeable in the plumage of females than of males, except in the breast

and body. Light edging is a fault that occurs when the edges, which are not as dense in structure as the body of the feathers, are lighter in color. It is found usually in the back section of females, but infrequently in other sections of the females and in the breast and body of males.

Black and white are found in the tails and wings of both sexes. Black is the more common in tails and secondaries and white in primaries. Both are decidedly objectionable. Black in the tail is a most common fault and a little at the base is not dealt with severely. The color itself is usually modified, in reality a reddish-brown or brownish black and often appears in broken field or in large dots or small spots, and sometimes in a few of the main tail feathers, but not all. It appears in tails of both sexes. White is equally objectionable and to some breeders more so than black, and indicates weak color. Birds that show considerable white in wing or tail are rarely used in breeding, though some white might be tolerated, possibly, if the surface color was even and the under color strong. On the whole, white as a color defect is more easily overcome than black.

Silver-gray in tails is a peculiar color effect often seen in both sexes of buff varieties. The main tail feathers of some birds are entirely silver-gray in color, while those of others show this shade only on one side of the quills, it is observed on the inside of the tail feathers while will appear nearly buff on the outside. Silver-gray in the tail would seem to be an admixture of a little black with considerable white, or perhaps some buff. It is comparable perhaps to the production of blue plumage sometimes, a black and white mottled plumage by the crossing of white and black.

In wings black is found, generally on the upper web of the secondaries, though it is often seen on the little feathers that cover the bases of the flights. White appears in both flights and secondaries. Brownish colored spots often appear in the flights, a most undesirable characteristic. The presence of white is not restricted to the web of the feather, as the shaft of the flights very commonly shows white at base. The best specimens of the present day, shows no black or white in wings, and but little black and no white in tails, while occasionally specimens with wings and tail of as good buff color as any part of the plumage are produced. Passing from the presence of black, white, or black and white in the tail, we often find this section too dark, though neither black nor white are present. The color, though dark resembles buff, yet it is plainly not buff, but rather browner than the golden shade desired. This shade has been termed chestnut, and we have what are commonly termed chestnut-colored tails. Sometimes that applies to the tail color as a whole, but more often it appears in patches on one or more feathers, while the remainder of the feather or feathers may be buff. In buff, under color is considered largely from the breeder's standpoint and valued according to its necessity in breeding the shade and the evenness required in surface color. It is impossible to breed birds with under color that is as strong as the surface color. The under color should be buff, but it is invariably of a much lighter buff shade than the surface.

The Buff Cochin is the source from which all buff varieties obtained their

color and to the other defects inherited from other varieties that were not buff, must be added the defects of the Buff Cochins, employed in the various crosses. For every breeder, no matter how well satisfied with his strain, very soon recognizes the good qualities of others and as quickly as he discovers a weakness in his own flock acquires in some way the blood of another that possesses the quality in which his strain is deficient; so the blood of all meritorious strains is quickly passed around and it is well it is so, because then the buff varieties acquire something of uniformity.

MATING BUFF WYANDOTTES

BY E.R. DURAND (1921)

Buff is the most fascinating, the most attractive and elusive color on the plumage of domestic fowls. It is clean at all stages of growth. A flock of buffs will cause a passerby to stop and look, where he would have gone his way without a glance at flocks whose color demands a knowledge of Standard points to be appreciated.

One dictionary describes buff as the color of English oak-tanned leather. Thus we may arrive at the basic shade, which the Standard amplifies by describing it as rich and golden. The world standard for gold is the English guinea. So here we have our buff with a golden hue and rich, meaning that there is plenty of gold in it. There may be several degrees of buff color, and the exact shade is less important than evenness, which should be the ideal. Once attained, it is no longer illusive, for it can be fixed on the flock by means of our line of sires. Breed from buff that has life in it. When a male's top color is so he has sheen. We must not stop there, but match him in every section. His neck and back should show no joining line of different shades, nor should his breast show any contrast with hackle except for the metallic sheen on the latter. In fact, tail, wings (folded or open), body and fluff-all of him should be of the same even basic shade.

In under color our male will show his strength to transmit his color to his offspring. The richer it is, the better. It will be weakest under the hackle, at base of neck, base of tail, and base of breast. If it is good in all these sections he will be "a find." Now note his quills. If they are of a lighter shade than the web of the feather it is called "shafting" where it shows on the surface. We will never entirely eliminate shafting in our females until we produce males without it, especially in breast and body, for it is this part of his plumage that corresponds to the female coloring. If he is not shafted in breast, he will seldom if ever be shafted elsewhere.

Test the male's strength of surface by searching for mealiness in the wing fronts and wing coverts. Mealiness consists of what appears to be a fine powdering of white over the buff. At a distance it may look like very even buff. It is one of the most difficult defects to throw off, and needs strength of rich color in the male to override it, and. even then it will take years. White

anywhere is a weakness in the color pigment, which you are trying to fix. Mealiness is the beginning of a tendency toward white. Black is a Standard defect, but it is a sign usually of strength of color, and Orpington breeders who have tolerated it in years past when Wyandotte breeders were howling against it, have attained wonderful color on their birds. We do not like to see it in the wings, but a little black in the tail is a small defect, and it is always safe to have a few such birds as a reservoir of strength. The wear and tear of breeding tends to make buff come lighter each year, unless means are at hand to hold the shade desired. Breeding year after year from buff without the black to hold it will finally cause the color to fade to lemon and the white in wings and main tail will at last begin to show.

Females should always be of good general type and shape, with size and bone. We want broad backs, flat at the shoulders; and we also want well spread Wyandotte tails. A good head on a female means a good body, and the general remarks about color apply to her as well. The male will correct color that is slightly uneven, especially if due to improper molt. Hens free from mealiness or white in any section of plumage will be corrected by the male if of the same approximate shade. Try to have them as smooth as possible in this respect. Do not use females of an entirely different shade to the male. If they are the same color, or slightly darker, they will be better than if too light. They may be light due to age, and this should be considered when mating. Good judgment and knowledge of what has gone before must always be used. Hens with dark necks and light bodies will not be bettered if the neck is stronger than the color of the male. Books could be written on color and color breeding.

BUFF WYANDOTTE COLOR

BY F.L. PLATT (1921)

Good Buff Wyandotte males present a beautiful sheet of buff color, but good females are rarely seen any more. The best buff females of the golden days of 1910-11, had edging on each feather. It added brilliancy to the plumage. The laced birds were free from shafting, and not darker but brighter in color as a result of the brilliant edging. The Red breeders had some of this lacing. Lester Tompkins said at the time he would rather have lacing than some other things. He didn't think it was much of a defect. The buff men, particularly the Buff Wyandotte breeders, have succeeded in eliminating the brilliant edging. We would like to see some of the rich golden buffs back to take the place of some of the hens and pullets that are being shown today. These hens are patchy and mealy.

In order to produce level colored females, more attention should be given to the breast color of the male. It should be free from light colored quills, called shafting; it should be free from whitish lacing; and it should be as nearly as possible of the shade of color desired in the females. Ancestry is of fundamental importance, and a male to be a good breeder of females should not merely be a

good bird himself, but his dam should have been a smooth level colored hen.

It is the Buff Wyandotte females that require the extra study. These hens with good hackles, even though patchy in back color, will produce good males; but better females can be produced only from males with brighter, higher toned breast color, even though they fail in some other sections. If this fact is grasped, we can look for Buff Wyandottes in females that rival any other buff colored fowls. An ambitious breeder can start now to produce what is wanted, outdistance old competitors, and make a name for himself. Get the breast of your male right, have his ancestry on the female side right, and then overlook some minor points in his own individuality. Such a male will breed good pullets.

BUFF COCHIN BANTAMS

BY H.P.McKEAN (1937)

My experience has given me to believe that Buffs can be made quite the equal of the Black for type, and that buff, as a color, is none other than any other color, if handled in a common sense way. There is and probably always will be a certain amount of sincere uncertainty as to what this color "golden buff" really is. We are fortunate at this time to have one or two things pretty generally admitted as right, which aid us in our actual determination of some of its limits at any rate. Buff birds to be called buff must be the one and same shade of color from head to tail. Whether that shade is light or dark, the one and same shade throughout the entire extent of the bird is demanded today if that bird's color is to be called good or recognized as such. Consequently it is pretty safe to say that buff birds unless they are positively of even shade are not good in terms of color to be considered as good today. While the actual hue of "golden buff" is quite an indefinite proposition at best, today I believe it possible to state as a fact that hues of buff bordering on anything of the cinnamon red or lemon yellow to be quite other than the desired hue of true "golden buff". At least we have confined our "golden buff" to some extent as to its hue.

When the real and true "golden buff" is seen I believe it to be best described as being a very soft color in its general impression, I believe it to be a rich color in its color value, and I believe it to be very intensively alive in its brilliancy. I frankly do not believe that there is one and only one such color as the true and real "golden buff" but I do believe that there is a one and only kind or sort of color and that this color is distinctly limited as to actual hue. There is nothing harsh, or weak, or dull, about real "golden buff", those qualities of color are not those of this color we need for the living bird. The very life or brilliance or the reflectivity is the only qualification of the quality to be seen on the bird that necessitates the use of this word "golden" in our description. Buff in itself is technically a dull drab affair. I have seen real "golden buff" birds which if judged as to actual hue side by side could not be said to be anything like as identical hue and still if judged separately could not be said to be of other actual color" golden buff". This "golden buff" to me is a positive limitation of a

desired color rather than anything like an actually specific denotation or description of anything like an actuality of anything absolute.

The combining of Buff Cochin Bantam for future stock is quite the same as the combining of any other type of chicken. Certain breeding principles must be known and used. After more than 25 years mating birds I have, come to regard certain qualities or functionings as “female responsibilities” certain others as “male responsibilities”. I regard the female as responsible for the general shape of the whole or parts of that whole. I regard the male as responsible for the mentality or easy tractable handling characteristic.

If real permanency or standardization of a quality is desired, the field of counteraction must be limited. The smaller the actual range of necessary counteraction of a given fault, the greater the stability and percentage of achievement towards the desired quality.

BUFF COCHIN BANTAM COLOR

From (Pacific Poultry man - 1940)

In breeding one has to guard against color difficulties, and the best way to do it is to use a sound rich colored cock, with hens that are equally sound, but somewhat lighter in color. It is a mistake to mate birds that are both on the dark or light side. The breeding pen must be balanced, and if hens are used that possess the desired show color, their mate should be somewhat warmer in color, and when an exhibition cockerel heads the pen, the hens should be of a rather warm shade. If this is not done, there is a tendency for the stock to lose color and become mealy. On the other hand, if birds are used on both sides that are too warm or deep in color, black is likely to show itself in the tails, and the flights are apt to be peppery.

Eye color is important. It should be orange or red, many birds fail in this respect, and have pale yellow eyes and some are almost white. Such birds should not be used as breeders unless they are superlatively good in more essential properties. Rich eye color, although not a leading feature is one of those finishing points that add considerable to the appearance of a bird.

Cockerels and pullets are never so well developed as cocks and hens, and are handicapped when shown against adult birds. Cochins do not assume that roundness and plumpness that is so much desired, until their second year. For this reason a young fancier needs to be very careful in the disposal of his young birds, or he may find that what he thought was the ugly, gawky wastrel as a chicken has developed after he has sold it, and has beaten birds that he esteemed more highly.

ABOUT COLOR IN BUFF COCHIN BANTAMS

BY H.P.McKEAN (1940)

There is little wonder that the Buff Cochins rank so high in popularity, for the color buff, when realized, is one of the most glorious of all colors known to our poultry and its attainment presents a very real challenge to breeding effort. Real and true buff is a very soft color, and rather light in actual shade. For buff feathering, the color is described as "golden buff". Now golden, as used here, does not denote any particular shade of this color buff, but it does denote the kind of color that this buff shall be. Golden, demands that the buff feathering shall be bright, alive, vivid; having reflectiveness and brilliance. The color buff is not bright and reflective, but soft and rather flat. The color golden buff is intensely brilliant and alive, having the reflectiveness of glittering gold. The term golden merely qualifies the term buff by denoting the impression that should be given by this color when viewed.

The more experience I get in the handling of Buff birds, the more convinced I become of the futility of a wide margin of counteraction. I mean the practice of using dark birds with light birds, in attempts to get the desired and proper color. This amounts to nothing more or less than using two separate colors and involves all the complications incident to that practice. Color counteraction must be held within narrow margins so that colors foreign to the one to be desired are not introduced. Actual buff has distinct bounds, beyond which limitations the color ceases to be buff at all and becomes, in reality, some other actual color than buff can be said to be.

It is, my most sincere belief that under color is a positive essential to actual color, and I consider birds not having to a very considerable extent, really sound under color, to be valueless in attempts to produce good color. The practice of using dark birds to counteract light birds, is of course necessary to resort to on many an occasion, but in such cases, it must be borne in mind that no bird failing in an actually good amount of under color has much power in the real transmission of its color, no matter how dark or how light may be its surface. A rather light bird, with solid under color has greater power of color transmission of its color, than a far darker bird without under color. Proper color intensity and its transmission are dependent upon under color much more than upon surface coloration. So far as I am able to gather from what I have seen, heard and tried, true and real buff color, is controlled best by the use of birds having fairly narrow margins of difference in their actual color. If a strengthening of color is desired, birds should be combined with as deep under color as possible; while, if a lightening of color is desired, birds should be combined having less depth of under color. When under color is considered as the basis upon which to judge a birds' power of color transmission, rather than surface color (as is so often taken as the basis for judgment) wide margins of counteraction are not found to be necessary and, consequently, reversion to white and red colors, which are not actually buff, are largely eliminated. If this practice is followed for a few generations, you will be agreeably surprised how many fewer red birds and white winged birds you will have to contend with. White and red are extremely powerful in feather coloration, and extremely unfortunate colors

in the handling of buff. The entire elimination of white and red will probably never be realized in breeding buff, but there is far more hope that eventually they will be eliminated if we do not make use of them than if we do.

If you seek to breed buff, do not, under any circumstances, use other colors than positive buff in your attempts. Red and yellow do not combine in pleasing proportions to result in buff, for, while buff may be said to be a combination of these colors in certain proportions, somehow, in breeding feather color, satisfactory proportions seldom if ever, occur. Our best buffs are quite as typical Cochin Bantams as are any Cochin Bantams. There was a time when the Black stood out as having superior type. This I do not consider a fact today. The best buff color imaginable is, after all, a waste of time if it is not placed upon a foundation typical of the breed.

BUFF AND RED PLUMAGE

BY J.H.ROBINSON (1920)

In buff, look first for evenness in the shade of buff. Poor breeding shows in different, shades of buff in different sections. A bird may be of several shades of buff, all good but not matching. A bird that is all of one shade will win over it though that shade is not as nice as any of the several shades on the variegated bird. A little white or black, making a faded or mealy surface in wings and tail, often leads a novice to discard an even colored bird for one that is cleaner buff in these sections, but not uniform in surface color.

In red, give the preference to birds that are an even shade of color everywhere except where black is specified. The worst faults in reds at the present time are yellowish red necks, and mottled color resulting from mating birds differing too much in color. Very dark birds frequently have black peppering in the surface on the wings and back. Many such birds look very rich and nice in color at a short distance, but the bird that shows a clean surface will win over them at the shows.

COLOR PIGMENT versus FEATHER STRUCTURE

BY D.J.HONOUR (1986)

Feather structure has more importance on color than most people realize. Actual color is due to the amount of pigmentation. However, the type of feather has a lot to do with the amount, or saturation, of color pigmentation and luster. What A.C.Smith writes in the 1919 A.P.A. breed books (Wyandottes - Plymouth Rocks), about buff color and feather structure, is very true. (See the 1985 article "Rich lustrous buff versus light, dull buff", and "**Common** defects of buff color - 1919 by A.C. Smith.") In addition it can be noted that the male has a wide-smooth feather in two other sections; the wing bar and in the tail section. In the tail, the main tail feathers, the main sickles, the lesser sickles, and tail coverts -to

a lesser degree; have the wide-smooth feather. It is natural that these feathers carry more color pigment and little if any luster. It is therefore natural that these sections appear just a color tone richer in buff color. In general, if the male is rich and sound in buff, this slightly richer color tone will blend in and, present a fairly even buff surface color. However, if the male is reddish in back, saddle and wingbow, then the wing bar and tail sections will appear too dark and, the bird will be uneven-will not blend in color. I have seen light lemon colored buff males that the wing bar matched the wing and general light shade of surface color. I did not consider this good color, as this even matching wing bar was accompanied by mealiness (small amounts of white) in wingbow, wing fronts, shoulder, and back. The tail sections were as light and matching, but showed some white in sickles and lesser sickles, the wing primaries and secondaries showed white in quills also. This light lemon buff on males appear to be even and matching in color, but only from a distance .On close inspection the white was there in most sections and the term “brassiness” would apply.

The wing bar and tail color differences are much reduced in the buff female and rarely are color differences noticed. This is in relation to feather structure; it does not mean that the female has no color defects in these sections. Some sections are more prone toward foreign color in buff color. This can often be noticed when crossing and backcrossing buff with another color White in the flight coverts of the wing is the last place to come back in buff. If there is a lot of white in the wings it appears usually in the upper webs of the primaries and secondaries, and sometimes as mealiness in the buff of the lower webs of primaries and secondaries. The breast and neck are the first places buff comes in nice .The back and lesser tail coverts often are a mealy buff. Main tail feathers are about the last section to come in buff in females. In males the last sections are, lesser sickles, main sickles, and main tail; sickles and lesser sickles being about the hardest section to get back to solid buff. The same could be said of black .The amount of black is usually less than white, but the amount of white is eliminated faster, but small amounts of white leave very stubbornly and it takes time to totally get rid of white.

The lustrous edging on buff females, sometimes called brilliant lacing; is a minor fault. With the many defects that the Standard cuts for in buff color, this lustrous edging is not even mentioned. Many do not even notice it, but it is found in all buff breeds. Even though buff is listed as a solid color, genetically it actually behaves like a parti- color. This lacing or edging tendency is common to parti-colored varieties. This edging has to do with feather structure and not to pigment color, as is the case with "color lacing" (like Wyandottes varieties-Silver Laced and Golden Laced), which is due to pigment color.

In my own buff color breeding I have been watching this lustrous edging carefully. I have noticed it for years, but only in the last few years have I brought it to the attention of others and then only to learn more about it. It can be noticed more in pullets with a medium or rich shade of buff, in lighter pullets it is there but can go unnoticed .The richer pullets with this edging usually moult into lighter hens, that are duller in luster and hence it is hardly noticed in these

hens that had it as pullets .The males produced by these edged females, are very beautiful and have a lustrous, bright gold top-color. In the females with edging, the feathers seem to be wide, smooth and, a nice tone of color free from shafting. I have not found it on narrow, rough, or frayed feathers. When the pullets are in good condition and in good feather, they seem more apt to show this lustrous edging. I do not select for this edging, but if it is a fault it does not appear to be a bad one. If it is a fault it is a feather structure fault and not a color pigment fault. I question if it is a feather structure fault, as it usually appears on the best feathers with feather quality. Going by the Standard, I see no reason why a buff female with edging cannot place or win, if of superior type.

I read with interest on this edging, in a 1955 Red color article by M.C.Wallace says," the broad female feather with a fine lacing, carrying extra brilliant luster, always met with the favor of Art Schilling. He contended that such plumage was conducive to better feather quality and more brilliant luster in the male progeny. My own years of experience in breeding Reds has been such that his contention has become a fixed principle."

I feel edging is a male feather structure character which is found in females. I find no drawbacks connected with edging, in relation to egg production, male temperament, or hatchability. I mention this because some will think of the hen feathering trait, and other double mating drawbacks. If it is a male trait in the true use of the word, more would have been written on it by Game breeders and other breeds long double mated.

One judge told me he never would place an edged buff female no matter how good otherwise. This to me is foolish, as it is such a minor thing the Standard does not even provide a cut for it and type in any breed or variety is the most important thing. Today we do not scorecard judge birds and unlike in the past when a bird had to score a certain number of points to be awarded first or second prize, today that has been dropped from the Standard. I think the last Standard to contain this clause, was about 1962. Judges too often do not follow the Standard close enough, and allow some faults or traits to carry far too much weight in their judging. I saw another judge going over some buffs and placed far too much importance on under color and not enough on surface color and type. This under color inspection was done in poor light, and had they been taken out in bright light, the under color would have proved to be richer than thought. The current Standard says, "Under color should be considered in placing but NOT GRANTED UNDUE EMPHASIS."

FEATHER STRUCTURE

BY F.L.PLATT (1921)

If we take a saddle feather, which grows from the hip of a cock, we find that there is a web in the center of it. The outer portion is composed of barbs not hooked together. The hooklets on the barbs are absent and the barbules are

reduced and the bare barbs are extended. The male has the greater wealth of plumage and carries long, pointed feathers on his neck and back, and they have a firm web only in the middle portion; the outer half of the barbs, not being hooked together, present a frayed appearance. This is called the top plumage and since it covers so large an area and is so showy in the male, it is of capital importance.

In the female, the neck section has a plumage similar in structure, but the female feather section is rounder and the web is relatively broader than in the neck of the male. The breast of the male is one section in which the structure of the feathers is about the same as found in body feathers of the female. The structure of the feathers indicates that the breast of the male, and the neck of the female, are determining factors in breeding; the male's breast for body color in pullets; the female's head and neck for top color in cockerels.

Sheen probably is superficial and due to refraction of light. Oil probably helps the blood supply in the nutritional processes, and it has been suggested that the sheen-which is especially important in a black feather and hardly less so in a red one, since it bestows life to the whole plumage is due to the oil hardening into minute crystals and refracting the light.

BREEDING BUFF COLOR IN BUFF LEGHORNS

BY D.J.HONOUR (1986)

It is said that in buff, the male has two color genes and the female has but one. This could be true, from a practical standpoint the male does seem to be very important in buff color breeding. If a light buff colored male is used on medium to dark hens, the offspring will be on the light side in general. Some (a small percent) will be medium in color shade. This mating seems to produce a lot of patchiness, mealiness, and uneven color. The lightest offspring are likely to be a bit more even and, some of the medium colored birds may be even. It is very unusual for any of the offspring to be as dark as the darkest hen used in this mating. This mating on the average tends to weaken the color pigmentation. From the offspring of this mating it is best to use the medium colored and even birds, especially with males. Some of the light patchy and uneven colored pullets might be used if mated to a medium, even colored male. It would be too risky to use light, patchy, or uneven colored males. The light colored pullets (if of superior type) might be used in a special mating using a sound medium buff male.

A sound medium buff male on light females will usually produce a good percentage of mediums colored offspring. Some of these medium birds may be even in color, but some will be patchy and uneven, a few will be mealy. You will also get some light birds, many patchy and uneven. Only a small percentage of even light buff. It is very unusual for any of the offspring to be as light as the lightest hen used in this mating. This mating on the average tends to maintain or increase color pigmentation. The best way to maintain color strength and

evenness of color is to mate medium buff birds together. In order for a nearly equal buff mating; an imaginary line should be drawn, the male can be a shade darker in surface color and also darker in under color, while the female can be a little lighter than the male in surface color and lighter in under color yet still have good buff quill color. These two birds would be nearly the same in ability to transmit good sound medium color to a good percent of their offspring. In margin of difference between light and dark shade here, is very small.

To increase color strength a dark buff male is mated to medium or dark buff females with rich under color. Watch out for red and pepper from this mating, and cull such offspring. Most from this mating will be rich in color, some too much so in fact

In Buff Leghorns, you are working with a long tailed breed and the longest tailed buff variety .If off-color is found, it is very apt to be in the long sickles and lesser sickles of the male. Females usually appear sound in color in tail sections, either they carry this defect or else they may be off in the very smallest degree and go undetected in this section. The color defects of this tail section are perhaps enlarged in the male offspring .I have looked very close here, and I think that the females carry the color defects in their genes .The only way I have found to maintain a good sound tail color on the male (one with sound even sickles and lesser sickles), is to use ONLY males that show no off-colored sickles and mate him to related females. Mate the same male to daughters or grand-daughters, and then continue using sound males bred from females with sound colored sires. The same thing can be done without inbreeding, if ONLY sound even sickled males are used EVERY year exclusively.

Very few of us have such males to use and even then they may not have that very important Leghorn TYPE or, feather quality and length of feather. It comes back again to, how do we make use of these good typed males with defective color in sickles? Some males come with off-white or cream color in sickles and lesser sickles; others come with chestnut or dark red mixed with brown or black. It is hard to say which is the lesser of the two evils. I feel black is the worst, as it is a strong pigment factor. White is a strong and persistent, but it is not a pigment but a lack of color pigment". In order to eliminate white, it has to be done in degrees and, by strengthening the buff pigment so that it comes in strong enough to counteract the lack of pigment. Blue or sometimes called "silver gray" in buff is very bad because it tends to brake up into black and white, as well as continuing as blue in some. Blue is best culled from all buff stocks, with blue you are working with two strong factors which makes buff color breeding harder.

Chestnut is usually reddish brown, sometimes mixed with small amounts of black. Chestnut is a strong color pigment; but being mostly red pigment, it is closer to buff and better than black. Chestnut can be reduced faster than black; it is reduced gradually by selection of males that show the least amount each generation. The females used (when chestnut reduction is wanted) must not show any pepper in tail, lighter buff females are better mates but; remember

lighter in this case would be a rich buff still as you do not want to mate extremes.

If white appears in male sickles, his mate should be of a rich medium buff, with good under color. This white will yield to buff by selection, gradually. Both chestnut and white in sickles are undesirable, but usually a small percentage of the male offspring from either; will be nearly buff or all buff. With a good number being raised, a few clear buff males can be produced and this gives the breeder a chance to brake the cycle and allows for production of better buff color. Each case is different, but in general chestnut is less dangerous to use and will produce a slightly higher percent of good colored offspring than with white. With white you have to be careful by watching out for mealiness and light colored off spring. Remember the male is very important in influencing the general color of the offspring in buff color. It is a bit faster to bring up color into a light buff (using medium rich males) than it is to reduce color in very dark buff. When reducing the amount of white or black, it is best to mate with a clear sound buff in the other sex. It has been found that mating one with white to one with black (in tails), produces some with white in tail, some with black, and some with both white and black or blue, and only a very small number with buff in tail.

RICH, LUSTROUS BUFF verses LIGHT, DULL BUFF

BY D. J. HONOUR 1985

From the new A.P.A.Colorplate STANDARD OF PERFECTION Buff (p.4) A medium shade of orange -yellow color with a rich Golden cast; not so intense as to show a reddish cast, nor so pale as to appear lemon or light yellow. Buff color description (p.21) Plumage; Surface throughout an even shade of rich Golden buff. Male -head, neck, hackle, back, wingbows, and saddle showing greater luster. Female- hackle, some luster. Under color matching surface as near as possible. Luster-Lustrous (p. 8) a brilliant, glossy, luminous appearance of the feather due to the reflection of the light rays, more evident when the fowl is in perfect physical condition. Rich (p.9) a term applied to plumage that has a high saturation of pigmentation, vivid in color. Sheen (p.10) Luster, the bright, glistening effect on the plumage of certain sections. Cutting for defects (p.18) Buff 1) mealiness, 2) light shafting 3) black or white 4) unevenness of color 5) slate in under color. Buff Leghorn color (p.79) shanks and -toes - rich yellow. . Note; Buff Leghorns are the only variety of Leghorn large fowl with shanks and toes Rich yellow; others are listed as just yellow.

From the A.P.A. Standard breed book on Wyandottes, based on the Standard of Perfection (1920) Buff (p.35) a yellow-toned brown, that is, a yellow darkened with red and black, bearing in mind that yellow is the color of gold. Buff Standard Color (p.14) a lustrous, orange yellow; sometimes as a soft brownish yellow. Luster (p. 19) The special brightness of plumage that gives brilliancy to the surface color. Buff color properties (p.221 - 226) The breast

feathers of the male, have a smoother structure than his hackle and saddle and, like those of the back and breast feathers of the female, the barbs are completely woven together. The brightest buff is found on the hackle, back, saddle and wingbows of the male, for the structure of the feathers of these sections of: the male is favorable to luster. The neck section of the female has the feather structure like that of the male. The back of the female may show some sheen, but this quality is usually limited to pullets. The strongest tone buff under color will always be found LIGHTER than the surface color, however a strong surface color may be accompanied by light under color buff color pigment runs to the web (or the surface color) and it concentrates there leaving the fluff or under -color; weaker in color pigmentation. Buff should be an even color, allowing for that difference in brilliancy due to structure of feather and not -to pigmentation. Light edging is a fault that occurs when the edges, which are not as dense in structure as the body of the feather, are lighter in color. It is found usually in -the back section of females but infrequently in other sections of the female and in the breast and body of males.

The above information was printed by the A.P.A. and met with their approval in the sources mentioned. This is what buff breeders and judges are to have used as a guide. The remainder of this article will contain buff information from long time buff breeders and judges of high reputation.

In looking over my collection of about 200 buff articles, I find the term "brassiness " in buffs, only used in two cases and both of these are connected in that both authors were talking of light buff . In a 1933 article on 'stay-buff', Frank Conway states; " A "strawy" cast and "brassy" birds eventually moult into a washed out appearance. A color too light a shade to remain permanent, resulting in considerable white." In The Plymouth Rock pamphlet by O.R.Ernst,in the Buff Rock section (p.8),"The ideal in buff plumage cast is to keep away from too much on reddish order, or pale lemon .The pale lemon buff shows brassy or light yellow Between these two seems to be a true golden buff."

Cyrus M Lewis (1980) stated; many breeders fail by producing a buff color of too light a shade. Light color is easier to breed in an even shade all over, especially in males and can be quite beautiful and may win if of superior type. The topcoat of the male carries a lustrous sheen, but it is most desirable that the breast be of the same shade .The aim is for the breast to be of equal strength in buff color. The female should be of one even shade, the hackle may carry some luster. Sometimes buff females appear with a nice tone of color but carry a lustrous lacing, this is a fault, but not a bad one, and such females are useful in producing lustrous males. The optimum is to secure under color as rich as the surface. The gradual elimination of birds, which carry faults, produces perfect colored buffs.

Frank Platt (1925); Buff color: Lemon buff color runs out in the first generation of the customers breeding. General popularity of buff diminishes when the lemon buff color is bred and sold .All permanently successful breeders of buff color have bred a rich golden buff. Those breeders, who fancy the lemon color, produce few more good birds than they themselves require and instead of

their breeding carrying strength of color that enables it to reinforce the flocks of customers and prove beneficial and popular in the hands of buyers, they (light color breeders) themselves must secure reinforcement from breeders of rich golden buff birds. A few constructive breeders, laid emphasis on a sound buff color that would feed and reinforce the true buff surface color.

In a 1927 show report T.F.McGrew asked what had become of Buff Rocks? A breeder told him, they have become yellow and no one wants yellow fowls. The judges prefer yellow and breeders must have that kind or they cannot win. The same has happened to Buff Orpingtons, at one time they had wonderful color, but little by little they lost the golden buff color, now they are not so popular .(McGrew stated, buff fowl of all kinds can be as popular as ever as soon as those who breed and show them have the true shade of color).

In 1900 Ezra Cornell had this to say about Buff Leghorns, the Buff Leghorn has more of a metallic luster than other buffs, but it is due to their having harder closer fitting feathers. The coloring matter concentration is in the surface or harder part of the feather, this is according to nature that under color in buff is lighter than the surface color. The rays of light pass through the surface plumage and on striking the light under color are reflected; much intensified which gives buff plumage its extreme brilliancy.

Henry McKean was one breeder that bred by the Standard in shape and color, after breeding Buff Cochins with much success, he wrote (1937) these notes on buff color; “while the actual hue of “golden buff” is quite an indefinite proposition at best, today I believe it possible to state as a fact that hues of buff bordering on anything of the cinnamon red or lemon yellow, to be quite other than the desired hue of true “golden buff”. When the real and true “golden buff” is seen I believe it to be a rich color and to be very intensively alive in its brilliancy. There is nothing weak or dull about “golden buff”. The very life or brilliance or the reflectivity is the only qualification of the quality to be seen on the bird that necessitates the use of the word “golden”. Buff in itself is technically a dull drab affair. I have seen real “golden buff” birds that could not be said to be alike in hue, but still could not be of another color except golden buff”. Golden buff is intensely brilliant, having the reflective ness of glittering gold. Golden denotes the impression given buff color when viewed.” The many examples given here indicate that buff color should be rich in pigment and have luster, in order to be a practical color to breed .It seems to be more popular in this shade too. The information from the Standard of Perfection also indicates that breeders and judges should give preference to rich, lustrous buff and not light, dull buff.

COLOR BREEDING BUFF

BY J.TOM COX (1946)

In color breeding buff, we have a number of problems, as evenness of top

color, freedom from red in back and wingbow, freedom from black or white in flight and main tail feathers, and depth of under color .If we have light buff females it is a sad mistake to mate them to really dark males, as the results are mottled females with a high luster in the neck feathers or perhaps fairly even body color with a much darker neck, so I suggest keeping the color of the parent stock as nearly equal as possible. It one parent must be lighter than the other it is much better if it is the male, in any case try to have both parents showing buff in the quills of flight and main tail feathers. Avoid definite black or white, for while the Standard says don't lay too much stress on under color; the breeder must always consider that without good under color he cannot maintain top color. The principles of color breeding apply to bantams as well as large fowl.

UNDER COLOR IS IMPORTANT TO BREEDING

BY A.B.A. (1958)

The color of the fluffy part of a fowl's feathers, the under color, only seen when they are lifted, together with the shaft of the feather, is of the greatest importance in determining the fowl's value for breeding .It is the surest indication of the amount of coloring pigment in the system. The under color may be lighter in color as it approaches the skin, hence the meaning and importance of such expressions as "buff to the skin" used of a sound buff. A deficiency in under color, unless counterbalanced by that of its mates', would breed stock of defective color.

BUFF

BY J.H.ROBINSON (1921)

The shade of buff which to most people appears most beautiful is the lightest color that can be described as a golden buff. It is a buff with a general tendency to become ashy or white. Mating specimens with this shade of color and this tendency develops weakness of the color, making an unsound buff. To maintain the color, standard specimens must be mated with birds that are a little darker than the preferred shade of color; and to use advantageously specimens that being of standard type in everything but a slight variation from the preferred shade of color, are desired and valuable breeders, such birds must be mated with those that are slightly off color in the opposite direction. If the standard shade of color is taken at a shade enough darker to admit of considerable reduction of strength of the buff color without breaking into mealiness or ashiness, that fault is avoided, but uniformity of shade in stock of different breeders is not secured, for the guide that keeps uniformity in flocks when the lightest buff is standard, is the line between good clear, bright buff and the color that just falls short of this

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
description.

Continuous breeding of the lighter color buffs would eventually produce white birds. Continued breeding of the darkest buff birds produces, after a while, red birds, and if the darkest of the red birds are selected year after year, the black-red combination would appear.

BUFF LEGHORN BREEDING TENDENCY

BY D.J.HONOUR (1986)

At times I have asked old breeders for advice on breeding. Most sound alike in their reply; saying things like I only inbreed or line-breed and one should never introduce new blood or they will have nothing. When asked about color mating and color defects, these old breeders often say I only mate the best together and it always produces wonderful color.

Someone new at breeding, might buy this advice, but with a few years experience in breeding, will find out it doesn't work that way. In color you rarely get birds so sound that they make perfect mates. There is variation in color in each bird, without taking the slight variations in color into consideration when mating, color defects will increase. It really helps to know how to use birds with defective color (as none are perfect), and type may be better on some poorer colored birds too. I have tried inbreeding and I find it doesn't seem to directly hurt the color. Indirectly it does, as everything else deteriorates, until the point is reached where you lose all vigor. I sometimes think old breeders rave about inbreeding and staying with the same bloodline, so that the customer keeps going back to him for stock instead of someone else. The results of inbreeding are well known. It is a tool that has some special uses, but as a general method of breeding it has far too many drawbacks. With new blood or outcrossing, you can have high vigor, good body size, good egg production and good hatchability of eggs; but without these you have nothing even if you still have the best type and color, how can it be reproduced?

Outcrossing can be done every few years; the best results seem to come with backcrossing back to the original bloodline. Most people like to have the new blood reduced down to 1/4 or less, that way the original line can dominate and more stability and uniformity will result. Some people, on the other hand, want to get away from the type and other defects of the original bloodline. In this case the new blood is increased in ratio and the new blood dominates. If the new blood is to be increased in percentage, the 1/2-blood birds are backcrossed back to the new blood stock. To keep the blood percentage, the same generation of 1/2 are bred together each year. One word of caution in outcrossing, sometimes the first generation is very ordinary in quality or maybe poor. These should be given another chance to prove themselves as they may be carrying the traits in a recessive form. If they are mated together, some of the offspring will show the recessive traits, if a good number are raised of this generation. This

mating together of the first generation is worth trying, especially in type traits. With color breeding, backcrossing to pure males until the blood reaches 7/8 is usually the best way to go.

When breeding most people do not give the young stock enough space. Condition is very important in the selection of mature cockerels and pullets. If the young stock has been crowded and the feathers are picked, you just cannot judge feather length and feather quality. This is especially important in breeds that the type requires the tail and sickle feathers to be long and full. Sometimes I have seen young stock so full of lice and mites, that the color was most difficult to judge to breeding potential. These birds lacked, luster and sheen, the feathers were brittle, rough, and lacked width and quill color. Some of these feathers are noted in birds that have no shade and the sun fades them.

I have noted that some of the best-combed males often have very small combs as young chicks and up to 3/4 grown. They may even resemble female chicks. The young males with nice big combs, often end up with combs that are too big in size, others have thumb marks or lop over in addition to being too large. Lopped combed males rarely straighten up into good-combed males. If only slightly turned over, and the bird is given lots of exercise, free range, and low temperatures; he might straighten up in comb. Those with too many points, fish tail blades, and double points, make poor breeders for head points. Side sprig birds should never be used no matter what, and the same could be said about duck feet and extra toes. In lobes, do not use birds with red in the earlobes, this will make matters worse in white earlobe breeds. Even good white lobed birds will produce a few reddish lobed offspring at times. Tinted eggs often go with reddish earlobe color, do not set tinted eggs in the incubator. Selection of large females will help keep up body size, also use birds with big shank size, as it indicates good bone and frame. Setting only large eggs will keep up egg size. New blood helps to increase vigor and increased vigor helps egg production. Trap nesting and breeding from the best egg layers will help build up a good laying strain.

BUFF DEFECTS

BY D.J.HONOUR (1986)

Buff color gives the impression of smallness. Many times this is not the case; as a buff bird may be every bit as heavy as or more so than another color in the breed, scales reveal the true weight. Buff color also gives the impression of shortness too. Sure some buffs are small and short, but not nearly as many as some people tend to think.

Rich golden buff to most, means a sound and heavily pigmented buff. A rich shade of buff is somewhat dark (as opposed to light) but, not red or brown; that would be far too dark. The reason rich buff is a favorite to many breeders is; that it is about intermediate, like much in the Standard. A rich buff in cockerels and pullets will add some as they age into cocks and hens, even with this fade

most are still showable as cocks and hens but usually a bit too light to be ideal. A breeder who likes a light buff in cockerels and pullets will have cocks and hens that have faded too much to be shown. The moult seems to take the golden luster out and reduces the surface color to a lighter shade. The quill color and under color is also reduced, but if it was good before, it will still show some color.

THE SCIENCE OF COLOR IN FOWL BREEDING

BY F.W.PROCTOR (1910)

There is no economic advantage, as regards to meat or eggs, in one color over another. Color is by far the most important factor in the beauty of fowls, which in itself possesses a money value far above the strictly useful. Pigmentary development is under two distinct processes of secretion and deposition. Thus, the Silver Laced Wyandotte and Silver Penciled Wyandotte may be regarded as identical as to secretion, their dissimilarity of plumage results from differing habits of deposition. Silver Laced and Golden Laced, while identical in deposition, owe their distinctness to different secretion of pigments.

The buff color of our fowls is but a diminuation of the red pigment and the perfection of its tone is the matter of how evenly it is diffused through the plumage. Either pigment is modified only by the joint action of the other or by being present in lesser amount white, which with no opposing chemical nature, being a negation merely, and blend or conjointly occupy the same area with red or black, resulting in buff or blue. Black and red, perhaps from the distinct chemical natures, retain their separate places when deposited upon the plumage and do not blend, making possible striking color effects

In the black-red pattern, if the secretory function failing to supply the red, its usual field receives no deposit, it remains white and we have the duck wing coloration. The same process applied to the black pigment (black being omitted) and red normally deposited, we have pile coloration. These two primary variations established, the others follow in natural course.

Suppose the forces of secretion to augment in each instance the remaining pigment. The pile then becomes a red fowl, which is aided by the natural tendency of a single pigment to leave its normal area and spread out over the plumage. This accomplished, the buff type is reached by lessened secretion, deposition continuing as before. In the case of the duck wing, an increased secretion produces the birchen, and ultimately solid black. The suspended red secretion has only to be revived and the birchen is transformed into brown-red. All known colorations are modifications of these mentioned, the change being in each case in the habit of deposition to reproduce the inherent pattern of plumage.

Buff is an intermediate tone of color, its full intensity existing in the Rhode Island Red. Between that breed's deepest red and a buff so weak as to just fail of being white, there exists an infinity of color tones one or more beautiful than another, their only limit in number being the lack of human skill

to distinguish between them. It would be foolish to say that, from this wide range, only one particular tone of color should arbitrarily set down as exclusively buff. Gold, even in its purity, is of varying shades, all decidedly "rich". The logical range for buff would be somewhere near a mean between the extremes, red and white. More important than any set shade of buff is the degree of success reached in the blending of the elements of buff - red pigment and colorless (or white) feather. To be buff in fact, the blending should be so complete that the most careful scrutiny may not reveal any deviation from one even color tone. To produce buff of the finest description, it is essential that the mated sexes are of one uniform shade, failing to match in color, their progeny will carry the mark of conflicting color. The mated stock should also be known to have the habit of a long line of good colored ancestors.

The Columbian color, its black and white appearance pronounces it to belong to the duck wing classification, not from the black-red type direct, but its preponderance of white areas shows that its immediate forerunners were largely red, relieved by black in neck, wing, and tail. The Buff Columbian coloration, under the natural process of development of the duck wing type would have preceded the light or Columbian; the deposition of red spontaneously ceasing, to leave former red areas white. A chief color defect of Columbian is a tendency towards brassiness in the white areas, an inherent trait common to the duck wing class. The duck wing color from the black-red, does not completely suspend the deposition of red; as we see by the salmon breast of females and the persistent appearance of red (not Standard) in the wing coverts of males This imperfect elimination of red deposit upon the plumage applies to the modified duck wing type Columbian. The red deposit, no longer driven to breast or wings by active black in other sections, is diffused over the surface in the form of brassiness. The remedy lies in selection of breeders showing it in least degree As regards conserving black by due attention to under color of the back, which section naturally carries a deposit of black pigment if secreted in sufficient quantity to give proper striping to the hackle.

White is free from all pigmentary deposit. White follows the elimination of black and red. If the breeding of (piles) pyles be long continued, certain natural tendencies follow, secretion of red would diffuse itself throughout the plumage, thus changing pyle to buff. By continued selection the red pigment is developed in a large degree than normally and, give solid red type color. The two variations brought about, the former (producing pyles) through interruption of the black-red's habit of secretion, the latter (buff and red) by modified deposition.

The males of the entire gallinaceous race are marked with greater development of red and, females more of the black. The original pigment assumed to be black, the red pigment came latter, originally a male attribute, hence more fully displayed by males, latter to be adopted in lesser proportion and with a differing habit of deposition by the female. This can be observed in pyles, buff, red, and blacks; the males showing a tendency to red feathers in excess of the female. The brassiness tendency in whites, in barred the male

displays an aptitude to red or brassiness, while the female is comparatively exempt.

I urge the importance of constant study in color. Color is the greatest essential. The successful fancier combines the qualification of scientific worker and artist. In no line is there a louder call for intelligence, and especially the trait of minute attention to details. A noted sculptor's friend remarked that changes he wrought from day to day were apparently but trifles; he replied, that trifles made for perfection and perfection was no trifle. So with the fancier, his efforts toward perfect type in form and feather may seem incomprehensible, but if by persistence he achieves recognition as a leader it becomes a proud distinction.

BUFF BREEDS

BY T.F.McGREW (1907)

Buff Cochins: There is but one shade of color permissible in the Buff Cochin, an even shade of rich golden buff throughout, free from shafting, shading, or mixed appearance. The top color of both male and female should be always more rich and brilliant than the balance of the plumage. This comes from the natural glossing over of the top plumage. One feature of the greatest importance is laying on of the color so close and dense as to present a strong surface color, which should be upheld by a shade of under color sufficiently strong as not to have the appearance of white, or lemon shade of under color. The Standard says that the preference shall be given to the specimens carrying the richest under color, other things being equal. This means that where a specimen carries an unbroken shade of color through each and every section, upheld by the true Cochin type, if the under color is of a nice shade of buff, the preference shall go to such a specimen.

Buff Rocks: In color both sexes should have a true even shade of golden buff throughout their entire plumage, this to be free from shading, shafting, or other imperfections. Every feather in the body, including the wings and tail, should have this true, even, buff color. If any shading of color at all is permissible, it should be confined to the flights and main tail feathers. The less of this, the better. The top color of the male is always richer and more brilliant than the under-body color. Under color to the skin, including the entire shaft of feather, buff of a rich shade that does not show shafting in the feather.

Buff Wyandottes: Shanks, toes, and beaks, yellow the richer, and more golden in shade the better. Surface plumage, an even shade of golden buff, so evenly laid on as to entirely fill the web of the feather and prevent a lighter under color to show through. Nothing but a true, golden buff is correct; a tint within the lemon shades not to be considered. Under color should be buff, a shade or two lighter in color than the surface color. Thinness of color in surface, showing ticking, or shading through the plumage is not to be permitted.

Buff Leghorns: There is but one acknowledged Leghorn Shape. The buff variety must conform absolutely to this. The buff variety is being produced in

both single and rose combs. In color, the entire plumage buff, and throughout must be an even shade of rich golden buff, free from shafting or foreign color of any kind, the color so close and finely laid on as to present the smooth even surface of golden buff with an under color of a lighter shade of the same color. Evenness of color with no foreign tint is most desirable.

Buff Cochin Bantams: The five varieties of Cochin Bantams came from the original importation of what were known as Pekin Bantams that were brought from Pekin, China, in about 1860. The originals were of a reddish buff color, and many of them had green shanks, they threw chicks of several colors, and there was a trace of both the Japanese and the Silkie Bantam in their make-up. Five toes were not infrequent in the offspring; more than one of the early-day breeders were known to clip the fifth toe on specimens, and then to cauterize the spot. Finally these imperfections were fairly obliterated, but even to the present day the influence of blue is still prominent in the shanks and toes. The first true colored Buff Cochin Bantams were shown in Madison Square Garden. They were the result of a double cross made with Buff Cochin Bantams, and with White Cochin Bantams having the creamy tint in their plumage. Three years of breeding and selection gave the perfect even buff color throughout in both males and females. The color of the plumage of the Buff Cochin Bantam is a true golden buff throughout. Some little black in the main tail feathers and a little stippling of same in the wing, flights, and secondaries, of the buff variety is permissible, as is a small amount of white in these same sections, but the white and the black are to be considered an imperfection and dangerous in the breeding pen.

BUFF COLOR

BY CHARLES N. BURMASTER (1955)

Since I was in high school, about 30 years ago, I have been breeding Buff Plymouth Rocks. During that time I have bred, judged, and watched judged, many buff birds of all breeds. Maybe I can help a little with the age-old questions. What is the correct shade of buff color? Does this judge like light buff or dark buff?

Probably more exhibitors have been confused over the judging of buff than any of the solid colored classes. If these same exhibitors would talk with the judge, after he has completed his work, much of this uncertainty would be eliminated. During the early years of my "chicken business," I was lucky enough, one season, to exhibit my birds under three great judges, John Knox, Newton Cosh and Maurice Delano, who were also three very fine gentlemen. In a very kind and understanding way they pointed out some things to me that I never have forgotten: 1) The bird must look like the breed it represents. It must have good type, be in good condition and it must be free from disqualifications. 2) The bird should be of an even shade of buff color, one shade from head to tail. The buff may be a shade light or a shade dark buff; it must be an even color, free

from shafting. Look closely at your bird and see that the hackle matches the rest of the color, that the male does not carry too dark (chestnut) color in the tail or wing bar, to match the rest of the body.

The Standard of Perfection describes buff color as “an even shade of rich golden buff”. I do not think anyone needs worry too much about recognizing the right buff color when he sees it. This color has substance and life that no other color shade of buff can equal. It is truly “golden”. The feather has brilliance and “feels” in your hand. Too light shade of buff often has a dry, brittle appearance. A bird of this color often shows lighter or darker in hackle or tail. The too rich buff has a tendency toward red and usually shows dark or chestnut in the wing bar and tail.

We must agree that a too light or lemon buff color, or a too dark or brown buff is not desirable. We must also agree that a good buff color can be a shade lighter or darker, if the color is the same shade from head to tail. One of the best Buff Cochins I ever saw was a shade dark; but he was even and had everything else. This bird was first in a large class at Madison Square Garden Show and was judged by Herschel Herster.

The next time you have a really top-notch buff bird, even if it is just a shade too light or too dark, just get out that box and get him to a show. If you are confused by the judge’s decision, ask him to explain his awards to you. You may be surprised and pleased with his interest and help.

ORIGIN OF MY BUFF CHANTECLER STOCK

BY WALTER FRANKLIN (1985)

When I retired, we took up our search for the ideal farm chicken. This bird must be rugged and vigorous enough to live and grow, on range or in confinement, under widely varied conditions of housing and climate. The hens must be year-around layers, satisfactory mothers, and top quality meat birds. This last requirement will eliminate varieties with dark pinfeathers. White birds are attractive while they are white. If conditions are not ideal, they show dirt or soiled easily. They seem more susceptible to cannibalism and feather picking than colored birds. White birds are also prime targets for predators because of their high visibility. Buff appeared to be the answer to our color problem. Buff pinfeathers or feather residue blends best with yellow skin color, so buff birds dress out well. Buff birds are less conspicuous than white, when predators are prowling.

Buff Rocks, Wyandottes, or Orpingtons can be fine layers and meat birds, but they have a lot of trouble from frozen combs and wattles in severe winter weather. The Chanteclers, seemed to have the closest to frost-proof combs and wattles of any dual-purpose breed. They are also good layers and meat birds. They were not available in buff, however. Those who know poultry history told me that Buff and Black Chanteclers were bred at one time, but never made it

into the Standard. We could not find any Chanteclers, but the Standard told what crosses were used to make the first Chantecler varieties. I decided to try a somewhat similar plan, using buff breeds.

About 1977, we crossed Buff Cornish and Buff Wyandotte large fowl. The next year, we mated a Buff Rock male to our cushion combed Cornish Wyandotte pullets. The following year, the pullets from this latest cross were mated to a couple of their mother's brothers. By crossing and back-crossing among these three breeds (so that propagation could continue without too much close inbreeding), and selecting for type as depicted in the Standard, we have obtained Buff Chanteclers.

Their eggs are medium brown, of good size, and these Buff Chanteclers are excellent meat birds. They lay well and are close to the Standard in type and color. We feel that they are the best all-purpose breed and variety, for the farm or backyard flock, and in the show room.

We decided a couple of years later, to try and make Chantecler bantams using the same method followed in the development of the Standard Chantecler. This was a little more difficult for the Buff Chantecler bantams than for the White or Partridge varieties. There were no Buff Cornish bantams around to use, so we used White Cornish bantams, along with Buff Wyandotte and Buff Rock, in bantams. Some of our Buff Chantecler bantams still want to sport a bit of white among their buff wing and tail feathers. Careful breeding should soon make this a rarity, we hope. We have been trying to make Buff Cornish bantams out of the Buff Chantecler bantams that come with pea combs. We are still a long way from home on this one; some are getting fair color and passable combs. The heavy bone and body type just aren't there yet. I tried crossing a White Laced Cornish bantam on these Buffs this year, but the color does not look too promising.

Editor's note: I met Walter Franklin and saw his birds at a show in Nov. 1985. Walter had Buff, White, and Partridge Chanteclers in both Standards and bantams that he made from scratch in each. They were all well made and I was impressed with the Buff Chantecler large fowl. I feel they deserve to be a Standard of Perfection variety, I understand they are working on getting them admitted. I liked the cushion comb, and think it looks nicer than either a rose comb or a pea comb. My guess on the origin of Buff Chanteclers, was a Buff Cornish - White Chantecler cross. Walter wrote the above article at my request to more fully explain his work. The buff color looks splendid on the Chantecler type and cushion comb. D.J.Honour (1986).

RED and BUFF COLOR

BY J.H. ROBINSON 1912

Both of these colors are derived from the black-red color pattern. By the blending and reduction of either the black or red, many shades and combinations

of these colors will result. Birds of the buff or red color often have different shades on different parts of plumage, sometimes two tones on the same feather. Only three colors of all the possible combinations are Standard, golden buff, red, and dark red. Uniformity in these colors are most difficult and the Standard color serves to keep breeders together or else the different shade strains would break up into sub-varieties as with Buff Cochins of years back. With buff and red the pigments of color constantly tend to separate. Black tends to go to the wing and tail; red tends to go to the hackle and back. In these colors it is rare to find a bird that holds its color after molting. If these birds are still sound for color they will make good breeders. It is still important to offset weakness in color of one sex by strength in the other make sure neither is more than a shade or two apart in color. If buffs are bred light in color, white will show in tail and wings, if continued, white will appear throughout the plumage. Buff is prone to white under color in hackle. In red, the constant selection of darker shades will result in brown and black. No slate in under color of buff or red is allowed.

MATING BUFF VARIETIES

BY J.H.ROBINSON (1898)

The buff varieties with the exception of Cochins, are all new, and the type of the up-to-date Cochin might without great impropriety be styled a new variety. Though buff is called a "solid" color, it is by no means an easy color to handle. Breeders find it quite as difficult to get one uniform shade of buff in all sections and keep it, as to get any combination of colors and markings described in the Standard. At present the popular shade is a golden buff, between the reddish buff and the pale yellow, which were the extremes of color which different breeders have been calling buff.

In mating buff fowls, the best method is to use birds of both sexes as near the desired golden buff as can be obtained, avoiding the mating of birds having color defects in the same section, whether the defects are similar or opposite. The common color faults in buff fowls are; white, or black, in wings and tails; red on the backs and shoulders of males; very light breasts on females; black ticks or lacing on necks and backs; mottled plumage; slaty under color; and white under color - no under color. Black or gray in any part of the plumage except the primaries and main tail feathers, should cause a bird to be rejected, no matter how good otherwise. In the sections excepted, a little dark color may be admitted if the mate of the bird has good buff in these sections. In any case it is not advisable to breed from a specimen in which the foreign color is distinct. Birds with positive white in wings and tails, should be rejected, also those in which the upper and lower webs of the feathers are of distinctly different shades. Faded, and slightly mealy wings and tails, may be admitted if the bird is pretty good all around, and can be mated with one good in wing and tail. A bird extra good in wing and tail can generally be used to advantage, though rather weak in

other sections. In breeding to get the red out of the backs of males, the lightest females that can be found that are good, bright, and even in surface color; the same on back and breast, should be mated to males as free from red as they can be had, and fairly uniform in all sections. Specimens with pale eyes should be rejected. In an exhibition bird surface color is worth more than under color; but in breeding, a bird good in under color will get more good even colored chicks than one better on the surface and not so good in under color.

BREEDING BUFF ORPINGTONS

BY WALLACE P. WILLETT (1911)

The Buff Orpingtons are now very easy for breeding perfection in the pullets, but the males still lag behind for the shows. The breeding of pure color males in any breed is a question in which lovers of the beautiful in poultry are all interested. Unfortunately it does not follow in experience that a pure buff male mated with a pure buff female will produce pure buff chicks, especially cockerels. In most cases there are more or less part white feathers in the wing or tail. Some other mating seems necessary to secure best results. This new method may be the "Mendel law" system. By mating a pure buff male with a few hens that show white feathers, if the progeny show white feathers then discard the male. If they do not show white, keep the male for breeding. Mate also a pure buff female with a male that shows white feathers, if the progeny show no white feathers, keep the hen for breeding. The tested male is then mated to the tested female and it is claimed that this is the basis for a flock of pure buff males and females.

BUFF ORPINGTONS

BY FRANK PLATT (1925)

William Cook of England originated Buff Orpingtons. He crossed Golden Spangled Hamburgs on Buff Cochins and then breeding this cross with Dark Dorkings; and again reverting back to Buff Cochin for an infusion of blood. There was also in the county of Lincoln, England, birds of type and color similar to Buff~ Orpingtons, "Lincolnshire Buffs". These were probably the result of crossing Dorkings or common fowl with Buff Cochin. They carried white shanks, buff color and were more or less feather legged. These big buff fowl formed the foundation of the Buff Orpington; just as the reddish fowls of Rhode Island formed the foundation of Buff Rocks and R.I. Reds.

Between 1897 and 1906 American interest began to develop in Orpingtons. By 1906 interest was reflected in show entries. Substantial popularity of the buff variety was now assured, although few realized that the Buff Orpington was destined to out-distance all other buff breeds within the next 15 years. It not only did that but also attracted to its ranks some of the greatest

breeders America has ever known. No other buff variety has advanced in quality of color and beauty of plumage, as has the Buff Orpington. Black tails, white in wings, red on wingbows, have all given way to a soft tone of golden buff as the best breeders have steadily forged ahead toward perfection.

BUFF ORPINGTONS

BY MAURICE F. DELANO (1925)

My early experience with breeding buff color was gained by breeding Buff Rocks, Buff Wyandottes, and Buff Cochins bantams. The knowledge gained with these breeds proved invaluable when I came to Owen Farm and found Buff Orpingtons. They were in the transition stage (1905) and reversion to the breeds that had gone into their make up was general. Reversion still exists, but years of patient breeding has made the percentage of yellow legs, stubs, ugly combs, and three toned color in the plumage; very small now. For 26 years I have bred and loved fowl that were covered by the beautiful golden buff plumage.

Buff color has always been extremely popular with breeders and novices. The modern Buff Orpington has the soundest color in both surface and under color that is possessed by any buff breed. I have worked for years to establish soundness of color and retain true golden buff. Nature seems to insist on introducing white when we breed out black or brown. While a solid colored bird is slightly easier to breed to color than a parti-colored bird, no breeder of buff color has ever found his job a snap. When we combine type and color that approximate perfection in one individual we have something to make us happy. They come more often than they did, but skillful breeding in the future will reward us all by adding to the uniformity and beauty of our flocks.

CONDITIONING BUFF WYANDOTTES

BY GERALD WILLIAMS (1912)

There are hundreds who can judge the finished Buff Wyandotte correctly, who sadly fail in the selection of individuals two months previous to show time. Right here experience to be able to see in an apparently rangy, long geared, crane-necked bird in short plumage; the outline of two months, hence when the plumage is finished and the rotund lines of maturity comes, is indeed an art.

In selecting for shape in an immature or in the moult bird, run your hand over the back. If the back is broad and moderately flat at the saddle and not too long, high or narrow in front of the saddle, and if the breast bone is straight and prominent, (that is, projecting well forward ;) then the specimen should have good Buff Wyandotte body shape. The length of neck and shank are best judged from a side view when the bird is standing in a natural position. Length of neck and shank in the unfinished bird must be judged comparatively to the possible development by show time. When in pinfeathers these dimensions always

appear longer than when the bird is rounded out with more flesh and full plumage. Frequently the last part of the plumage to be completed is the saddle. The full length of saddle feathers in the Buff Wyandotte are most necessary to good shape.

Buff color is one of the nicest of all with which to work, when one gets it right. Sensitive to every change in the condition of the bird's health, it responds quickly to coaxing in this way. It is absolutely no use to try to condition out shafting, mealiness, nor black, but to a good smooth even shade of buff that still looks rough while in the unfinished coat, a wonderful help rests in the proper conditioning. There is a great drain on a bird's vitality when feathers are growing. Sometimes ill health causes malnutrition of growing feathers, when all kinds of trouble appears, deformed feathers, white splashes and "rough coats". Special care of the general health of the bird while the coat is forming is necessary. Perfect health of the fowl, when the work of making feather is over, the forces are directed to the addition of luster, sheen and brilliance so desirable in the exhibition Buff Wyandotte.

THE BUFF WYANDOTTES

FROM THE MICHIGAN POULTRY BREEDER (1898)

A few years ago C.A.Emry, judge and breeder, predicted that Buff Wyandottes are the coming favorites with fancier and farmer. At the time these words were spoken breeders all over the country were striking hard blows at the "new breed", condemning it in a most unjust manner, and all because some misguided breeder thought it necessary to introduce Cochin blood for color and thereby brought into his flock the evils of feathered legs and single combs. Criticism did not doom the breed but rather drew attention to the careful efforts of painstaking breeders who knew what they were about and who could read the signs of the times. Some in their haste were setting eggs from promiscuous stock with an eye to present income, they were quietly selecting a few of the best of the hens for breeders aiming at excellence rather than numbers, and when at the next season's shows, these critics were confronted with Buffs that were Wyandottes and Wyandottes that were Buffs, they opened their eye and their pocketbooks. The Buff Wyandotte has since been marching straight onward toward the highest pinnacle of popular favor. Today they stand side by side with all the greatest favorites of fanciers and breeders and have won their way alike to the heart of the beauty and utility lover. The Wyandotte is American and possesses many sterling characteristics, fitting nicely into any nitch of usefulness. The prophesy of Mr. Emry is fulfilled. They are easily confined in yards, strong and vigorous and now bred remarkably true in color and shape. Their small, low rose comb is a decided advantage in a cold climate.

BUFF COCHINS

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
BY THEODORE STEINBERG (1894)

In breeding buffs it is not so very unusual to obtain pullets with clear wings and tails, but a male with both wing and tail perfectly clear buff is very rare; so rare indeed, that such a one can be classed as an accident. One of our oldest Cochins fanciers, who has bred them in America for 30 years, says he never saw but one male with absolutely clear wings and tail. The reason for this is very plain. The dark and white blood is in the fowls, and is very apt to crop out somewhere. If I were writing a standard for Buff Cochins males I would call for a clear buff tail, for this is a great beauty and is very noticeable, but I should not call for clear wings, to go uncut and not call it a defect.

Why? The color is in the blood, it is absolutely necessary that it should be in the blood or deep brilliant buff will be lost. It will break out somewhere, and thus be concealed and not detract from the beauty of the plumage. I have seen in my life several males, which fitted the bill completely. Gorgeous buff plumes for the tail and all the dark out of sight in the wing flights.

In making standards for fowls, those things which are natural to the breed should be recognized. It is entirely wrong to make ideal standards which conflict with nature; breeders do not create colors. The best we can do is to some extent control the location of colors. In breeding Buff Cochins, the breeder will select females as near as possible to the desired shade of buff, as free from dark or white in the wings and tail, and as even a color as can be. The male for these females should not be the proper exhibition mate, but while of the same general shade, be two or more shades deeper in color. Considerable black in wing is quite the thing, while the tail should be buff of a coppery luster. This mating should give many correct pullets, and some fine cockerels, but for breeding cockerels I really prefer a pullet of almost cinnamon color, free from black in hackle, but with black in flights; some black in tail, although usually objectionable, is no serious matter. To such a pullet mate a male with clear tail, quite light in color and some dark in flights. I have seen males with almost clear wings and tails of the very brightest and most delicate shade from such a mating. This will be apt to give you some cockerels fit to use as males in the exhibition pen. They will not usually be as good as breeders at the head of a pen in the yard, as the darker colored males. In short, as a male, I regard exhibition birds as not altogether the correct thing in the breeding yards when mated together. Color is far; more easily gained if once lost than is shape. Shape is not only the chief element in beauty, but it typifies the breed. Between color and shape, shape is the most important and should have a much higher value placed upon it when judging Cochins. Color can and does win in our average shows over shape, and this ought not to be so. If I were called upon to judge Cochins, I should endeavor to give the honors to the best most typical shape, if there were more than one typically shaped bird, then to the one which additionally had the best color. Birds not of typical shape should be passed over as wrongfully entered and not judged at all.

BUFF COCHINS

BY N.J.GROBY 1895

No fancy fowl has improved as fast as the Buff Cochin. Some 20 years ago their tail was black, wings black, and the edging of the hackle feathers were often tinged with black. Their fluff was short, leg and toe feathers very scanty but, just see the improvement in a quarter of a century. We boast of our deep under color, length of feathers, clear buff tail and wing, heavy leg and toe feathering, correct Cochin shape.

For several years they lost popular favor on account of their lazy disposition, but at the time the Buff Leghorn, Buff Wyandotte, Buff Rock, and Buff' Brahma were originated; the Buff Cochin dropped into the Buff Craze" and have been in good demand ever since. They should continue to improve in the next quarter century as they have in the last. They make a beautiful appearance on a lawn and can easily be recommended as a fowl for the city or country.

BUFF PLYMOUTH ROCKS

BY G.W.HAMM (1895)

This past year has seen a great improvement in this new and now popular variety. The first of the kind that claimed notice were decidedly mealy in general surface color, tails and wings were blacker than buff, and some black showed in hackle. Combs were soft and inclined to fall to one side. These defects are rapidly decreasing and at the present rate of improvement, they will shortly breed as true to color as the Buff Cochins. They are quick of growth and we have found the chicks to be healthy and vigorous from the start. While retaining the correct Plymouth Rock shape and general characteristics it seems that the new blood that has been introduced to give the buff color has not been a detriment but a decided improvement. They are good layers of a large brown egg, this, with their size, rapid growth, bright yellow legs and beaks, yellow skin, freedom from dark pin feathers; makes them one of the most desirable as well as one of the most handsome of all our domestic fowls. When their general utility and beauty are considered, we cannot but predict for them a brilliant future. Since they were admitted to the Standard at the meeting of the A.P.A., at the World's Fair in Oct.1893, they have rapidly increased in number and popularity.

BUFF PLYMOUTH ROCKS

BY R.W.ROBERTS (1898)

Two or three men claim the honor of origin, each one by the practice of

different methods. One claims the use of R.I.Reds, another Cochin and Brahma blood, but it is likely that the first foundation was the sturdy Plymouth Rock with an introduction of R.I.Red, Brahma, and Cochin. When people learn that these possess all the characteristics of the other Rocks, with the advantage of a beautiful buff plumage (a color which will not hurt the color of the skin or legs and whose legs and skin will not hurt the color of plumage, but improve it), earlier maturity and better laying qualities; they will not be slow to accept the Buffs. The money and time our best American fanciers have spent on them, together with general admiration, assure their continued popularity.

From a fancier's standpoint I find them quite easy to breed. They have some culls, all breeds do. We have color equal to any Cochin, shape equal to any Rock. As to size, they vary. Combs are now very good, but a few are too large. You can get better birds now than when they first came out. The work is now easier to get them better.

BUFF CORNISH LARGE FOWL

BY ROBERT G. STEINFELDT (1979)

Most of the present day Buff Cornish are not equal in type, substance, correct size and color; to the other Cornish varieties. Many are not equal in color quality to the better of other Buff varieties. Two situations seem to prevail. 1) The breeders have put color first and foremost and have a bird, which is quite acceptable in this respect, but is at the same time rather narrow and long legged with few of the true Cornish characteristics. It does not look like a Cornish at all. 2) On the other hand, there are breeders that have good type and substance first, and have a bird quite acceptable in these features, but the birds are a little too dark or light, and probably a little black or white on them. In the early days of any buff variety these color faults are present. Black and white are genetically present in buff chickens and they must be managed accordingly. One area that I have found superior in Buff Cornish is that they seem to excel in the beetle brow, pearl eye character, although this varies from flock to flock. Many lack the bare, center breast line so characteristic of the Cornish.

Due to its long neglect, I doubt that this variety has progressed at all in the last 25 years. One regrettable thing is that some breeders think that the Buff' Cornish are not as good as the other varieties. I for one, will not let it go at that, and with all the recent revival of interest in Buff Cornish, there are a number of other breeders of the same mind. I recall one breeder, who has had this variety for 25-30 years or more, telling me about the strange color and type of some of the birds that were sent to him years ago when he was buying his foundation stock. Some of today's birds still look like that, off type and off color. I think that this is due in part to the fact that many of today's Buff Cornish are recreations, due to scarcity of stock, and are not direct descendants of the 1938-40 era birds when the variety was new to the Standard. Backcrossing to the parent Dark variety for improvement is also responsible for some dark

Genetically, buff plumage is one of the most difficult to produce well consistently. It is genetically complex, made up of several factors. It has been classified by some geneticists as a pattern. The fact that Columbian type markings are so closely genetically connected with both red and buff colors, can be troublesome in the selection and breeding of buff colored fowls, especially during formative periods. The achieving of whole colored buff birds has been and will continue to be a problem at times in the young Cornish variety. One must select for genetic black recessive factors. Something should be said here about the recognition and use of the genetic characteristic known as the dominant white factor which is hidden in the genotype of many buff colored fowls of all breeds. In a homogeneous buff, it can be carried along for generations without making an appearance. Buff Cornish may be both helped and hindered by it. It is best known for turning what would otherwise be black feathering to white or smokey white. I believe the dominant white factor to be highly influential to buff plumage expression. I believe I have seen that it can genetically blend, soften, lighten and goldenize buff plumage. This factor is a legacy from not only the buff ancestors but also from the White Laced Red Cornish that has been used in starting this variety.

I do not believe that black can be eliminated from the genotype of buff fowls. You can suppress it by selecting for the factors, which suppress or eliminate it from the plumage. If a bird doesn't have a bit of black on it somewhere, I think it is a good bet that the dominant white factor has helped you out. I consider the challenge of breeding top quality Buff Cornish in numbers, to be one of the greatest challenges in the rare breed poultry industry today. It is much more difficult than it first appears. It requires diligent attention to detail and a real stick to it attitude. A job for the most part for specialty breeders. The best way to start would seem to be with hatching eggs or baby chicks. Attempting to start with a pair or trio has often run into a stonewall and failure. Relying on too few birds can be corrected with purchasing a number of chicks. As yet, because of more moderate type, egg production and fertility are not problems of much magnitude in Buff Cornish. Most present day Cornish of all varieties lack size, because of the breeding out of scale over the years. If one moderates a Cornish too far, one no longer has a Cornish. We need type, substance, and size.

Buff color seems to fit the Cornish like a glove. They have so much to offer, if carefully bred. I am hoping all Buff Cornish breeders will work together for the good of the whole, and will succeed at last in bringing this worthy variety to the top in quality, where it will no doubt give good account of itself. Type, substance, size, and color are the watchwords. Breeders, if they are not good enough; let's fix them. Those long legs, body without type, snake heads, giving us birds which need a sign around the neck telling they are Cornish, do our breed no good at all. A few breeders have good stock, why not all of us? It CAN be done if we work at it.

BUFF LEGHORNS

BY E.G.MARQUARDT (1900)

I have read much about mating buff color, especially that which was written by our Buff Cochin and Buff Rock breeders; and to all appearances they prefer the black to the white in plumage. This is where most make a great mistake. Buff Leghorns were never bothered much with black in plumage, mostly white, and by judicious selection they have been bred to a soft, even buff without a trace of black, white, or mealiness, nor do cockerels show red wingbows. One of the best cockerels I ever raised was sired by a cockerel that had a tail, which was intermixed with white. This bird has almost invariably bred me solid colored chicks. I believe that Buff' Leghorns of today are the best buff birds in the Standard.

Under color should not be lost sight of, although I do not think it is near as important as surface color. Too much under color in males, as a rule, runs to red in chicks. Pullets with a soft, even shade of surface color are preferable to mate to such males. Under color can be two shades lighter than surface. Such birds will give you a good percentage of buff chicks. Extreme matings I do not approve of. It is true you get a few good birds for show purposes, but most of the females have salmon-colored breasts and cockerels are red. In my 10 years experience I have been practicing standard matings and it has given me the best results.

BUFF CORNISH

BY FRANK L. PLATT (1925)

This variety is not extensively bred. It is inclined to have too long plumage. The birds should have the characteristics of the Cornish breed. The variety carries a combination of blood, including these; White Cornish, Dark Cornish, Buff Wyandotte, Buff Leghorn, and Buff Plymouth Rock. The fancier who takes up this variety will find little competition and still much work to do in setting it into Cornish type. Buff as a color is very popular and Buff Cornish have attracted the attention of several breeders. F.H.Bohrer (N.Y.) has done much to improve these. He reports cocks to 10 and hens to 7 lbs., such size is a good foundation to work.

IDEAL BUFF COLOR

BY J.H.DREVENSTEDT (1911)

The Standard color for all American buff fowls is defined as a rich golden

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

buff, free from shafting or mealiness, the surface of the head, neck, back, wing bows, saddle, sickles; being of a rich golden sheen in the male. The same surface color predominating in the female, the glossy luster on the surface harmonizing in shade with it in all sections. Under color is a lighter shade of buff, which must be free from foreign color, while black or gray appearing in wings or tail is a serious defect.

A first class specimen is one of even shade of color from top of head to tip of tail over back and wings and around breast and body. This is the ideal American Standard buff color, hard to attain, but the true guide for the breeder, one that has been instrumental in producing magnificent specimens of Buff Cochins, Buff Wyandottes, Buff Plymouth Rocks, Buff Leghorns and Buff Orpingtons in America. There is no flexibility in this Standard color ideal, for it means that only true buff color can win, other points being equal in exhibition specimens.

BUFF MINORCAS

BY C.M.LEWIS (1980)

I like the big Buff Minorcas, like the Black Minorcas that fill up the double coops with long tails that are low carried and with well-spread wide feathers. My Buff Minorca females averaged 7 1/4 lbs. and males 8 lbs. I have had at times males over 10 lbs. in Buffs. When I got stock from Ed Schmidt in 1918, the Buff Minorcas were darker in color and males had nice show type combs. Then about 1924 when I again got stock from Ed, you could see the White Minorca cross. The buff was lighter in shade, better size and type, but lopped combs in males and, males with much more white in the tail. These lopped combs gave me trouble and I had to use my own strain females with very small erect combs. My line with Buff Orpington blood came in handy here. In my Buff Minorcas, the Buff Orpington cross I called my "golden giant line". Red earlobes were not too much of a problem, but cream-tinted colored eggs were. This Buff Orpington cross did shorten the length of leg for a time, and the loose feathering required several years to reduce.

I used the White Minorca - Buff Minorca cross both ways with good results, the first time using a White male and later using White Minorca females. Herman Pribbernow's Buff Minorcas in the 1930's had good buff quills, he used a Buff Minorca male on a White Minorca female just under 9 lbs. He got light buff females and lavender blue females from this cross, males came silver gray much like Silver Gray Dorkings in color. He gave me a silver gray male from this cross, which I mated to Buff Minorca females but I only got black-red offspring. I wouldn't recommend this mating of these silver gray cross males on Buff Minorca females.

I never had yellow legs show up in breeding my Buff Minorcas. The use of Buff Orpington, Black Minorca, and White Minorca, without the use of any yellow legged breed; gave me a pure white leg strain of Buff Minorca. The Buff

Orpington male I used was high on his legs and had good egg records behind him, was 9 lbs. in weight with real outstanding buff color. This Buff Orpington helped me establish size, an outstanding long back line, and rich buff quills and under color. The Black and White Minorca crosses helped to keep size up and good earlobes, but mainly to improve the Minorca type.

BUFF PLYMOUTH ROCK

BY O.R.ERNST (1937)

The Buff Rock origin and that of R.I.Red's are closely associated. The original Buff's had a deep almost reddish buff color, black tails and wing flights. In color today, the Buff Rock is popularly referred to as a golden buff, the same shade of buff being present from the top of the head to the tail, shalftiness or mealiness being undesirable. Mealiness is alternating light and dark buff' plumage. Black in any part is undesirable. The ideal in plumage cast is to keep away from both too much on the reddish order or pale lemon. The pale lemon shows brassy or light yellow. Between these two seem to be the best way to get a true golden buff. The under color may be lighter but free from any other color.

It is generally held that the best way to hold a rich, even golden cast, is to breed from birds of one even shade in color. C.R.Baker, One of the best known Western breeders of Buff Rocks, advises in breeding Buff Rocks to first establish thoroughly strength, size, and breed type. When this is done, selection of both males and females is done on the basis of buff color that is very even and free from foreign colors in all sections.

T.F.McGrew gives some valuable points on breeding Buff Rocks. He advises to avoid too much length of leg or shank, as that will cause too sparse a feathering along the breast. He says that the back must be carried wide its entire length so as to give a rather flat shoulder. He cautions against allowing too much length in neck and legs or shortness in beak. The Buff Rock, coming from the same fowls as Red's, have the same constitutional makeup for egg production. The buff color is an entrancing color and breeders have found their greatest delight in striving for color in Buffs. They have a natural tendency to look neat and clean at all times in their striking golden buff plumage. Like other Rocks they are plump and well fleshed from broiler age. Market buyers considers buff as good as other light-plumaged varieties.

BUFF ROCKS

BY T.F.McGREW (1927)

In 1924 at a Chicago show, one man paid over \$2,500 for 17 Buff Rocks. Why have those days gone so quickly? Simply because there are not today those hard working fanciers like Shephard, Downey, and Morton to push the Buff Rocks along. I asked a breeder at New York what had become of Buff Rocks?

He said,' they have become yellow and no one wants yellow fowls". I said, Why not change that? He said,' the judges prefer yellow and the breeders must have that kind to show or they cannot win." People will not buy that kind so there are not many shown anymore. He said it was the same with Buff Orpingtons, at one time they had wonderful color, but little by little they lost the golden buff color, until now they are not so popular.

There was one Buff Orpington at the Sesqui in Philadelphia that had the real buff color. She was much admired. One equally beautiful was shown at New York. When attention was called to these two, all agreed that they were true buff that holds its own and is most difficult to breed. One breeder (Nickerson) always has that proper shade of buff to show and he wins wherever he shows. Buff fowl of all kinds can be just as popular as ever and they will be as soon as those who breed and show them have the true shade of color.

BUFF LEGHORN CHICK COLOR

BY D.J.HONOUR (1986)

In buff breeds, the chicks produced are buffish in down. Shades vary from light buff to dark buff. A lighter shade often appears on ventral (under the abdomen, belly or throat) surface, than on the dorsal (pertaining to the back) surface. Different buff breeds and also different strains within a buff variety, may behave differently; but sometimes the chicks can be culled for color at hatching time. It takes some study and record keeping, but I have noticed that chicks with several black or brown spots on the head or neck (back of neck) turn out to be peppered with black in the tail and wings. These buff chicks with the brown head spots are usually buff elsewhere when hatched. Chicks with brown or black around the eyes and with brown stripes on the back can safely be culled too, as they turn out with much black and red when mature. Sometimes buffish colored chicks with very faint whitish color or faint white stripes appear. These will show white in wings, tail, and maybe slight white in back feathers, when mature. Sometimes these (if pullets) can be used in special matings, so might not be culled at hatching time. Sometimes a chick with one very faint brown spot on head, will mature into a clear buff.

Generally a very light pale buff' chick will mature into a very pale light shade of buff. I believe color culling can be done at hatching time, which will eliminate many birds that would show black or white, and those that are too light in buff. When this is done for a few years, the chicks will come very uniform in buff color.

Some good matings may produce a percentage of off-colored chicks, that doesn't mean the good colored birds cannot be used as breeders. Chick culling is a tool that can help a breeder, but it certainly does not replace color culling and color selection of mature stock. Chick color culling can be useful to both the small buff breeder and the big buff breeder. If the small breeder lacks in space,

this early culling can be helpful. The small breeder can change his matings early in the season if he sees too many poor colored chicks in a certain pen mating. The big breeder can keep the best-colored chicks for his own replacement breeders, while selling the poor colored chicks in the utility orders. All breeders should save only the most vigorous and active chicks. Never help any chicks out of the shells. All deformed, crooked toed, and non-vigorous chicks should be culled fast.

ROSE COMB BUFF LEGHORNS

BY J.H.DREVENSTEDT (1911)

The R.C.Buff Leghorn was produced by crossing S.C.Buff Leghorn with R.C.White Leghorn, at least, that is the claim made by some of the early breeders of the variety. It is generally believed that some of the Eastern strains were made by using Buff Wyandotte and S.C.Buff Leghorns; the large bodies, good color, heavy coarse combs, and almost reddish ear lobes, indicating the blood of the larger breed mentioned at least in the specimens we handled ten years ago. Since that time they have been toned down and refined into true Leghorn type.

BUFF MINORCAS

BY D.J.HONOUR (1979)

When you get a chance, look over your Buff Minorcas, it will be helpful (in color breeding) to look real close at their color. I have found that under color is important. Slate or faint light gray under color, is defective under color and in general it is best not to use birds with this. There are cases where gray under color is used to strengthen buff under color, but close records must be kept and the mate in each mating with gray under color, must be sound clear buff. If not, pepper will appear in surface color and black in wings and tail.

Buff Minorcas tend to be very light in under color, sometimes almost white in the females. Buff under color is needed in the breeding male and in the female, an even buff surface color with at least some buff quill color and under color. White in the under color is a defect and means the flock needs more strength of color. It is natural for Buff Minorcas and Buff Leghorns to carry a lighter under color than Buff Rocks or Buff Cochins. This is because Leghorns and Minorcas have a closer, harder feather. This doesn't mean you cannot get a medium buff surface with rich quill color and under color, in these harder feathered breeds.

In the surface color the female is lighter, while the male is a shade darker generally. White in the main tail feathers of either sex will carry through several generations. I dislike using males with white in the main tail or wing. A small amount of white in a sickle or in a wing feather can be used with caution. A real

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

good female with sound wing color and only a slight amount of white in tail can be used with caution. Pepper in main tail, if very slight, can be used if need be, but it is much better not to use pepper in any mating, it is a very strong pigment. Pepper can be used on the female side, if only very slight in main tail and mated to a sound colored male. Even then some chicks will carry pepper in some degree. Do not use a male with pepper in the tail, especially if he has red-orange in wingbows, saddle, and hackle and back. If males with pepper must be used for some reason, use lighter females with sound color, and expect mostly off-colored offspring - being patchy buff and many with pepper. In general dark buff color shows defects and contrast of color, while light buff appears more even. Light buff may be just as defective (with white) upon close observation. The light under color and quills shows up as shafting. Dark buffs might be prone toward some red, but usually show sounder quills and under color, making shafting less troublesome.

BUFF LEGHORNS

FROM MICHIGAN POULTRY BREEDER (Nov. 1894)

Having found that many breeders had a different opinion in regard to white in the feathers, we wrote to R.G.Buffington, who was selected by the American Buff Leghorn club to judge the Buff Leghorn at the next meet. He says," My opinion, the meaning of the Standard for Buff Leghorns is; ½ of the feather is solid or clear white it would disqualify, but if a feather is intermixed with buff color or a white feather edged with buff, it would not disqualify.

BUFF ROCKS

FROM FEATHER WORLD (Nov.1932)

A cockerel or pullet, right in form, gives the nice color that anyone wishing for beauty can be satisfied with. Don't imagine that this variety is easy to breed. The small breeder can meet with success when showing or breeding buffs, and that is another advantage in its favor. When you get your buff ideal, there comes the necessary shading to prevent the plumage from getting weathered. You shade just the best-colored specimens; but shading or at least protection from bad weather conditions comes in with most breeds to be exhibited. So don't refuse to consider the breed because of the little extra attention and time required for this part of the finishing business.

Aim first at an even shade in the male bird, so that the breast matches the back. A common failing is to have a lighter breast coloring. Limit, the black in tail, for this will ever be trying to come through. Ordinary specimens may have very much black in tail, and the sickles may be partly or mainly white. One cannot hope to go far with males with such bad reproductive failings. Give preference to a sound tailed cockerel in your breeding; he is worth buying to start with.

You have not finished with color faults, for the male may have a lot of white in the wing feathers, or excessive peppering, and even black markings. Try to start off with sound tails and wings. Don't mistake the harsh red coloring for the golden shade of buff. Try to keep clear of similar wing and tail faults in the female, also light shaded neck, mealiness in wings, and shaftiness on breast. The shanks should be a bright yellow in keeping with the breed, of which the buff is but a variety. Whether plumage color or not has something to do with pigment in legs, I do not know, but in some buffs the leg color can be rather pale and on occasions of willow or greenish shanks. Richness of shank color in yellow—legged breeds is a sign of vigor and stamina, and if that be so the point should not be overlooked in selecting breeding stock. Whether also plumage color has anything to do with eye color or not, I am not sure. Many buffs are seen with lightish eyes, and this should not be passed over lightly as a defect. It is easy to shut one's eye to failings because of excellences of other points, but that does not mean progress. It's far better to acknowledge any weakness and to put it right by careful matings and selection.

In utility circles I have heard it argued that light coloring in eyes, can stand for weakness, and if that is true one should consider eye coloring as a serious fault. If you keep Buff Rocks sum them up for their strong points and their weak ones. If it be leg color, then use for breeding those, which are rich in yellow pigment in this section. If it be in eye color that there is any weakness, first start improving the strain by using males that have good eyes for color.

BUFF COCHIN BANTAMS

BY C.M.SMITH (1926)

I have bred Buffs constantly for 38 years and other varieties of Cochins intermittently since. The first Cochins I owned were a trio of Buff s bought for me by my father from an exhibition held in Brooklyn, N.Y. In color, not as good as those we are showing today. The males were red or cinnamon color, and we had to contend with green legs and white legs, while many of them had five toes. In type and length of feather they were equal to many shown today.

A few years later we heard that A.P.Groves of Pennsylvania, had some White Cochins. We could not secure any White Cochins, so decided to produce them. I secured a rather short-legged White Booted cock and mated him with several good light colored Buff Cochin bantam hens. The first cross produced some females almost white, just showing a little buff on breast .I then imported a White cockerel from W.F.Entwisle of Wakefield England. I mated him to these pullets. This cross-produced a number of really good whites. About this time we were trying to produce better Buff males, so I used one of the half—bred White cockerels on Buff females. The result was a few really good colored Buff cockerels, of course many had white in the wings and were rather leggy, two faults which still give us trouble.

BUFF COCHIN BANTAMS

BY T.F.McGREW (1905)

Many have introduced Standard Cochin blood into the Buffs with some benefit. Evidently the first that came to this country were tainted with the Nankin bantam blood, for a large percentage of them had bad colored legs and scant leg and toe feathering. Those produced here of good form are descendants of a cross with the Standard Cochin and reduced by crossing with smaller specimens.

Some of the very best Cochin bantams shown in England are by Ethel A.Southam. Some of her productions have found their way to this country. Their great strength of character and blood influence are shown in the persistency with which they crop up. The most prominent is the hock feathering and the color, which is much too strong for the American idea of buff. For beauty of form and feather, the English stock are pleasing and their use may be made a benefit. Those that have come to this country would be classed as too deep a shade for true buff, which shows that England prefers a deeper or darker shade. Americans prefer the true golden buff, soft and clear, not the dark or reddish buff.

BUFF COCHIN BANTAMS

BY E.S.PORTER (1945)

Without under color in buffs, and especially a solid buff quill, you are sure to run into trouble in your surface sooner or later. In Cochin bantams, it will usually crop out in the toe feathering, tail, and over wingbows, in the form of white or meal. I think if you will stress absolutely a sound buff toe feather, you need not worry about the under color in any section of the bird. We must carry some excess color pigment in order to maintain a deep mellow, soft surface year after year; and we cannot have excess pigment in any other place but under color, without detracting from that soft, mellow top color. It was an old idea that we use some smoke in tail to maintain color pigment in our breeders, but that idea has been abandoned long ago, and many good breeding specimens have been produced from positively sound surfaced birds with a rich mellow under color with positive buff quill.

BUFF COLOR CROSSING

BY D.J.HONOUR (1986)

The experiments with crossing buff color with other colors, in efforts to improve type, feather length, or other traits; are very interesting. Most crossing with buff color to other colors will produce awful color in both plumage and leg

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

color of the first generation. The important thing is to use a buff colored male, to cross on the different colored female. Then to backcross to pure buff males, this backcrossing is done until 7/8 or 15/16 generation. It is wise to select for size and type in these crossed females while backcrossing to pure buff males. This works something like grading up, and takes about 5 years. It is usually the 7/8 or 15/16 generation before the buff color comes back to a good degree, depending on what other colored female was first used to start the cross. In most cases leg color goes way off in buff crosses, even when both breeds and varieties had yellow legs, you usually get green or willow leg color. If white-legged varieties are used with buff, you may get slate or light blue leg color. Leg color generally corrects itself through backcrossing to the pure buff males, but it is often not until 7/8 buff that leg color comes back. The 7/8-generation can be bred together, instead of backcrossing, but with 15/16 there is much less off-color and so it is better to wait and breed this generation together instead of the 7/8

My advice is to raise good numbers in each generation and cull them for disqualifications and defects other than color. You must cull all the males in the 1/2 and 3/4 generations. Do not worry about the color of these females in the 1/2 and 3/4 generation; just cull them for size, type, and vigor. The pure Buff males that you backcross with, will keep buff color coming in. The color will be anything but buff, but by 7/8 generation the color should be back to resembling buff.

This crossing is not for everyone, it takes time to work, and most will give up too early before it can work. The first and second generation often looks very bad and this causes questions and many will quit, before the good traits begin to resurface. I know this method works, as I have used it and know of three others who have used it with results. The other colors used with buff were; dominate white, recessive white, red (R.I.Red color), and black. With each case it was the female of the other color that was crossed with buff males, the reverse does not generally work as well.

BUFF CORNISH BANTAMS

BY TAYLOR McGARRITY (1943)

Buff Cornish bantams are beautiful and difficult colored Cornish that are appearing steadily in our shows. We have seen and handled, some grand specimens appearing within 6 years after the first crosses, which made use of both Dark and Light females and a highly colored Buff Cochin bantam male. (Light Cornish are simply white where the Dark is black) Lloyd Ellis at our suggestion used White Cornish and Buff Wyandotte blood and the cross breeding of the progeny from both crosses, has produced gratifying results to the writer who justly claims the distinction of producing the first. Foreign color, mostly white, is troublesome but is gradually being eradicated with the use of

BUFF LEGHORNS

BY GEORGE S.BARNES (1898)

I have been breeding and showing this variety now 7 years. My first start was with pure white tails and wings. In 1893 I purchased a cockerel that gave me a true start and since then, great improvements have advanced, and there is plenty of chance yet for new improvements. During the 7 years we have learned much about this valuable breed and know by actual experience we have more to learn yet. The buff color is harder to breed than most any other color, as the judges in most all cases have different ideas what buff color should be.

In most cases the good cocks when they were cockerels were chestnut or bronze in tail; will throw as near pure offspring as we have seen. Females with black in tail, mated with a cockerel with buff tail mixed with white, will bring pure buff now and then. Any of these matings will bring you all the white you want and more. For a good breeding bird, give me a cockerel with chestnut, bronze, or even some black; on good females, will produce a nice lot of show birds. If you can get a pure buff cockerel with strong tail and wings; he is worth his weight in Klondike nuggets. A great deal in getting good birds, is the care, attention, and feed. It is 1/2 of the making of a show bird. This labor commences from the time the chick is hatched until it enters the show room. The chicks must have shade and cannot have too much. Buff Leghorns are a beautiful breed, full of life and activity. Take a nice pen of them out on the lawn, they are admired by all. They are great layers, laying as many as any Leghorn, as for size they are larger and laying a larger egg.

BUFF LEGHORNS

BY GEORGE S. BARNES (1895)

There is no fowl of all the new ones that were admitted to the Standard at Chicago in 1893 that is attracting so much attention and deserving of notice as the Buff Leghorns. In the past 5 years there has been a rapid improvement in them, so much so, that by the time they have been bred half as long as other Leghorns, they will be as popular, if not more so.

As for beauty, they will speak for themselves, and are admired by all who have seen them, all who have seen good ones. They have the size that the other Leghorns have not yet reached. Here is what Franklane L. Sewell says in "Farm Poultry", "If the breeders of other colored Leghorns keep pace with the Buff fanciers, they must do some good breeding for size, full breasts and bodies. Many of the Buffs shown are nearly up to Minorca and Spanish weights, and quite equal to any of the Leghorns in style. The Leghorn, to keep up as a popular

farmer's fowl, must develop a fair size, and we expect to see them much improved in this within the next few years.

As for eggs, they will lay just as many as any of the Leghorns, but for size they will go ahead of all. Galabrig, in "Poultry", England, has the following to say; Referring to the handsome appearance and good laying qualities of the Buff Leghorn, I can endorse every word. I have bred them for 4 years and they far surpass the Browns for eggs. As for breeding true, they bred as true as any breed if properly handled, and the purchaser using good judgment securing stock. The Buff Leghorn is here to stay, and after once in a farmers or fanciers yard will always be found there.

BUFF COLOR - MY FAVORITE COLOR

BY MARCUS L.DAVIDSON (1973)

In breeding the buff color, select your male of a very good even medium shade, be sure he is very even over the wingbows, with good under color all over, try to have a good clean tail, strong in wings. Select females, hens preferable that have come through the moult with smooth medium color and good under color, with good sound tails if possible. Type is very important, both male and female, see your Standard. It is a good idea to have females to match the color of the male's breast when mating. Although in my experience, the different breeds of buff colored birds, the feather texture differs, so a little difference in mating is necessary. This cannot be explained on paper, only by experience. In matings, using extremes in color, such as a very light colored male, mated to very dark females or vice versa, this will not produce that happy medium as some expect. The results will be unevenness of color and mealiness will be the result in many birds. I have done a lot of linebreeding as well as stud mating with great results.

Every buff breed needs a different mating and, to describe the color in print, just cannot be done so everyone can understand the exact color of buff. An old-time judge and breeder was here some time ago and remarked pointing to a buff male, "That's the ideal color. How about it? I replied," a little more color, preferable." Too much or too strong in under color has a tendency in some breeds to run to a darker shade of buff and not as even in males. Try and have good colored wings in males and breeders free from white if possible. It takes time to have a strain of buffs that will breed year after year.

BUFF LEGHORNS

BY FRANK E.KIMBALL (1896)

About 4 years ago I started out to look at the different breeds to decide which I should adopt, and settled on the Buff Leghorn and immediately purchased a pen and commenced the difficult job of breeding to make them buff

instead of almost white .My flock has shown the effects of careful breeding and close study each year, until now I am satisfied having raised birds that are as close to the Standard as any of the older breeds with a small percentage of culls. I am not the only person having high scoring Buff Leghorns, but I have received the highest honors with considerable competition.

BUFF LEGHORNS

BY AUGUST D. ARNOLD (1893)

Today we have a reasonable number of Buff Leghorns in America that are worthy of the name. The improvement over the birds of a few years ago is simply wonderful. The cotton tails and white wings have disappeared to a great extent and buff, chestnut and black wings and tails have taken their places, and a reasonable number of birds can be found with good buff wings and tails. The man, who prophesied a few years ago that it would take years to get a buff tail on this variety, has nothing to say today. England has sent her best birds to America the last two years and we have today no more need to call on our English cousins for birds. We are indebted to Mr.Lister Kay of England, for the good birds we now have .

BUFF MINORCAS- FOR TYPE AND COLOR

BY WILLIAM C.GARWOOD (1919)

Five years ago I had the misfortune of starting with a small hen. We know size is controlled largely by the female; this is where my breeding for Minorca type was handicapped. The following two years of breeding produced all undersized pullets. The male bird was of excellent type and color. In order to produce the desired type females, it was necessary to purchase a Standard Minorca type hen. This was done and with the result of a number of excellent pullets. This hen being rather light in color rather confused the color breeding for me, but the mating gave me the expected and pleasant surprise of some very fine color and type Buff Minorcas.

Selection is one of the big factors in lining up or improving type, etc. Three features afford the requirements of these accomplishments, constitution, vigor, eggs type, and size. You will find loss of vigor and low vitality are coupled with the following characteristics long slender body, narrow head, long thin legs, long beak, stunted growth, slow feathering, squatty walk, drooping wings.

Color breeding; I find is one of the most interesting features in the poultry work. Being able to select and grade seems to be the key to the color-breeding problem. You will find by selecting good under color this will enable you to control the surface color, as the under color is effective in toning down or

strengthening it according to the force of union of the under and outer colors. The surface plumage of the Buff Minorca to show beauty should be of an even shade throughout, outside the sheen feathers of the male bird is just a shade stronger. We will take for example the ordinary paint colors, the moment you apply varnish to it, how much brighter, in fact darker, it appears. So do not let this confuse you in seeing an even buff color throughout. The idea is to keep away from too much dark color in wing secondaries and main tail feathers. If this appears in any part of the plumage of your breeding stock it is sure to crop out in the same sections of their offspring even to a greater extent. The outer or surface color will come a shade darker. This also applies to white feathers, the bird that has a clean, rich buff outer color on the breast and under color that shows buff in the quill will breed more true to Standard color, than those having white under color in the breast. Remember the flight and secondary feathers should be somewhat darker in tone than the body plumage. Main tail feathers should correspond in color with the flight feathers. Buff Minorca male birds' covert and sickle feathers should be of the same shade as the color on the plumage of the saddle. The quill should be of the same shade of color, as the web that grows from it in that way you will have eliminated shaftiness. Hens that lose their strength of outer color, but hold the correct shade of under color may be used to advantage in the breeding pen.

Too much white, black, or red is objectionable in any of the breeding stock. If you will observe the color of the eye of your breeders, having it a good red shade, you will find it to be of strong influence in mating for buff color. The plumage and the eye lose the brilliant color as the season advances. In close-feathered birds like Buff Leghorns and Buff Minorcas, it is well to allow a stronger shade of outer plumage, close-feathered varieties usually have lighter under color. Offspring are usually brighter in surface color than the parents and for this reason the breeding stock requires more color. Show birds are not necessarily extra good breeding stock. They can be used to advantage in some instances. My advice is try them out and see. Buff breeding is one of the greatest sports you can find.

WHEN IS A BUFF LEGHORN BUFF

BY R.F.KITTLE (1928)

There is quite a dispute among the Buff Leghorn breeders today as to what constitutes the proper shade of color for the Buff Leghorn male and female. The Standard describes the color for Buff Leghorns as, plumage surface throughout an even shade of rich golden buff. Buff as a color, is a medium shade of orange color having a rich golden cast that is not so intense as to contain a reddish cast or so pale as to appear brassy or bright yellow. Free from shafting or mealiness, the head, neck, hackle, back, wingbow, and saddle richly glossed. Under color a lighter shade. That means a lighter shade of the same color that is not; so light as to make a break in the color at the surface. The quill of all

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

feathers may be of the same shade as the under color, and to correspond to that of the surface.

Free from foreign colors. These are different shades of color and tone that are not buff. The Standard says, different shades of color in two or more sections is a serious defect. Common defects in buff color are; different shades of color in any section, including shafting of the quill, that is darker or lighter than surface color.

I do not think any breeder would make a mistake if they were to examine their birds one by one, go over them carefully, and see if they all carry the same shade of color from head to tail. Say you would start at the head, and then the hackle feathers as a whole may appear even, but if you would look closely you will find some that carry a lighter or darker lacing; or the under color may not correspond to that of the surface.

The lemon hackle and breast are objectionable to breeding one even shade of buff. The buff feathers of the male and female should be the same shade, the male to carry a glossy appearance on hackle, back, saddle, and wingbow. Beware of the chestnut wing bar, and secondaries, wing bay, primary flights, and also the chestnut tail for they are foreign color defects. Pull a feather from different sections of a Buff Leghorn, and do the same from a white fowl and then you can readily see if the buff is as even as that of the white feathers.

BUFF COCHIN BANTAMS

BY MERLE H. WILLIS (1931)

I think no one will dispute the statement that there is opportunity for us to improve the type of our buffs, as a variety. The true Cochin type has been allowed to suffer from neglect somewhat, while breeders for a quarter of a century have struggled to fix the wonderful buff color that we see on our birds today.

The color one sees now is usually even, and this improvement in color has largely done away with the red backed males, as well as the white or pepper in wings and tails that were quite common in my boyhood days. This improvement in color has been a man-sized job, as golden buff is not a natural color for poultry but has been produced by the skill of the breeders. I think the time has now come when breeders should accept the challenge to improve the type as well.

BUFF COCHIN BANTAMS

BY THE A.B.A. (1959)

Buff Cochins are not quite as popular as blacks, chiefly because of the level coloring required which is somewhat difficult to obtain. The shade of color varies considerable in different specimens; some breeders favoring a lemon-

buff, others a golden buff, whilst many require an even darker shade. Perhaps the best color can be described as a soft, golden shade, full of richness and without redness.

Double mating is not quite so popular, nor necessary to produce exhibition stock in this color. In selecting breeding pen the male comes first. Select for even color, free from white, black or peppering. His under color should be as sound as possible, particularly in the hackle and at the base of the tail, and with the sound buff quill of the feather running right down to the skin (not white as many are). He should be quite sound in flights. A male with good surface color, but with a weakness, even white, in under color may produce many excellent colored pullets, but the cockerels would fail in wings. The cock which moults in solid in under color of hackle and saddle is more valuable as a breeder than one which is sound as a cockerel but fails to moult in sound. A shading of dark in the tail is not to be objected to, especially in the breeding pen. White in the flights of males may only mean that there has been some accident or check in the growth of the bird, and if that is the case it does not constitute a serious breeding defect. The appearance of white in the secondaries is a serious defect, which comes from the use of mealy winged females.

The females should match the male for color and, as shape is derived from the female, type should predominate. If the male is a trifle light, use females one or two shades darker; if he is a little dark, use females one or two shades lighter. On no account make matings in which the fowls are extreme in color, as the majority of the chicks will be mealy and mottled. Shun as breeders females, which show mealiness on the wingbows. Such females will lead to general color troubles in the progeny, such as white in the secondaries of male offspring. Lacing, which means that edge of the feather is surrounded or edged with a slightly different shade is also to be avoided. Not only Cochins, but in other buff breeds, it is a mistake to leave out of your breeding pens specimens with real strength of color pigment; to do so leads to a loss of color. Few soundly colored cockerels will be produced from a light mating, while the females will be better in color.

The majority of pullets will moult out too light as hens. Bantams of stronger color must be bred carefully and only occasionally, but they must not be discarded entirely. A number of breeders mate to what they term a blending of color; that is, selecting a dark male and light colored females, and vice versa. They claim this mating will give good results provided the fowls are bred to suit. It is worthwhile noting these bad faults; green or willow legs, which should never be bred from, too warm color in wing bows, breast color of lighter shade than back, smears of white in wing flights and tail feathers, dark penciling, and under color too light or smutty.

BUFF MINORCA BANTAMS

BY CYRUS M. LEWIS 1980

I had two lines of bantams. One line was bred down from Standard Buff Minorcas. I made use of some stunted hatchery Buff Minorca Standards that from an order of 100 chicks that were on the road nearly a week without food or water; only about 20 lived and never got very big.

I got these from a friend and I spent 5 or 6 years hatching only the smallest pullet eggs and then forcing the chicks with heat. These had good buff color but had a tendency to get too big when 3 or 4 years old.

Another friend and breeder told me he thought they needed the gene for smallness or bantamness that he called the pigmy gene. Shortly after that I found some mongrel bantams while traveling one day. I got a male that looked like a Buff Cochin bantam with clean legs, and some sisters of the same stock that looked like they had game bantam blood in them, they had white legs. These were off in many points, but they had fair buff color and were definitely bantams. I made a second strain of Buff Minorca bantams from this bantam stock. At first, a few from this second strain had yellow legs. This yellow leg problem did not give any problems in later years. I did have trouble with feather legs and stubs, for a time. Later still in years, I crossed the two lines and discontinued the Standard "bred-down" line. I did keep the second line pure. I did not have any more size problem after that.

THE CHARM OF PIGMY POULTRY

BY J.MAUDE (1934.)

Having bred Buffs (Cochin bantams) on and off for longer than I care to remember, I have always found it safest to discard those showing the least sign of black in tail, flights, or footing; also any specimen with white in it or any sign of mealiness. Let the head of the harem be sound even buff or cinnamon throughout. Some of the best colored pullets are produced from a very dark cinnamon cock, and in the case of weakness of color or shaft showing in a female, if good results are to be obtained from such, it is only by mating her to a very dark and perfectly sound feathered male.

BUFF COCHIN BANTAMS

J.SHAKESPEARE (1924)

Faults in buff are generally in the nature of white or black feathers in wings and tails, and duskiess in fluff. Many look sound on the surface, but when they are handled, and their tails and wings opened out, they are "horses of another color". A good Buff Cochin is buff to the skin, and clear in flights and tail. The judge who doesn't handle every bird with a view to detecting black, white, or smut in plumage, is not out for the good of the breed.

Compared to white in tail or flights, black is the lesser fault, but neither should be tolerated. How to breed out white in the plumage, I don't know and I

don't know anybody who does know. It is, of all faults, the worst; in choosing birds for the breeding pens it should be regarded as one would regard a contagion. To a more or less extent, it will be handed down to your progeny and so on infinitely. The only way to breed good sound buffs is to breed from good sound buffs only. If, however, the home stock is of a level color, but of a lemon shade rather than of a golden buff shade, the progeny of such can be improved by placing in a male of level color but a shade deep, after it will be a matter of selecting the progeny, as conforms in color to ideal.

BUFF COCHIN BANTAMS

BY ART V.GRANGER (1943)

Buff Cochins in the eyes of many have long been a problem because of variations in color. First it must be remembered in judging Buff Cochins that I do not think there is a buff color that can be considered Standard. The most important thing being that they should be neither too dark nor too light and above all they should be uniform, all sections of the bird being the same. Buff Cochin bantams when put together in the breeding pen should be as close to the color you are trying to produce as possible. Both sexes should possess under color that is not white. The degree of under color density varies, and so long as it is not white and shows some semblance of cream with quills still being buff, I would not discard it from the breeding pen. In mating for color in Buff Cochin bantams you have a problem to determine what actually is the male color since his feathers are glossy, and a glossy feather sometimes fools the eye.

It is a good idea to accept the feathers on the male that are not glossy and match them with the identical on the female to be mated with. Breed toward this uniformity. Avoid the cinnamon buff since this has a tendency toward lack of life in the feathering, as well as some smut in the under color and sections like the underside of the tail and the underside of the wing feathers. Try to pick the birds that are alive in color, bearing in mind, of course, that the sun sometimes does things that you cannot correct.

BUFF COCHIN BANTAMS

BY JOSEPH SHAKESPEARE (1925)

This is an old, and was for many years the leading variety. In spite of the fact that a perfect buff fowl of any breed is not easy to produce, Cochin bantams of this color have been persevered with to an extent that some well nigh faultless birds have been penned at the leading shows.

Color of exhibition cocks are a deep orange shade throughout, including wing flights and tail, these to be free from white, black or ticking. If any allowances are made in respect to variation in color it should be only in respect to the breast, and underparts, but any excessive distinction between these parts

and the top of the bird should not be tolerated. Color of exhibition hens are a rich level buff throughout, the shade to match the male's breast and free from any foreign color.

Double mating is not essential in the production of exhibition specimens, but the stock birds must be good. Choose for the breeding pen, a male bird resembling as near as possible the one described above and mate him to a trio of hens whose plumage is of a rich golden buff color throughout, a shade lighter than that possessed by the opposite sex or to simplify what is meant, their body color should match as near as possible that of the male's breast. This is not a bad rule to follow when mating any breed of buff bantam.

If one possesses a male bird that is too deep in body color for the show pen, but free from red, he should not be discarded as a stock bird, but should not be mated to hens a little too light in color to fit in with Standard requirements. What must be avoided in the section of flights and tail is white or black, or under color that is not sound, i.e., feather fluff of a whitish or grayish color as birds with such defects will breed only wastrels.

BUFF LEGHORNS

BY GUY HATTEN (1983)

In 1918 I went to the Chicago show. I got some Buff Leghorn chicks in Cincinnati, Ohio from Len Lancis, who was not nationally known but had real good stock. My step father raised Brown Leghorns, at 10 or 11 years old, our school principal (Prof. Buck), who was also a poultry judge; would come out when mating the pens and make a score card out for each bird. So I got interested in show chickens when young. At Chicago in 1918, C.M.Herren won first pullet, she had real color and 8 tail feathers to the side. I met Floyd Purdy then and he showed me the pullet, and said he would give \$ 50 for her as she was just what he needed. He got in touch with Mr. Herren and bought the pullet. Mr. Purdy had a dairy "bank barn" that never froze water in Tomah Wis. He mated the pullet with his best Buff Leghorn male. From her eggs the following Dec. at Chicago he won first pen, first and third cockerel. He raised the chickens in the barn out of the sun and they didn't bleach out.

F.S.Smith was a salesman, not a breeder. He sold pianos before chickens, also milk goats and later pottery. He put out chicks on the shares and bought back eggs. Floyd Purdy had very good color and added feathering from C.M.Herren's 1918 pullet, as well as type. I had good type and got color from birds I bought from Purdy. George Rex, Marcus Davidson, and Mr. Bush had some good birds. I will be 94 years old in July of 1983. I wish I could have gone ahead with Buff Leghorns for a life's work, but it didn't work out that way. I bought this farm in 1924, later I had a fire and had to give up the Buff Leghorns with the Depression times. I have a feed store and have sold feed for 65 years. Today there are no farmers and I sell dog and horse feed mostly.

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
BUFF WYANDOTTE BANTAMS

BY HAROLD B. WIDEMAN (1931)

I am a breeder of large Buff Dottes, for several years my mind naturally was set on procuring Buff Dotte bantams. I could not find any in America, imported the best we could find in England, and have been more than pleased with the results obtained thus far in our breeding and improvement of this worthy breed and color.

Buff is really hard to describe as we have several shades, as you will notice if you compare classes at the shows. The standard calls for an even shade of rich golden buff, which we interpret to mean a soft lightish buff with a golden hue. We are careful not to breed too light a buff as they lack strength to reproduce and we can expect to get faded out birds. Neither do we breed too dark a color for if persistently used we are sure to get red or a brown color. Therefore choose as breeders only the ones with the even soft buff with the golden hue. Pick your breeders with the same shade of buff. It is sure failure to breed light colored females with a dark male on the other way around. Sure, you may get a few fairly good birds but the percentage of good ones will not pay. Now along with color we must have type. We pick our females as small as we can and of correct type, short yellow legs, choppy short back and a nice neat feminine head. We get size from our females, so keep them small. Our male must have good under color giving strength to his offspring, and still give you some wonderful offspring if the male is a little larger than the females. If there is anything more persistent in reproducing itself than stubs, green legs, or white in ear lobes; I do not know what it is, so don't breed birds with these disqualifications.

A couple of pointers we have found rearing chicks; keep them free from lice, as a certain louse lives on the juices that put color in the feathers and when these juices are sapped away we will have faded out feathers and the bird has a mottled appearance wherever these lice have worked, just as a female loses the color of legs and feathers after she has laid several eggs. Keep buff chicks out of extreme heat of the sun, provide plenty of shade or we will have the trouble as with lice. Sometimes when a chick is nearly matured and we find a foreign colored feather in wing or tail; if it is pulled we find it will grow back a perfect feather. Many times this is caused by lice or possibly an injury. Therefore, an otherwise good bird is saved and given a chance to show its merits. In conclusion, Wyandotte bantams are a breed that has been painstakingly improved year by year by a handful of true fanciers, that are ever striving to put them on top by quality and not quantity. These real fanciers go on year after year with one thought in mind "improvement".

BUFF ROSECOMB BANTAMS

BY H.P.MACKLIN (1980)

Let's go back some years ago to where I was working to perfect the Buff Columbian and White Columbian Rosecombs. For some reason the Buff Columbians were better in type, and better layers than the White Columbians; although both colors came from practically the same crosses I made to develop these two color patterns.

I was having trouble with the female coloring in the Buff Columbians, gradually getting more faded each season while the males retained the rich, deep buff so desired. In making a direct outcross for a new color I always tried to stay in line by having the new-blood-variety resemble the Rosecomb type as nearly as possible. Two varieties similar in body type to the Rosecomb are the Lakenvelder and the Leghorn bantams. I originally started with a Lakenvelder cock to get the Columbian pattern going and, I did not want to cross white back into an already failing buff Columbian color. So I decided to bring in a Buff Leghorn bantam cockerel to help the buff Columbian coloring. This Buff Leghorn cross definitely helped, it eliminated the black lacing that was prone to show in the backs of the buff Columbian females and it did help the buff color tone at that time in the buff Columbian females. This new blood also created two other colors that I had given no thought to at the time. The all-buff color and the all-red color.

A number of the Buff Leghorn- Buff Columbian Rosecomb, chicks came out buffs with either black, badly speckled, or smoked tails. This was especially true of the females and I am troubled even today in ridding the tails of this speckling of black. Some of the cockerels were a deep reddish orange and two were red. One of these red cockerels with a green tail, the other with dark tail over shadowed by red or dirty rust color. This Buff Leghorn cross took place about 6 or 7 years ago.

What of today's color? I feel I have progressed in the all-buffs. I finally bred cockerels without black or speckling in the tails but then I had some white show up. At the present, in the male line I am juggling with about 60% buff tails, 20% with a bit of smut, and 20% with a few white streaks generally in the top tail feathers. In females, the smut in the tails still persists in over 50%. Thankfully, definitely less each year. So far very little white is evident in the female youngsters.

In the Reds, I have a problem that has me baffled. I produce males with a deep red, but females with rich red necks, but body color is washed out, sandy, or flecked with black-never a clear even color of any shade. I tried crossing the Red males on good Black Rosecombs. This helped type but fouled up the color badly. Some were brown-reds, but the red ones were smutty with black tipping on the feathers. The red color soon became sandy and faded again on breeding back to red.

When an outcross is accomplished the resulting young all show a regrettable reduction in the size of the earlobe. In the four colors I am working with I have never been able to bring back the size of earlobe to compare with that of my Black Rosecombs.

Even now some of the all buffs will show a yellow leg coloring rather than white. The males of the Buff Rosecombs are coming with fairly good shading of buff, some even deep orange-buff. The males were first in producing clear buff tail with no black. The white edging is beginning to creep into some of the tail covert feathers. The heads need some improvement to Rosecomb type. The buff females come, unfortunately, in several shades of buff. After eliminating the black tails I now have some trouble with white showing in the tails, more so in the males, because several very nice pullets had decidedly cream tails compared to body color. All the buffs appear just a bit smaller in body, compared to the other colors, but they show more brooding tendencies than the others.

In developing new colors in the Rosecombs it is necessary on occasion to use birds with minor faults, (sort of choosing the lesser of two evils), in order to advance closer to your goal. Cull your breeding stock as correctly as you can, but don't be fearful of using birds with minor faults to continue your experiments, visible faults are frequently eliminated by the better qualities of ancestor birds used earlier. It sometimes happens, though not often, that faulted birds will give you the prize you seek. Don't hesitate to experiment when you "feel" it might prove a point.

A year or so ago I acquired two Buff hens, small and of good even coloring with not a suggestion of black in the tails or elsewhere. Their legs were a definite slate blue. On closer scrutiny the type was just a trifle different from true Rosecomb. The fancier who bred them said just prior to setting the eggs of his Buff Rosecombs, one of his Golden Sebright cocks escaped from his pen and ran with the Buff Rosecomb hens for several days before the intruder was discovered. So there is a strong possibility that these two buff females are of Sebright cross breeding. If so, this makes a point for using an out of variety cross to achieve your goal.

BUFF CORNISH BANTAMS

BY A.B.A. (1950)

Buff Cornish bantams have never been produced with true buff color. They tend to have white necks and tails, with white markings in wings and white under color. They have been produced by mating Buff Cochin bantams to Jubilee Cornish bantams and Buff Wyandotte bantams to White Cornish bantams. Crossing the results of these two matings and selecting the product for the desired results. Some Buff Cornish bantams have "just occur" out of White Cornish, bantams. Buff Cornish bantams should be as near the Standard

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

description in type and a rich, golden buff color. The male should be lustrous in hackle, back; saddle and wingbows and females show some luster in neck. Under color as near the top color as possible. There is a white neck and tail variety of Buff Cornish named Palimino. They are bred with Cornish type, smooth buff top color of body, with necks of white laced or tinged on edge with gold and a tail of white. Both Buff and Palimino Cornish have light pin feathers and dress out nicely.

BUFF LANGSHANS

BY J.H.ROBINSON (1924)

Buff Langshans were evidently produced from the cross of White Langshan and Buff Orpington. Only a few of them have been seen, and the variety cannot be regarded as established.

BUFF LANGSHANS

BY C.C. SHOEMAKER (1902)

Our Buff Langshans are all imported direct from England. So far as we know we were the first in America to advertise Buff Langshans. While in England we found a few breeders raising them, we imported a fine lot of them in the fall of 1898. We find them one of the best breeds for laying and for general purposes.

BUFF LANGSHANS

BY GRANT CURTIS (1906)

Question: I have purchased at a very fancy price, some stock of Buff Langshans. I have never seen them advertised by any, but the fancier I purchased from, I would like to hear from you in regard to same as to whether they are bred in this country or if thoroughbred? C. Y. Moundsville W.Va.

Answer: Buff Langshans have not yet been admitted to the Standard, and we do not at the present writing recall any breeder who is making a specialty of this variety in this country. The Buff Langshans are mentioned in Mr. Lewis Wright's new book "Book of Poultry" published in 1902, England. He says, "Buff Langshans have been advertised but only by individuals who advertise Buffs of all possible descriptions. Whatever differences have existed amongst Langshan breeders all would agree, any buff color must denote a cross of quite recent making."

BUFF ROSECOMB BANTAMS

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
BY H.P.MACKLIN (1985)

Many years ago I started the new colors with a Lakenvelder bantam cock, a Black Rosecomb hen and a Buff Columbian Wyandotte hen. From this unholy trio I got many colors, even barred, and most did not look like Rosecombs until quite a few years later. The two Columbians (white Columbian and buff Columbian) started from this trio and eventually a few black tailed buffs came along. I purchased a S.C.Buff Leghorn bantam cock to improve the buff coloring and eliminate the dark tails. That's the start of the Buff Rosecombs.

I occasionally criss-cross my best Black Rosecombs into all the colors to try to improve the type for Rosecomb. One year two "all red" cockerels showed up and that was when I got interested in making a Red Rosecomb. The red color has been my largest headache because I cannot, so far, get a good red hen. All are smutty and sandy colored. About four years ago I brought in two hens and one pullet that were 50% Buff Rosecomb and 50% R.I.Red bantam. Since then I have improved the hen coloring somewhat, but have lost the all-red coloring to green tails.

The Buff and Red Rosecombs lack the large earlobes. I am working on this continually, but when you cross out you generally lose the size in lobes. My Buff Rosecombs are good in color; especially the males lately have developed a deep orange in the cocks I try to bring up the color, hoping to improve the female's color tone. A year or so back I really saw the last of the smut in the tails, but now I have them showing up with some silver tracings in the tail feathers. The hens still come in various shades of buff and I am hoping these deep orange cocks will help to eliminate this. I think the type is good but might use a bit more work. In both sexes the combs come good and so I think size is about that of the Black Rosecombs.

The Buffs need more wealth of feather in the tails. However some of my Reds show fine flowing tails. I cannot understand why the Buffs should be faulty in the tails since the original Buff Leghorn bantam cock had a beautiful flowing tail. The rare colors, I have trouble getting new blood that look like Rosecombs. I stopped buying when I got some Buffs that looked more like Cochins. However I now have five pens of Buff Rosecombs and five pens of Red Rosecombs, none closely related.

About five years ago I used a very good Black Rosecomb on both Red Rosecombs and Buff Rosecombs to improve type and also on the advice of a fancier who said the black would help make a good red color. I must say it did not help my color at all. For the first time this past summer my Red pens threw two cockerels that are black with some reddish coloring in the wingbows and a few red feathers in the hackle. I guess this black is a throwback from my crossings of years ago. Several years ago when I lost the only two all-red Rosecomb cocks, I kept on with the black tailed reds, I was by now producing. If I can get a good Red hen I will not cry about a black tail being attached.

The leg color on Buff Columbian Rosecombs is slate, while the Buff Rosecomb has white or pinkish legs. I get a percentage of both slate and white

legs in my Buff Rosecombs and invariably, the slate colored legs throw the best buff coloring in the pullets. I must admit I have used both leg colorings indiscriminately in my matings, in my rush for a good deep buff color.

BUFF COCHIN BANTAMS

BY FRANK L. PLATT (1925)

The bantam Buff Cochin are the oldest. It is supposed that they have been bred in China for not less than 10 centuries. They were first imported to England from China about 1860, when they were known as Cochin China bantams, and later as Pekin bantams. The original Pekins, like the early Shanghais, were longer in leg, less profuse in feather and hotter in color than the modern bird. Louis Paul Graham and T.F. McGrew were the first American fanciers to tone down the color of Buff Cochin bantams. This they did by crossing their reddish buff males (bantam), with White Cochin bantam females, back in the 1890's. From the Oct. 1912 -Feb. 1913 show season in the U.S., Cochin bantams were the most popular bantams and Buffs lead the four varieties of Cochins.

There were two types of Buff Cochin bantams, which contended for position early in the 19th Century. The winning type which was small, with soft buff surface color, but usually showed some white in wings; and the older fashioned, short legged, long feathered bird that had some reddishness on wingbows. A pure buff wing and tail were seldom seen. These two types were then amalgamated, the soft buff color being preserved and improved, while the long soft loose feather was developed in the same bloodlines. By 1915 wonderful ones were shown. Even, sound, true buff color has gone apace, while type has been developed to a high point of perfection. Frank Conway (Canada), Chas. Smith (L.I., N.Y.), Bruno and Arthur Schilling (N.Y.), having three of the best strains.

BUFF COCHIN BANTAMS

BY W. ENTWISLE (about 1890)

The Cochin bantam is evidently very ancient, and to the Chinese belongs the credit of their production, and cultivation, probably for many ages. Their first importation into England was not until 1860 or 1861 and previous to that, we believe no fancier in this country had even heard of them. These were all Buffs, the cocks rather a rich darkish cinnamon, and the hens some shades lighter.

Some years elapsed and the writer was trying his best to produce a lighten shade of buff in cocks, more like the lemon buffs so fashionable in the Cochins at this time. About 1884 we had made considerable progress in breeding down from the larger Buff Cochin and had a nice lot of Buffs between 2 ½-3 ½ lbs. We were fortunate in importing good Buffs, which greatly improved our own

Bufs in size and shape, while our birds added vigor and stamina. In 1885 we became aware that a few Bufs were bred in America. We secured some, these we found superior in color to our pure Chinese, but deficient in foot and shank feather; and quite wrong in shape; they were longer in neck and leg, longer in back and sloped from the shoulder down the back to the tail, which suddenly rose from a divided saddle. For the sake of color, we kept and bred from some of these Americans, and admit that they have been helpful when bred with the better shaped and heavier cushioned birds we previously possessed.

One great point we value most highly, and we think our English breeders will not be long in recognizing; is the sound, even color insisted upon by the Americans. They say "a buff must be buff", perfectly free from any dark shade in fluff of feather, buff under the wings when expanded, buff in all the tail feathers and foot feathers. A bronze tail is considered a blemish, and the Americans do not allow such faults to be hidden, or disguised by pulling out the faulty feathers. Why should we allow it? At present we are breeding from four yards of Bufs, and not one bird has dark feathers in it. Others can do the same if they will.

In mating Bufs for color, we cannot do better than follow the Chinese lead, if we deviate from this, uncertainty at once meets us. Our opinion after more than 10 years experience in breeding Bufs for color, and some years with 5 on 6 experimental pens; is that a solid colored, rich, but not dark cinnamon cocks, and a clear, even shade buff hen 2 on 3 shades lighter than the cock's breast; should always be looked upon as a correctly-matched pair. If we take for a breeding pair, a hen whose color matches that of an ordinary colored buff cock (a full, warm color) instead of breeding cockerels the same color, they will get darker and darker every year until the cocks would be dark as chestnut, and the hens dark cinnamon. If the reverse mode be adopted, and we select light buff cocks and light buff hens, both of one shade, the tendency is to breed still lighter. Generally the cockerels have pale hackles and breasts, with wingbow of a different color, and often mealy. The pullets are what is termed mealy or mottled. We have always had the best results from mating a full cinnamon cock and moderately warm buff hens, about two shades lighter in body color than the cock's breast. Always avoid cocks or hens with any unsound color, either shades of black or white.

BUFF COCHIN BANTAMS

BY CHARLES A WHITE (1939)

In my experience I have found that the first and most important step in breeding any variety, is to start with good birds even if these cost above the average. It will be money saved in the long run. It is not necessary to buy prize-winning bantams, but it is desired to obtain breeders from a proven line of stock. Watch your type. Study your birds to see if they conform with the Standard as type makes your breed. Scan for color as color makes your variety. Bufs of

today have progressed far along the color perfection trail.

Early matings, I find produce the best results. Get your birds together so they can be changed about frequently until the best are selected. I like to put my best together; by best I mean those that have given me results the previous year. This is your stabilizer pen; your other pens will be more or less of a gamble. In these other pens, I like to offset faults; this is mixing birds with different faults. For example, a male with a bad front, but good otherwise could be mated with a female with an excellent front and an extra amount of forward tilt. It is astonishing how these experimental matings will sometimes produce fine results. These pens are usually stud-mated (one male is placed with one female). This is done to permit study of results obtained in the offspring, an important factor in subsequent breeding.

Then again we have a mating to obtain new blood. I have found the best way to achieve this is to breed one of my males with a "foreign" female. Again these offspring must be carefully watched as much damage may result in the importing of new blood. The periodic importation of new blood however is necessary to maintain the vitality and assure the general improvement of the flock.

In breeding do not become so interested in one section of a bird that the other sections suffer through neglect. For example, some breeders are carried away with forward tilt, others go to cushions, and still others prize the length of feather. Look at the bird from tip of beak to the end of tail. Make sure it conforms to the Standard to which we are breeding. Then we will have more and better Buff Cochins Bantams.

BUFF ROSECOMB BANTAMS

BY D.J.HONOUR (1985)

Poultry history shows that Buff bantams in other more rarer breeds, originated some time ago and are not such recent creations as some now think. In the Oct.1929 "Poultry Tribune" magazine on page 51, Rose Comb Buff Leghorn bantams were shown at the N.Y. state fair 1929 by Harry M. Lamon, their originator. In "Stringman's Scrapbook" on page 394, at the 1933 N.Y. state fair Mr.Lamon exhibited Rose and Single Comb Buff bantams, all of which he originated. In the 1975 A.P.A.yearbook, page 16, Mr. Nash writes;"Mr. Lamon, at the time of his death (Harry M.Lamon died Aug. 6,1942 at age 70), was developing the Buff Rosecomb bantam, no black tails or wings, a truly buff rose comb bantam. Those I saw were true little buff beauties, and what an addition they would have made to the bantam fancy. Only a few times did Mr.Lamon show them at the N.Y.state fair, as he was a perfectionist and was sure they were not ready to give to the public. To me they seemed to be things of great beauty and quality. It is said that Mr.Lamon is the one who put the buff in Buff Leghorns." I have not found anything on how Mr.Lamon made these, it would be helpful to know, as many rare breed or rare colors, have had to be remade in

recent times. It is too bad, that strains disappear, as it takes time to recreate them and perfect them again in fine points of color and type.

BUFF COCHIN BANTAMS

BY E.H.TOWNSEND (1953)

We should have good healthy birds with sound color of an even shade and correct type. This will cost more to start, but we will have better results in less time we use two or three sisters that are of an even color, good head points, short of body with good depth. We want a long keel with legs set in the center of the body to give us the forward tilt. They should have good width of body and no pinched tails. A good Cochin has a nice soft buff with a good buff quill in under color. A wide feather with plenty of fluff is a must. Don't breed females with mealiness in the wingbows, as they will as a rule produce males with white in the wings.

To these females let us use a good vigorous male of rich golden buff with even color and the same good points and type as the females. This mating should give us real good colored females and some good colored males. Other males from this mating may be too dark. We can also mate a light male (not yellow), to the same kind of females and expect mostly all good colored males, and some fair color in females.

Many times we do not have a sound colored male. He may have a little white in the wing but I would use this male if he has a little black peppering in the tail, or he may have good strong buff under color. In a very short time one will be able to find males in the offspring that are sound in color. If we find our color in general is going too light, you will produce a mottled buff if you mate a dark buff to the light. Let us take two or three years to bring this color back by using a bird just a shade darker each year, in this way we will keep an even color regardless of shade. The bantam breeders watch all through the growing season, they see them from the time they start to feather out and then follow them right to the breeding pen. Each year we produce many faults that we try to overcome the next year.

If the female is weak in one section we should use a male that is strong in the same section. We find many Cochins that are way up in front and as a rule these birds will have a short keel with legs too far back. Pick your Cochins with a long keel and deep bodies with the legs in the center to produce the forward tilt. Know where each and every one of your birds comes from and keep your records on each one. When mating them up go back into the records 2 or more years so that you may know how much color the father or grandfather had. We do not want to use any Cochins that are wild, as this will carry along in the youngsters. A Cochin that is friendly and comes to the front of the cage will win a blue, long before the Cochin that tries to go through the top of the cage. We still have two faults in our Buff Cochins today. One is the length of wings, and the other is the large combs, mostly in males. Let's work on these two sections

MAKING BUFF LEGHORN BANTAMS

BY JOSEPH SHAKESPEARE (1925)

In the first place we must secure undersized cockerels from the “large” variety. The best way to do this is to pay a decent price for hatching eggs from a noted breeder of exhibition stock. The eggs should be incubated in July or better yet August, as late hatching coupled with careful dieting, means smallness in the resultant birds. We are only after cockerels, they should be dieted in such a way as to insure smallness without serious loss of vitality, and the diet will chiefly consist of grain. Use a little milk at times when the youngsters are showing signs of listlessness. In due course there will be on hand just the undersized cockerels necessary for mating to pureblooded bantam hens. As to bantamizing of fowls, we must select bantam hens for the breeding pen, these hens must in some respects, resemble the breed and variety we are trying to produce. It is important that the plumage color of the specially selected bantam hens should resemble that of the giant birds, which we are hoping to produce in miniature.

To produce Buff Leghorn Bantams of the rose comb order, procure for the breeding pen a trio of Buff Rock bantam breeding hens, that are good in color, an even shade of buff, matching as nearly as possible the color of the R.C. (Standard) Buff Leghorn male’s breast.

Being bred from a pure blooded R.C.cockerel and S.C.bantam hens; both rose and single combed pullets and cockerels will result. Mate the best of the R.C.pullets to their R.C.sire, in the following season, and the best of the S.C. pullets to a S.C. (standard) Buff Leghorn cockerel. Following such a procedure both varieties of Buff Leghorn bantams will be well on towards something passable. By careful selection of the smallest and best colored birds, inbreeding, and late hatching, something good in the way of miniature Buff Leghorns should crop up during the following breeding seasons.

If Buff Rock bantams in hens, cannot be secured to mate to the pure blooded Leghorn cockerels, then Buff Cochin bantam hens that are as long as possible in back and leg, and whose shanks and feet are scantily feathered; should be chosen. The female progeny from this mating will be more or less feathered on leg; but by mating such back to the sire, some clean-legged birds will result. It will then be a matter of selecting for the breeding pen such birds as follow the Leghorn type, and inbreeding late in the year.

IMPROVING THE PEKIN (Cochin) BANTAM BY COLOR CROSSING

BY H.B.OWENS (1957)

Of all the present day colors, Buffs are the poorest for type. Doubtless too

much attention has been paid to their beautiful color at the expense of other points. Type should be the deciding factor, not color, unless the birds are equal for type, then of course the better-colored bird must win. If our stock has not the right type, all the breeding skill in the world will not produce it; breeding can only bring out what is in the strain, you can only add something by an outcross. Why not introduce or add the factor needed (type and carriage) by a color cross? Blacks and Whites excel in type.

I can imagine the purists throwing up their hands in horror at the mention of a color cross. Whites are kept up by judicious crossing with Blacks, Blues have improved in type because they are crossed with Blacks, and Cuckoos are brought up to type by crossing with Blacks and in some cases Whites. Most breeders will never readily admit to such practices but this does not detract from the truth of the matter. It is time Buff breeders overcame their blind prejudices against color crossing and for the sake of the breed start experimenting with crosses with our leading colors in an endeavor to add type and carriage. Only use birds of another color whose type is far superior to your Buffs. Type comes mainly from the female and color from the male. I strongly advise that in every case you use a buff male (the best you have for breed characteristics), damn the color for the present. Type is what you are after; the female you use to cross with must have plenty of it.

Buff crossed with black; I have tried this cross and here are my results. Using a buff male to black female, I got birds which were mainly black but with buff neck, hackle, plus patches of buff on breast and wings. The cockerels showed more buff markings generally than the female. The following year I put a pure buff male over one of these cross-bred females, and the result was a very mixed lot of colors ranging from an odd pure buff to some buffs with black markings, some turned out almost white except gold in neck hackle, and others black with buff markings. I suppose if the cross-bred chicks from the original buff-black cross mated together, (brother and sister) would show more pure buff the second generation. Leg color was generally bad in both the first and second generation.

Buff crossed with blue; Mr. Ryan actually tried this cross and it produced chicks, which turned out buff. Buff crossed with Cuckoo; another breeder says this cross-produced buffs. I would expect only buff females from this cross (sex-linked).

Buff crossed with white; some years ago I was creating a Buff Wyandotte bantam, I crossed a white Wyandotte bantam with a Buff Pekin female and all the chicks were a very pale buff color. Using a Buff Pekin and a White Pekin female, I should expect to get pale buff Pekins.

BUFF COLORATION

BY JOHN M.FREEMAN (1982)

It was long held that buff was the most difficult color to breed and this

undoubtedly included the Buff Columbian pattern. This is probably still true although breeders have made such tremendous strides during the past half-century, that the color in most exhibition birds is excellent and in most flocks is at least acceptable.

One point that still causes controversy among breeders and judges alike is the definition of just what constitutes the proper shade of buff in poultry. Years ago, Robinson wrote that it had finally been settled that the correct color was a golden buff," somewhere between lemon buff and cinnamon". Logistically this would mean that John Robinson preferred a medium shade of buff. Most judges attach more importance to evenness of color in all sections, than to the shade although many will show a preference; all else being equal, to a light or a dark buff as fits his fancy.

The finest examples that I have seen of what is to me a true golden buff have been in the standard Buff Cochin and Buff Rock males. I have seen outstanding examples that truly glisten in the sun, throwing out reflections similar to a golden nugget. This true golden color is rarely approached in the Leghorn, Wyandotte, or Minorca and never in the Buff Brahma. I cannot recall seeing it in hens or pullets, nor in any breed of bantam. The Buff Orpington males will carry a suggestion of this trait, but the surface color loses to a certain extent, thru lack of pigment in shank and skin.

There can be little doubt that Marcus Davidson was the greatest breeder of buff varieties, of all time. All of the buff breeds he bred, and he bred most of them, were remarkably uniform and unbelievably even in color in all sections. With the exception of his Buff Brahmas, his top color was on the light side and might have been classified as lemon buff. George Rex, a noted breeder of Buff Leghorns and a keen rival of Marcus at the shows, bred them a shade or two darker but, just as even and it was usually nip and tuck between these two at the fall fairs and larger winter shows. Failing eyesight affected George's ability and selections and the last few years they both exhibited, Marcus reigned supreme.

In those days Ralph Sturtevant was an outstanding specialty breeder of Buff Wyandottes, as was Ben Hazelton Smith. Sturtevant was really hipped on under color and insisted that his Wyandottes be deep buff to the skin. This resulted in a very dark, though even surface color. The strongest type I have seen in Buff Wyandottes came from Sturtevant's yards, but they lost out under some judges who favored a medium or light top color. Smith's Buff Wyandottes lacked the type and under color of the Sturtevant birds, but they were larger and more nearly approaching the golden buff that is the desideratum of the majority.

This all boils down to the fact that we may breed them light or breed them dark or breed them in-between, and that both extremes, as well as the middle course, will find adherents.

Buff Brahmas are a different story. With the Buff Columbian pattern, it is impossible to achieve the bright, golden color lauded by Robinson and admired by the majority. While it is only a matter of careful selection and proper breeding to produce Brahma females of an even albeit dull shade of buff, it is a different story with the males. These are universally prone to dark, brickish

wingbow, hackle, saddle, and very pale buff on breast and underbody. This contrast, of course, varies from bird to bird, from extreme to moderate. That it is possible to produce Buff Brahma males of an even shade throughout, I know. Marcus Davidson's were consistently so and I have used his birds to the vast improvement of the color pattern of my own buff males. It is a question of consistent breeding and careful selection with no short cuts. Most Buff Brahma breeders become discouraged after a few years, perhaps just when they are on the verge of success. Extreme care and infinite patience, plus common sense, will solve most breeding problems capable of solution.

BUFF LEGHORNS

BY FRANK H. HAWLEY (1900)

In breeding Buff Leghorns there are a few points that the beginner should be shy of, for once introduced into a flock they are very hard to eradicate, such as white in the wings and tail, bad combs and lobes, poor shape, stubs on legs, blue legs, etc. I found that I could produce better birds from a male showing dark in wings and tail than from a bird showing white in these sections. If you will mate a male and female each showing a little dark in both wings and tail (not black), you will stand a chance to produce chicks almost clear in these sections, but if you use birds showing white you will surely have white in wings and tails. Beware of the long white quills in wing feathers.

Under color is a fine thing to have on all birds, but do not think that under color alone will make a bird win. It is the soft, even shade of surface color, whether dark, medium or light, that takes the eye of the judge as well as the fancier. Such a bird should win, other things being considered equal, even though not so strong in under color, over a mottled or blotchy surfaced bird that has very superior under color.

It is very important to mate together birds of the same color, that is, if you have a light male bird do not mate very dark females to him, and vice versa, for you are sure to produce mottled birds by doing so. The study of how to produce the proper buff color on birds with clear wings and tail is very fascinating and how to hold it after we get it, is another interesting problem.

BRAND NEW - BUFF LEGHORNS

BY THE AMERICAN BUFF LEGHORN CLUB (1893)

The American Buff Leghorn Club was organized on Aug.7, 1891. In the 1893 club yearbook you will note the next club meet will be held in Chicago (Oct.1893) during the World's Fair. Come all, bring your best Buff Leghorns, and make this the largest and best show of any one variety, as Buff Leghorns will then probably be admitted to the Standard.

The 1893 club standard for color; male rich, deep clear buff, free from mealiness and uniform in shade for all parts except tail, the buff extending to the skin, the tail either rich, deep clear buff or chestnut light or dark, or bronzy chestnut mixed with black. Preferred in the order named. Female, rich, clear buff, free from mealiness and uniform in shade throughout, the buff extending to the skin.

The Buff Leghorn has now reached a stage in breeding where as good colored birds are expected as in any other buff variety, entirely white feathers (not those partially white) ought to disqualify. White is a most serious objection. The ease with which a flock of White Leghorns can be transformed into white winged and white-tailed buffs ought to make such a disqualification one to be enforced. Black is far less objectionable, especially in the wings and tail, as it is a frequent accompaniment of a rich buff, yet solid black feathers should be eliminated. Buff Leghorns should be a buff bird throughout, free from all other color in plumage.

The tail of the male bird may be a rich, clear buff, and this is the ideal tail, seldom obtained, but exquisitely beautiful when it is. Chestnut light or dark, which next to the buff tail is to be preferred or bronzy chestnut mixed with black. The word deep is dropped in describing the color of the female, in order to indicate that a shade lighter in color to be expected than in the male. The word under color is not used but instead, buff extended to the skin. It is to be observed that the buff on the surface is invariably deep in shade. Surface color and under color must be buff, though the under color will undoubtedly be of a lighter shade of buff.

FINE POINTS IN BREEDING BUFF MINORCAS

BY D.J.HONOUR (1981)

The Minorca breast must be prominent to fill out their rectangular shape. A line dropped down from the base of the beak should just clear the front of the breast. A long neck tends to make a bird appear rangy, and long shanks give that stilty look. A bird must have station, secured by legs of proper length, but the thigh, from the hock joint up, is likely to be short. Length of leg may be gained at the expense of lost muscle or meat on the drumstick, or at the expense of the desired spread between legs, which suggest a good, strong body. Excesses in any direction are detrimental, and there is practical value in a well-balanced fowl.

The Minorca is a long bird, and length is desired. If an extreme length is obtained, it is generally gained at the loss of width. The bird is long in body, but narrow across the hips and not thick through the breast and body. How can good length of back and legs be combined with width? The answer is only by breeding big size. A big bird has a longer back because of that increased size; it therefore has the length without narrowness. Breeding for length as an

independent factor can only be secured at the sacrifice of width. Nature puts just so much bony framework in each bird. If you breed a bigger bird than your competitors, you will by nature, have a bird with a longer body. The carriage of the tail depends on the main tail feathers. The dropping tail makes a straight line from neck to the tail, and lengthens the body. The sickles, lesser sickles, coverts and hangers lay over that main tail. An increase in weight coarsens the entire body in every line. The increased weight causes the arch of the neck and the concave sweep of the back to assume almost straight lines. It shortens and broadens the thighs. When more breast meat is desired, enlarging the muscles that lie upon the wings will help. Large muscles in this section are invariably associated with large wings, even if a large body size reduces the bird's ability to fly. Undersized birds are often good layers and early to mature, but being first to mature are exhausted by long periods of laying. When these exhausted small birds are used in breeding pens, their progeny are found lacking in vigor. A loss of vigor, size, and egg size will continue if small birds are used.

The length, formation and thickness of feathers have more to do with type than most people realize. Birds that carry a broad feather and a fairly long feather will have a web stiff enough to support the weight of the feather without dropping near the end butt. This feathering gives you a male with full hackle, full saddle and a tail of proper length. This feathering does not generally go with high tails. While there may not be any more feathers, feathers of this type give the impression of being more of them. Wide feathering affects type more so in males than females, and narrow feathers on males, are rarely found with fine type.

A feather of width and somewhat oval in shape, rounded at the end with a web of firm texture, and fluff the same width of web extended about half the length of feather into the skin, will give overlapping of one another to make the entire body plumage appear like one even coat or covering. The flimsy narrow feather has not the smoothness, and narrow feathers show degeneration of web and too much fluffiness in under parts. Narrow feathering produces the "rough effect", and uneven surface. Narrow feathering produces the narrow frayed wing primaries and the tendency to split or cause slip wings.

The back is the section, which gives the great distinction to a bird or a breed. The tendency among breeders is to produce backs that are longer, rather than shorter or medium backs. A back that slopes down to the tail throws up the breast and throws down the tail. The back should be broad at the shoulders and the breadth carried all the way to the tail. A very minor sweep to the tail, sticking out of the back, and gives a blending together of two sections with some harmony.

There should be good distance between the wings, when a bird is seen from the front. This gives breadth to the breast. Length of keel or breastbone influences the length of under line. If the keel is curved up at the rear, the belly will be small, and such a bird rarely will be found in laying condition. If the legs are weak at the hock joint, it portrays weak constitution, and knock-kneed birds are often inactive compared to birds with sturdy legs. A fine boned shank means

a fine boned body, just as a narrow skull. A way to gauge the head, in order to detect crow or snake heads; is to check the distance from the center of the eye to the tip of the beak.

The good breeders give some thought to the breed's future by selecting against weakness. Weakness means poor hatching qualities of the eggs, poor growth in chicks, and disappointed beginners and. abandoned breeds.

BREEDING BUFF MINORCAS

BY EDWARD F. SCHMIDT (1920)

The Buff Minorcas were originated in America. American fanciers may well be proud of having produced and perfected this remarkable Mediterranean variety. The credit for their origin belongs to Mr. Lindgren. In 1909 I purchased from Mr. Lindgren some Buff Minorcas, but at that time the variety was lacking very much in type. My first object was to improve the type and to do so I was compelled to introduce some new blood. I bought a very large White Minorca male with extra good type. and mated him with the best Buff Minorca female I had. From the White Minorca cross I got a few birds that were pretty good in color and at the same time possessed good Minorca type. I bred them in line for several years and established a line of Buff Minorcas with good type and size.

At this time (1920), I have hens that tip the scales at 7 1/2 lbs., and males 9 lbs. In egg production, the average Buff Minorca will crowd the 200 mark, and I have bred some as high as 279 eggs per year. They mature earlier than other varieties of Minorcas and yet lay large sized eggs. Breeders should adhere strictly to true Minorca type. The carriage should be upright. The body and back should be long, deep, and well rounded with full breast, long breastbone and good abdominal development. The main tail feathers in both male and female should be large and wide, moderately spread and carried at a 40-degree angle. Thighs of medium length, shanks stout-straight-strong and rather long and set well apart. A male not even in surface color will often produce a mottled surface color in the female offspring. (A male with hackle and saddle several shades darker than the rest of his surface color.)

The male must be even in surface color with all sections blending, and rich under color. A light male will sometimes produce a few good colored pullets. A little bronze in the tail of either sex, mated to clear tailed mates will help produce rich under color in males. Do not mate together color extremes. There is always room for improvement. To many people, progress is apt to seem slow as the desire is to accelerate it. It is better to make haste slowly, in order to be sure that every section is studied and every action taken is for the best. The improvement of Buff Minorcas in America is due entirely to the distinct superiority of careful mating of breeding pens, which are mated by men who have bred them for a number of years with success.

EDWARD F. SCHMIDT, THE MASTER BREEDER

BY DANNE J. HONOUR (1981)

Edward F. Schmidt was born in 1879 in Germany. At age 22 he came to America. He worked as a general farmer before he got into poultry. For a time he worked for Mr. Byers, the famous Orpington breeder of Hazelrigg, Indiana. With Mr. Byers he gained some important knowledge of breeding Buff Color. In 1909 he started breeding Buff Minorcas after getting his start from the originators; the Lindgren Brothers. Then for 2 years he worked for Walhalla Poultry Farm of Oscoda Mich., under Carl Schmidt (who was no relation to Edward). In 1919 he moved back to Hazelrigg Ind. Then in 1925 he moved out to Ute Crest Farm, Libertyville, Illinois, for a wealthy man named Harry Meyers. During all this time he kept breeding and improving S.C. Buff Minorcas. In 1927 he bought all of Ute Crest's Buff Minorcas and moved back to Thorntown, Indiana, where he remained.

Edward did his main breeding at home where he generally kept 60 females and about a dozen males. This stock was his very best that he selected. He trap nested and had individual records from 230-300 eggs. His mature females about 2 years old ran on the average 7lbs. and males about 10 lbs. He had 7 or 8 farm flocks that supplied the bulk of the demand. All totaled the farm flocks had about 2100 breeders. These farm flocks were all hand culled and selected by Edward. He always culled for show as well and had type, size and length on the majority of the farm flock breeding birds. The last few years his son William helped by catching and handling the birds while Edward did the selection. He culled close and out of a flock of 300 about 125 might remain.

He sold chicks to Canada, Mexico, Japan, Cuba, and all over the U.S. His prices for top show quality was \$100 per male, \$75 per female, \$1 per egg and \$2 per chick. He had lower prices for lower grade stock and big orders. He had cuts made by Art Schilling and they were good friends. Edward was an officer and big booster for the International Buff Minorca Club.

Edward had his first heart attack in 1941 but remained active in breeding up until the breeding season in the spring of 1951. He died in May (25) .1951. Ed had not showed for the last 10 years. as his competition was not overly keen and he disliked winning all the prizes.

Much of the information on Edward F. Schmidt came from old show reports, advertisements, and from a personal phone call I had with his son William E. Schmidt; who still lives at Thorntown, Ind. .

HISTORY OF THE BUFF MINORCA

BY DANNE J. HONOUR (1981)

The Single Comb Buff Minorca was reported as being admitted to the Standard in three different years by three different sources. Those years being 1913 - 1914 - 1915. The answer to the correct date came to me by chance. I bought an old Standard dated 1915 and it turned out to be a signed copy of the well-known Buff Minorca breeder, Robert Henderson of Ohio.

It was a practice to update the Standard every 5 years. The Standard Revision Committee held its annual meeting in Denver, Col. Aug. 9, 1911, to discuss changes in the text of the 1910 edition. Two meetings were held in 1913, one in Indianapolis and later in Atlantic City during Aug 13-15, 1913. It is believed S.C. BUFF MINORCAS were admitted under official rules during one of the 1913 meetings. The Aug 1914 meeting was held in Chicago and the text changes and illustration changes were adopted. The 1915 edition of the Standard of Perfection DID contain S.C. BUFF MINORCAS. In short, all three sources proved correct and currently the Standard of Perfection lists 1913 as the date of admission.

The Standard Revision Committee of 1910 was in touch with all officials of the corresponding specialty clubs and with the most experienced and enthusiastic breeders of the varieties under consideration. A committee was appointed by the President of the Pacific Minorca club to formulate a Standard for Buff Minorcas. This first Standard was prepared in Los Angeles, California and sent to the Standard Revision Committee, dated Aug. 4, 1910. It was signed by N.E. Luce (early Buff Minorca breeder in Cal.), C.C. Bonnell (representing the American Black Minorca Club), H.T. Paschal (representing the White Minorca breeders, and Mrs. Hill of N.Y. (representing the East and Buff Minorca breeders.) The only changes made in this first drawn-up Standard, were: eye color changed from hazel to Reddish bay and leg color from light slate or white to white; before admission.

The Buff Minorca is 100% American made. An American creation to the Mediterranean class. All other claims to Buff Minorcas being originated in other countries has no founding. The Lindgren Bros. of Kingsburg, Cal., are credited with being the originators of S.C. BUFF MINORCAS. They were the first to produce a good strain.

The idea of a Buff Minorca came somewhat earlier in the late 1890's. The early breeders were not very successful in their efforts. It proved to be a hard task to combine good buff color with good Minorca type. Early breeders were not sure how to go about it. N.E. Luce was working on Buff Minorcas by 1900. J.V. Boss advertised them in the Reliable Poultry Journal of 1905. Boss said in his ad, "The work of 8 years", which would put him back into the 1890's. These early strains did not breed true, being much too red in color, high tailed, small bodies and dark leg color.

The early Buff breeders used mostly S.C. Black Minorcas and Buff Leghorns in crossing. This combination led to dark colored legs, reddish plumage, small body size, poor type like Leghorns instead of Minorcas. These early breeders' efforts to produce a Buff Minorca, did not lead to the breeders getting any credit at all, because they did not breed true, nor were they good

examples of type or color. They were really an unfinished product that failed to capture any attention.

The Lindgren Brothers had more success even though they were going about it much the same way. They too lacked greatly in type. Mr. Edward F. Schmidt got his start from the Lindgren Bros. in 1909. Schmidt realized they lacked type and set out to correct the problem by crossing his best Buff Minorca female with a big typy White Minorca male, he was able to reverse the trend of small size and poor type

While working at Walhalla Farm he purchased the entire Lindgren strain of Buff Minorca and added it to his already good line. S.O. Lindgren still sold some Buff Minorcas in later years, but they were not of very good quality. The Lindgren stock was unimportant in breed development after their big sale to Walhalla in 1918; S.O. Lindgren continued to boost Buff Minorca as late as 1936.

Schmidt was on his own by 1919 and from then until 1925, he became the foremost Master Breeder of Buff Minorcas. From 1925-1927, he managed Ute Crest Farm and there produced some fine Buff Minorcas. He went on his own again in 1927 and continued to produce good stock until his death May 25, 1951, at age 72.

Many of the best strains of Buff Minorcas of the 1920's were made up of a large percentage of S.C. White Minorca blood and Buff Orpington. These two breeds worked better, the Buff Orpington was used for buff color and the White Minorca; breed traits and type. Leg color and size were not the big problems as in the Black Minorca-Buff Leghorn crosses. In later years some breeders learned how to use Black Minorca blood in Buffs; by repeated backcrosses to pure Buff Minorca males.

The biggest problem for WHITE MINORCAS, BLACK MINORCAS and BUFF MINORCAS; has been the LEGHORN BREED. In nearly every case where Leghorn blood has been used it lead to reduced body size, leg color problems and poor type. The use of heavy breeds did less harm, but can be traced to small earlobes, tinted eggs, loose feathering, or stubs. Good clear Buff Color had to come from somewhere, as Buff color almost never appears as a mutation or sport. Buff color in most every breed has been TRANSFERED directly or indirectly from the Buff Cochin. The best Buff color came from the Buff Orpington to the Buff Minorca. The use of Buff Leghorn, Rock, or Cochin, would lead to strains of white-legged birds carrying the recessive yellow leg factor. Yellow legs can be troublesome unless test mated to find, pure white-legged birds in the strain.

BUFF MINORCAS

BY CYRUS M.LEWIS (1980)

I became attracted to Buff Minorcas around 1915, as a boy of 9. For years this was my favorite variety. I bred them for some 40 years, quite heavy in the

late twenties through early forties; when I ran over 500 breeders and hatching over 2000 a year and selling chicks in 25-500 lots.

By 1921, Edward F. Schmidt had produced birds equal to Black Minorca size. It took some effort to get the Buffs equal in weight. The Standard weights in the 1923 STANDARD OF PERFECTION listed the same weights for Buff Minorcas as for S.C. Black Minorcas. I still prefer that all Minorcas have equal weights as the Blacks. There were breeders that developed strains of large Buffs, however many had trouble securing and maintaining Minorca size due to various reasons:

(1) Reversion to the Leghorn, (2) crosses by some hatcheries, using Buff Leghorn females to increase Buff Minorca chicks to sell when demand became so great in the 20's and 30's; first cross chicks are white skinned and pink-legged as Buff Minorcas (3) top crosses with Buff Leghorns in an attempt to establish better color.

It is easier to secure a pure white earlobe in Buff Minorcas than in Buff Leghorns. There is a relation to skin color and lobe color, and Buff Leghorns are prone to show yellowish lobes, while White skinned Buff Minorcas do not. I found no connection between white skin color and under color, as the strongest buff under color I have ever seen, have been on my own Buff Minorcas. I have shown at least 100 hens that had under color as deep as the surface, with several even darker buff under color than the surface. This deep under color was secured from a Buff Orpington male, over 9lbs., and well up on his legs. He was a most even buff all over, and under color rich buff down to the skin, even under the hackle, also buff quills down to the skin but he had too much fluff feathering.

By 1928 there were dozens of Orpington breeders that had some hens of rich color, but none could be found in Buff Leghorns. It was from this Buff Orpington that I TRANSFERRED the rich under color to the Buff Minorca females. It took three years of breeding back to one of my best typed Buff Minorca males, and I continued to breed back to my best colored males of good size and type. I called this line my Golden Giant Strain; they had large white lobes and were extremely long in backs. I also bred the Schmidt line pure, securing from Ed Schmidt from time to time, the best he would sell to compare with my own line. I also sent him stock for new blood. His line and mine would cross usually very satisfactorily.

The light blue color found sometimes in the leg color of Buffs, is usually a carry-over from Black or White Minorcas used in the creation of the variety. The blue leg color is usually dominate to white leg color, but it is probable that if you can bred the blue legged birds together you would have a percentage of pure white legs.

E.F. Schmidt and others; including myself, made crosses using prize winning Buff Minorcas with large White Minorcas of extra good type. The first cross usually would produce light buff birds with bluish legs, (even though both parents had white legs). Breeding back the female progeny to Buff male usually would beget offspring of good buff color with white legs, but some of the pullets

would still show a bluish cast to the leg color. Sometimes the Buff and White Minorca cross may produce females with blue plumage and surprisingly, silver males colored like Silver Leghorn Males. The blue females (if they occur) can be bred back to the Buff Minorca sire with equally as good results eventually.

By crossing a Black Minorca male on Buff females the tendency will be to produce too red a color. The way I would go would be to secure the finest type Black Minorca female I could find, and mate her to my best Buff Minorca male. Then discard the cockerels, which will come the color like a dark black-breasted red game. Mate the best-typed pullet to a good colored Buff Minorca male. (These pullets will have buff ground color with black markings, and bluish under color and legs.) Then mate the next generation pullets back to a good colored pure Buff Minorca male, and you may have some good enough to show and win. If not another year of breeding back to pure Buff Minorcas will do it. The males will generally be more golden in color and if you are fortunate, the females will have rich under color. Black in the tail will be the hardest fault to eliminate entirely, but will eventually yield to buff. This will usually be in the form of. peppering in the main tail. In mating the cross with White, the progeny should not be bred together until they are 3/4 buff or better yet 7/8 buff. In crosses with Blacks go one year longer; 7/8 buff or 15/16 buff. There will be much less reversion and off-color.

Keep the females from laying until 6 months; by feeding low-protein ration after 4 months old. I had females lay at 4 months old and they would be 1 1/2- 2 lbs. less in body weight as hens; than those not starting until 6 months old. There is some danger from prolapsis with early laying and smaller birds, especially those bred to lay large eggs. Large eggs do not hatch as well as smaller ones. Large eggs may mean larger chicks, but mature bird size depends mostly on the size of the stock used for breeding. Size is most often and most quickly obtained from the female, but the male can exert some influence also. Breeders of small stock can increase the size by using males from stock bred for size, and after 3 or 4 years of using these large males and, at the same time, selecting the largest pullets; there will be little difference in the size of either line.

It would be impossible to predict what you might get in a Blue Andalusia female and Buff Minorca male cross. The possibilities range from black to white, with a number of combinations of black-red, blue-red, pyle, etc.; but if the buff color is sufficiently stable in your line and the males you use are prepotent, by breeding back to them, the buff color can be restored and even enhanced. In my breeding efforts for size, I almost always used mature hens or on occasion oversized pullets. Another exception would be the 2nd, 3rd, and 4th generation crosses, when in order to speed up the process, I used pullets, preferably to a cock. After I moved from Tioga Street, Portland, Oregon; we had a 10-acre farm with buildings to accommodate 16 pedigree matings in Single Comb Buff Minorcas, plus a young and an old flock.

Lester Boyd of Pendleton, Oregon; was probably the only one that could match Schmidt's birds of the early 1920's. Boyd had an intensive inbred line and

raised 50-100 birds yearly. Schmidt raised 10 times as many to maturity. In the early 1920's, Schmidt having worked out the problems of his White Minorca cross-jumped away ahead of every body in America, especially in type. Schmidt had several breeding pens. His best pens he called his exhibition pens, which were headed with prizewinning males or birds just as good. The females were selected by him to go with the male. The practice was to mate a cockerel with 10 hens or a first year cock with 8 pullets, older cocks with less. He also had quality matings, at cheaper egg prices and flock matings which he sold hatching eggs in 100-500-1000 egg lots at lower prices. Schmidt probably did at times have small or stud matings. In Boyd's Buff Minorcas, most were stud-mated. Boyd's own strain had a few old hens he had been breeding back to for cockerels to head his pens. These hens were Boyd's own strain and carried eight main tail feathers on each side. This trait of eight main tail feathers was unique and something few had, but it was often with narrow feathers and seldom wider than strains with seven wide tail feathers. The eight-tailed trait often made the birds look stringy in the tail.

The first time I got stock from Schmidt; they were darker in color and nice combed males. The second time I got stock; you could see the White Minorca cross. The buff was much lighter and the lopped combs in the males was much more trouble, I had to use my own females with small erect combs to balance the lopped comb problem. The Schmidt males also had more white in the tail feathers and sickles with laced edges of white.

Boyd had some of the J.V. Boss stock, being in color like a light R.I.Red, small in size and dark blue leg color. After Boyd moved, he did not have room for them, so I traded a trio of my exhibition Buff Minorcas, for the lot of 25 Boss birds. I found them to be good layers, but no better than my Buffs, which were averaging close to 250 eggs as pullets. I did develop and exhibit Red Minorcas from this line. By the use of hot colored buffs of Boss stock and Black-Buff Minorca crosses; I produced Red Minorcas. I bred them about 10 years from a few trio matings each year. They were Black-tailed Red Minorcas with pink legs.

E.L.Redding had both Single Comb and Rose Combed Buff Minorcas. In the early 1920's; I bought the best Rose Comb male he would sell and eight hens. The male was good type and color. The females were good color and comb, but too fluffy in feather, suggesting a Buff Wyandotte cross. These hens were the most gentle and charming birds I have ever seen. They liked to be shown and would sing when being groomed for exhibiting. I had previously become interested in the Rose Comb Buff Minorca strain originated by Judge James Tucker. He created a R.C. Buff Minorca that was large with buff under color down to the skin in both sexes.

Charles Ingraham of N.Y., had stock which was with the better ones of the day, but smaller and lacked type compared to Schmidt's. Kircher and Mr.Rusk had utility stock and sold many chicks. Kirchers birds were better than Rusks, being lighter in color and more uniform in color, even though his females often had much pepper in the tails, but his males (Kircher) seem to have a more

refined Leghorn type Comb. Rusk's male birds were apt to have too much red over wingbows with chestnut color in the tails, giving his males the two-tone effect. Some of Rusk's hens were even in color and darker than Kircher's, but many were with bronze and some with slate in tails. Rusk's birds had more Minorca type combs but were inclined to be rough and not well serrated. I sold many Buff Minorcas to customers of both Kircher and Rusk, who wanted to upgrade their stock.

Schmidt bred the best for the longest time and they were noted for their type, size and color. Schmidt produced some of his very best from 1925-1930. I established having the best in Buff Minorcas in the late 1930's. My best females have never been equaled anywhere. They surpassed the Schmidt line in length of back, spread of tail and stronger under color. Herman Pribbernow's line had much the same tail spread as mine and a little stronger in under color than Schmidt's; but not as rich as my females in under color. There were a few years when Pribbernow produced a large percentage of first class males.

E.L.Rusk operated a hatchery firm and advertised Rusk strain Buff Minorcas, but Otto C.Kircher spent more money in advertising the Buff Minorca than any other. Kircher operated the largest hatchery given over in large part to Buff Minorcas, with a hatching capacity of 300,000 eggs.

Marcus Davidson was one of the greatest breeders of all Buff varieties of all time. Bob Henderson of Zaneville Ohio, Charles Ingraham of Batavia N.Y., F.S. Smith, Bob Bordner (both of Ohio), B.E. Arbuckle of Indiana, L.S. Poisal and William Williams of Calif., George E.Lane of Waverly Iowa, and E.L. Redding of Indiana; were all good breeders of Buff Minorcas.

Warren Kurtz of Arizona, bred the Schmidt line and had the best in the country in the 1960's. His birds had the size and weight of the Black Minorca and the type of Schmidt's best of the 1925 period. Surface color in the males was as good as I have seen in any breed, with fairly good under color. Females were nice even color and clean, but under color was virtually white. Head points near perfect in females, but male's combs tended to be too large and heavy; inclined to lop. Females, like Schmidt's early winners, inclined to be pinched in tail.

George E.Lane, had fine Buff Minorcas, but for some reason was forced to sell out. I bought his best 3 hens, which had score-card records at Allison, Waverly, and Nashua Iowa. The highest was 96 points, the lowest was 95 points. They were about on par with the Schmidt hens. Charles I. Smith of Eaton Ohio was an early breeder and his birds had extra good color. F.S. Smith, of Buff Leghorn fame, was also a Buff Minorca breeder and was probably Schmidt's strongest competitor in Buff Minorcas before the 1920's. There were a dozen or so breeders just a step behind.

Some Buff breeders prefer to have pepper in the main tail, as it seems to keep white from appearing in the plumage. They look upon white as a weakness, for if it invades the under color, eventually the tendency is to run out in surface color. Such birds, especially females, will bleach badly in the sun. On the other hand, you do not have a completely buff bird until the pepper has been

eliminated from the tail. When using pepper, have it in tails of one sex only, preferably female, and try to reduce the amount annually. Sometimes male birds of otherwise good color, but showing white primaries or white in one or two sickle feathers, may produce fine colored pullets. Seldom are good colored progeny produced from a mating containing females with any noticeable amount of white in wings or tail. At one time, many Buff Minorca males showed chestnut color in tails. Schmidt eliminated this with his White Minorca cross, but for a few years there was a slight tendency for white to show up now and then in male sickle feathers.

Stephen Costa was a reputable breeder of trap nested Black Minorcas in the 20's, 30's, and later. In the 20's there were several Black Minorca flocks being trap nested, but the accent being put on the size of Minorca eggs, their records numerically fell short when compared with Leghorns. Charles Pape of Fort Wayne, Indiana, claimed that he had trap nest pullets that went 250 over 300 eggs per year. I found that 90% of the best Black Minorca females do not show the declining back-line. If it is a trait you wish to establish, I would suggest picking the female with the most slope and mating her to the male with the highest shoulder carriage. A shallow breasted male usually shows a higher shoulder carriage. Pape had hundreds of hens with plenty of slope of back. They had good breasts on females, but did not have the spread of tail desired today. These shallow breasted males had shorter narrow tail feathers. Pape used them occasionally to breed pullets with the descending back-line. He sold them to customers wanting cheaper males (\$5-10), his other males were going at \$25 -50 around 1920. In general large Minorcas of today do not lay, as well and large eggs are often less fertile. This was not always the case, such Black breeders as R.O.Lipton and J.V. McConnell, claimed otherwise. They were referring to large birds of Standard weight and eggs that grade extra-large. Large Minorcas may take special handling and the know how, on the part of the breeder to attain production and fertility. Large Minorcas take more room than any other breed. Range Minorcas with lots of green feed as an aid for growing birds to large size and best feather condition.

I crossed in Single Comb Buff Minorca blood into my Rose Comb Buff Minorcas. Usually a S.C. female with a very small comb, otherwise the rose combed offspring would have too large and lop over type rose combs. The female influences the size of the earlobe a great deal. The use of a big white earlobe male, may skip a generation, but by using the male back on his daughters; will often produce the large lobes again. In the Leghorn breed, size was maintained mostly by selection of large and extra-large breeders, plus outcrosses with other strains.

There are indications that in some instances, slate in under color of females Buff Minorcas, when bred to a male that has strong buff under-color; you can deepen the under color of the female progeny. Breeders would sometimes get gray under color from the Black Minorca or White Minorca cross. Breeders would make use of it, and it seemed that eventually the gray under color and pepper-tailed birds would later produce the best under color

lines. Each year the birds showing the defect were mated back to good colored birds bred from a good colored line. Never mate together birds with the same defect (When Buff birds of strong gray under color are mated together, black comes in with spots in the surface color; some feathers being nearly black. Extra black would show in wings and tails.). Gray under color sometimes shows up when inbreeding or introducing new blood.

I would at times double mate to retain strong buff color, and sometimes I would double-mate to correct lopped combs or erect combs. This was done for a short time only, so that all lines could be crossed. By breeding from old females year after year, the progeny in later generations would lay better as older hens. I had females about 6 years old still laying nearly 100 eggs a year. These females would not lay during the winter and would take longer to molt.

Minorcas became very popular in the 20's and 30's, into the 40's too. A big boom through the midst of the depression. The Blacks and Whites were popular, but the Buffs even more so. The Buff Minorca was in big demand in the mid-west and west, not so much in the east. Many of the breeders thought they were the coming breed. During this time the Buff Minorca was popular with, the then common small egg producers of flocks of 500 - 2000 birds. They laid well and some markets paid a premium for large white eggs. In body size, females of 6-8 lbs. brought a good price for meat compared to Leghorns which were penalized for the smallness. For the production of broilers, some strains were good, being selected for fast growth, fast feathering, and fast weight gain. Big advertisers like Kircher, really pushed the Buffs commercially and created a good demand. The Blacks were being pushed by Charles Pape and the Whites by Eden C. Booth. Poultry shows had big classes of Minorcas in many areas.

Popularity began to wane in the 40's. The real large eggs lead to breakage, because the Standard-sized egg cartons were designed for the smaller eggs. The egg markets changed and longer shipments were necessary. The larger egg farmers found they could stock and re-stock cheaper in other breeds. The meat markets began to discount prices paid per pound on all white earlobe breeds regardless of body size. The NEW HAMPSHIRE breed came into being and stole the broiler market. The New Hampshire's were fast growing and had the desired yellow skin color. The hatcheries declined in number and many Buff Minorca breeders had to cut back their flocks. Some breeders also passed on. All these things led to the decline of Minorca popularity.

The early English Black Minorca Breeders, added size to the stock that originally came from Spain and the Island Minorca. The English birds were coarse, with very large combs and earlobes, with whiptails. American fanciers added more symmetry to the English stock, maintained the size and in some instances increased the egg production. Americans refined the large combs and bred for wider spread tails. The German Minorca, at one time had the large size about the same as our Blacks. The German stock was bred along similar breed type as ours, but the earlobes were extremely large and round as in Hamburgs. They also had very narrow pinched tails.

The Buff Minorca was more popular as a utility fowl, than an exhibition

“fancier’s favorite”. By 1920 the Black Minorca had been raised to the pinnacle and some great specimens had been produced and under scorecard judging, were equal to the best. In the 1920’s and 1930’s, Buff Minorcas were shown that compared with the best of the Blacks. This can be shown by the fact that in many shows in the 1920’s, the score-card was still being used, and there were Buff Minorcas that scored 96 points; few Black Minorcas or any other breed went any higher. True, only a few breeders could show stock of that caliber and at comparatively few shows.

With the Black Minorca- Buff Minorca cross, if the first cross offspring show that the Minorca type is not improved or even lessened; this would suggest that the most desired type factors are recessive in the particular mating. By breeding the progeny together, you should get some with distinct Minorca type; that was not apparent in the first generation. When bred “inter se”, the second year (from hybrids), they produce principally Black-red males or black with gold (or silver) in hackle. Occasionally birds of very poor red color, some with bluish or white tails. There were no “buffs” in their number. You will have to backcross to good Buff, if you expect to get good Buff color all over. The 7/8 Buff cross-worked for me but remember my Buff Minorcas had White Minorca blood introduced by Schmidt; today more than likely the stock has more of the Leghorn blood. Any crossing, either variety crossing or breed crossing; takes perseverance if you are to succeed.

In the effort to improve the type of the Minorca, the breeder must take great care in his selection of his breeding pens. Only the very best typed males should be used and as they, undoubtedly, will have some faults, one should try to select to correct the faults on the female side if possible. Select males that are up to or over the Standard weight, with good station, carrying long wide backs free from any indication of a hump, fine evenly serrated combs, good sized earlobes, deep and long bodies with full breast, and low well spread tails. I prefer a six point comb with a good blade set rather close to the head, the earlobes large - almond shaped and of good texture. Females pick them for size and the best shape. Always attempt to select the ones that are the strongest where the males are the weakest. Avoid the use of males that have bad thumb marks on comb, narrow skulls or bodies, or crow-headed individuals. Avoid the use of large beefy combs on females, although there are times when it is necessary to use them, especially in Buff Minorcas, to secure size. Be on the look out for females that have broad flights and tail feathers, for these are the ones, which will produce the males that carry the most luxuriant tail plumage.

BUFF COLOR MAKES TREMENDOUS IMPRESSION

BY HERBERT H. PRICE (1953)

The Anglo - French Expedition, arrived in Peking China in October 1860. On arrival they found that the Chinese royal family had in the Summer Place at Peking small Cochin bantams “ weighing not more than 1 pound each “. One pair

of Buff Cochin bantams was then and there obtained which was taken to England and presented to Queen Victoria. The first pair must have been prolific since their descendants are to be found in every part of Europe and America. The Black Cochin bantam came from China later, but the White and Partridge were bantamized in England.

Large Cochins in all colors had already been imported from China into both America and European Countries. The interest in the then unusual Cochin shape and especially the buff color soon made it fashionable to be a “poultry fancier” in Europe and America. Following the importation of Cochins into England it was discovered that the “Buff” or orange color made a tremendous impression on people, and “ a curious popularity for chickens of that color” caused the buff color soon to be bred into all breeds of fowl and bantams. The marked revival of interest in fancy poultry, about the year of 1870, led to the invention of the incubator.

THE BUFF COLOR SOURCE - BUFF COCHINS

BY D. J. HONOUR (1986)

In one case history, it is stated that Partridge Cochins originated from the same setting of eggs as the Buff Cochin. Eggs brought over from China, when hatched; one party took the chicks looking most like Partridge and the other party, the Buff chicks. Large fowl with feathered shanks reached America in the 1840's and 1850's; through ships employed in the China trade. All these fowl were classed as Shanghais. They were various shades of color in white, grouse, and buff. Those specimens in two shades of brown plumage were called Marsh Fowl .The importations of Malay, Chittagong, Cullom fowl and Azeel; figured into many breeds. It is thought that Cornish Indian Games were a mix of Old English Games, Malay and Azeel. The Malay is thought to have added length of limb to black Shanghais and produced Langshans. Malay color was on the black - red order and some were nearly red, for males; females were various colors ranging from cinnamon brown to a lighter yellow brown, the brown often slightly intermingled with black. It is thought that Gray Shanghais became the Brahma. The light and dark Brahmas came from one original gray color.

The Buff Cochin was originally a crude form of red or brown, coming from the lightest specimens being selected from the Black - Red color pattern. The crossing of Malay and Shanghais gave rise to many color variations and both single and pea combs. Mixing of red, brown, and white fowls, gave rise to the many shades of buff sub-varieties that were long bred in America. The light lemon buff, orange, cinnamon (reddish brown buff, quite red), silver buff (an ashy buff), silver cinnamon (like cinnamon, but with white giving an ashy tinged mottled effect); all buff sub-varieties known as yellow Shanghais. The Kinkee or golden flower variety, in parts of China is known, and the Buff Cochin is a refinement of this ancient Kinkee color. The silver buff and silver cinnamon shades of buff disappeared early, but the lemon, the orange buff and the

cinnamon shades remained in America until the early 1890's, when one true buff shade was then selected.

It was noted that the lighter shades of buff always had better Cochin type, heavier shanks, heavier toe feathering, and a greater amount of fluff. From 1885 until the early 1900's, a wonderful degree of perfection of size, type, and color was produced in Buff Cochins. Until about 1890 the Buff Cochin was the only well-known established buff variety. After nearly 50 years of indifference of this color, between 1890 and 1900 there was a period of such intense interest in buff color, this period is often referred to as "buff fever". At this time period many new buff breeds were made and brought before the public.

Crude forms of buff can be secured from many combinations. Mixed flocks often have specimens of common yellow, red, and brown, all more or less with some black or white. Even in Brown Leghorns, in poor colored birds of the light shade, they often degenerate into rather dark mealy buff and the dark becomes a medium dingy brown. The pyle color pattern is common also. These red and brown variations with slight amounts of black and white; provide the foundation for buff and red. The best of these crude color forms were crossed with Buff Cochins to produce many buff varieties in many breeds. In the late 1800's when new buff breeds were being developed it was from the Buff Cochin that the buff color was transferred. The common drawbacks to the use of Buff Cochin blood, was the loose feathering and feather legs. Later on Buff Orpingtons and Buff Plymouth Rocks were used as a good buff color source, when they became well-established in buff color. Buff Rocks remained a buff color source for the less established buff varieties, because Buff Rocks were tighter in feather than Buff Orpingtons .

STARTING WITH BUFF LEGHORNS

BY WAYNE URBANAVAGE (1986)

Breeders of Buff Leghorns tend to breed for everything at once and end up with a lot of wasted money and time. It is easy to become discouraged with a variety of a breed that is hard to find outside blood, to help improve your line. Most breeders, no matter what breed they raise, tend to buy more stock than they raise in an effort to improve their own breeding practices. Most of the time they end up with good breeders and don't realize it. They believe that if their birds do not place well in shows that they will be poor breeders. You will find that if you pick out a few birds that have good characteristics of the breed, you will become a better breeder through your selectiveness.

The most important part of breeding is hidden below the colorful and well-feathered portions of the bird. For all the good buff color in the world, will not make a good bird. The skeletal structure is, and always will be, the most important part of any breed. Years ago A.O.Schilling advised breeders to "Avoid specimens having long, narrow shanks. These generally accompany

narrow skull and sunken eyes with crow beaks.” The Leghorn shank is supposed to be oval in shape, while being slightly flattened at the sides.” To take Schilling’s thought one step further, one must realize that as the “head goes” the body must follow. Specimens having short rounded heads usually have short compact bodies accompanied by round meaty shanks. Long narrow heads are followed by long skinny bodies and long narrow sunken shanks. The structure of the body will usually resemble the structure of the head. Birds that have good size, but have small heads will produce a mixture of breed characteristics for you, but birds that may lack a little in size but have a well-developed head, will produce more birds of quality and size than the former. The head and shanks are the most visible and the easiest breeding points to pick out, do not allow yourself to be beat by the obvious. I have seen breeders who disposed of good breeders because they did not place well enough in shows, some of these birds having well developed skulls that would have been valuable in breeding pens. The Buff Leghorn is known widely by the fancy for lacking in size, these birds are capable of producing birds with good size and development, if their offspring are culled carefully by the breeders and not by how they place when shown.

Many breeders talk about good depth and width of body of the bird, but many breeders have a hard time trying to figure out how to hold on to this characteristic. A Leghorn should appear to be flat across the shoulder area of the back; this area should have good width that is carried through to the stern. An easier way to help keep track of the depth of your Leghorns is to check the development of the keel bone. The breast of the Leghorn should seem to protrude from the bird when being held in hand, this gives the well-rounded shape to the breast area. Leghorns do not carry enough feathering in this area to cover up such a fault. An even more important fact of the keel bone is its length. The rear of the keel bone supports the abdomen and should be sufficiently long enough to do so. A good way to check to see if the keel bone is of sufficient length is to check the hens when they are in production. The abdomen should not appear to be droopy, Leghorns are bred to produce eggs and should hold their shape while laying, you do not have to pick your birds up to see this fault.

When you buy stock from other breeders you inevitably inherit the good traits with the bad. Although the breeder may be reputable and has very little trouble breeding for consistency, you may. For when you mix your birds with his in the breeding pen, you are going to stir up a lot of dormant recessive genes that will have a great influence on your stock. When you mix unknown birds together you stir up a “bee’s nest”, you will have to cull many birds at first, but don’t cull a bird just because it is not of show quality. A bird with a sub-par comb may be more valuable than a bird with sunken shanks. Do not pass over birds with well-developed keel bones, heads, and shanks. You can walk through your chicken coops and pick out these birds without ever touching one of them. Many people complain of lack of time, this can be done while feeding.

The STANDARD OF PERFECTION describes buff as “ A medium shade of ORANGE-YELLOW,” not yellow-red, or lemon-buff, or even yellow

by its self. Orange is a fading of red in the pigmentation of birds. The fading process would start with red, bred down to orange, then yellow, and then white. Buff is somewhere between orange and yellow, not lighter nor darker. Lemon-buff s do place well in shows and are easier to breed for evenness of color, but they are not true breeders unless they posses an under color of the same shade as the surface color. These lighter colored buffs are very close to bleeding their color out to white and will produce offspring with mealiness in the wingbows. Males from this, produce, may be lighter in the hackle than the breast area, the exact opposite of the Standard description of buff. If you breed these birds to darker colored birds their offspring will show a variety of many shades of buff, no consistency. If you have no choice, pick out the bird with the darkest under color, you may get some surface color back. Your male bird should posses as good rich colored buff as you have available for use. Birds with good surface color, often have a light under color, but don't be disappointed. You are breeding for surface color and must secure this area first. Under color being the most important area for breeding buff, may be held out until last when breeding Buff Leghorns. I have heard of no one who has raised Buff Leghorns with good surface color and a good under color with consistency. In breeding for consistency of shade that will hold true in the breeding pen, under color is of the utmost importance. The quill of the feather should also hold the buff color from the tip down into the skin. Light surface color is generally accompanied by light quill color. If you have a lighter colored strain of buffs and cannot determine which bird has the best under color, check the color of the quills.

I use the 1980 edition of the Standard of Perfection and suggest that you look very closely to the pictures on page 12 & 13. After you have done this turn to pages 46-47 and study these pictures until you believe you understand how the body is supposed to be proportioned. Try to relate the width of the head with the width of back. Then relate the depth and length of the keel bone to the length and slope of the back. Once you understand the skeletal development of a Leghorn you can then turn to page 258 and begin to dissect one sentence at a time, what a Leghorn should look like according to the Standard. When you get to the color description take special notice to the plumage color description of the male. The head, neck, hackle, back, and wingbows should show greater luster. This means that the chest and other areas not described should be at least a shade lighter in color. Do not interpret evenness of color as meaning that the male should be the same shade from head to foot, but of two shades of buff as described in the Standard. The female should be of the same even shade of buff all over, except for showing some luster (orange-cast) in the hackle area. The Standard also describes the under color as being "as near as possible" to the surface color. Breeders who have birds with this quality are holding valuable breeding stock, no matter how they place at shows. To the experienced breeder this article may not mean much to you, but I have personally seen a lot of Leghorns in shows with some of these faults, such as sunken shanks, shallow breasts, sloping backs and so on. When confused, open your Standard and study.

Many new breeders tend to choose buff as a color to start with. Whether

you choose Buff Leghorns or another breed, I hope this article will give you some ideas. Remember, you do not determine your breeding pens based on how well your birds do in shows, when you breed Buff Leghorns. There are some very valuable traits carried by non-show type birds that should not be lost through non-selective breeding techniques.

IN “BUFF LEGHORNS”, BODY STRUCTURE IS THE FOUNDATION OF TYPE

BY D.J.HONOUR (1986)

The buff color variety in the different breeds, are usually not as good in type. The buff color seems to rate higher in importance than type with too many breeders. The Whites or Blacks in the same breed, are generally better in type, due mainly to less difficulty in color breeding more attention is given to type. The buff varieties can be as good or better in type, size and finish. It is important to know that this is possible. Always give type, vigor, and size importance over color, especially in the female. Type is worth the most points (scale of points) in the Standard. Some knowledge of body structure will help you build the right foundation for type.

THE HEAD: If the head is not wide across, it indicates fine bone throughout the body of the bird. If the head is long and lacking in breadth it is called a crow-head or snake-head, and indicates a long and narrow body. A long beak is commonly found in snake-headed birds. A way to determine the length of a head is to mentally measure the distance from the eye to the end of the beak. The head contains the brain and the brain controls the birds' activity. Every breeder should remember that weak heads make weak birds.

THE NECK: If the neck is too long, it is generally accompanied with too much length in other sections, especially legs. A well-arched, full neck indicates vigor and with long, flowing hackle feathers well over the shoulders, the neck and back seem to merge together to form a good top line.

THE BREAST AND BREASTBONE: The breast section in just about all breeds should be full and broad when viewed from the front. There should be good distance between the wings. If the bird lacks distance between the wings and distance between the legs, the bird is narrow and shallow in body. If the bird is wide from a side view but narrow from a frontal view, it is called “slab-sided”. Shallow breasts or flat breasts are a sign of inherent weakness. The distance between the females pelvic bone to the rear of the breast-bone (the keel), indicates abdominal capacity. The larger capacity indicates larger intestines and laying ability.

THE BACK: A short back means a short body and the bird lacks breed type. Shortness of body means lack of weight. Long backs mean long bodies and this means lack of type, if the bird is flat on the side. Long backs usually lack the curve needed to finish the back and tail section. Long backed birds are often

too narrow and apt to be roached backed. Breadth of back is greatly needed to give a sturdy characteristic. Backs should be broad at the shoulders and the breadth should be carried all the way to the tail. Width across the hips can be determined by placing a hand over the hips. The plumage over the back gives the appearance of roundness, rather than being strictly flat. The saddle area just before the tail (tail sweep), causes a look of fullness, roundness, and gives the back an appearance of shortness. The bone structure of the back may be of good length but the plumage can give the look of shortness. Hence the need to actually handle the bird, the only real way to determine back length, crooked backs and roached backs.

THE WINGS, wings should be carried level and well tucked up to the sides of the body. Drooping shoulders indicates a weakness of the shoulder muscles (wing fronts droop too low). Drooping points where the wing points are carried too low (not tucked up), are caused by a high shoulder with too long wing feathers held at the wrong angle.

THE TAIL: The tail section completes the top line and gives the appearance of gracefulness. With a good tail a bird is finished. Without the proper angle and spread, a tail lacks balance. A bird with a pinched tail is never finished and appears narrow.

THE LEGS: A fine boned shank indicates a small-refined boned body. Shanks that are rather large and strong are found only on large and strong specimens. Breadth in back and body indicates vigor. Legs that support a broad body are set well apart. In order to have station a bird needs some length of leg. Short legs make a bird appear squatty. Toes give balance and allow the bird to stand squarely. The toes should be well spread and straight. If the outer two toes are close together, the bird cannot stand squarely and is of low vigor. Games are noted for their strength, especially in the legs and toes. Game breeders do not use birds that have weak hock joints, crooked toes, or duck-feet. The rear toe is a brace used to help balance. The hind toe should project backward. If this rear toe turns at the side, is too low or too high up on the shank; it is useless and indicates weakness. Crooked toes, weak hocks (knock-kneed) and even bow-leggedness, all handicap the bird and make it much less active. Birds with well spread toes and strong shanks are very active, scratching and exercise, appearing almost tireless. These active birds with good feet seldom appear tired or lazy and have well worn toenails. Birds with too much length in thighs (stilty) do not easily move about and so get weary and spend much time resting on their hock joints. Knock-knees are more common with long legs and narrow bodies, and the condition is caused by too much of an angle at the hock joint where the two bones meet. Spurs in cocks, that turn downward are defective and go with low vigor. Desirable spurs in cocks are nearly level leaving the shank, and then turn upward; they are of good width and both should match. Spurs should be trimmed of the sharp point to avoid damage to the backs of females (and injury to people also). If they are not trimmed back to a shorter-blunter end; they grow too long and sharply pointed, and can hurt the bird or cause him to walk only with much difficulty.

BODY FLUFF: When the body fluff is short, that covers the thighs, sides of the body, and abdomen; it doesn't influence type much. If the plumage is loose and long, it detracts from symmetry and the underline is partly destroyed. The underline then lacks that smooth outline it should have. If the keel is short and curves up at the rear, the abdomen will be small and the underline will look short. If the keel is crooked it detracts sometimes from underline.

WEIGHT: The deliberate development of excessive size (some strains of White Rocks) is a fault correlated with very slow growth rate. The Standard forces breeders to practice "severe selection to exclude" faults of all kinds. It is the only way to get stock of good Standard quality. Faults are not inseparable. There is no reason to tolerate many common faults; one who does tolerate faults is just reluctant to take the temporary loss involved in rigid selection. Things being equal, a bird of Standard weight or a little over, should be your first choice. If your birds are vigorous but fine boned, they should be mated to birds above Standard weight with a tendency toward coarseness. The farther apart the parents are in weight, the greater the range of weights in the offspring. Really large birds can be used in matings, provided they have other good qualities and are not too coarse. Large females are usually more useful than males. Large females mated to a slightly underweight male usually produces good-sized uniform offspring. Large birds mated together may increase size and coarseness, more than desirable. Large males mated to small females is not a good combination. Size seems to go down in most stocks unless selection prevents it. Underweight causes loss of type, and small specimens are not advisable to use unless of remarkably good quality otherwise, and even then they must be carefully mated to correct the lack in weight.

SYMMETRY: A bird of Standard shape with good vigor is usually a bird of symmetry (harmonious blending of all parts). Standard shape is represented by a balanced structure of each part or section, with enough quality in each part to combine in a nice blend of the whole. A bird of good proportions, when viewed from above, will present a broad well-balanced form, also when viewed from the side. The top (or above) view is very helpful in judging width of skull, tail spread, back width, tight or loose feathering at the sides, wry tail, crooked backs, and neck and hackle length. In cockerels, their immature plumage makes them look gawky and ungainly. It is the short and narrow immature plumage in the hackle and tail sections that causes this look. It takes a strong healthy vigorous male bird to develop a wealth of feather with a finish of quality. It takes strength and vigor to produce a strong head, large face, and body of good substance. It is the weak ones, which have the narrow plumage, which lacks that complete coat appearance known as "finish", the scant tails, the long legs, the narrow head, and the narrow body.

BUFF LEGHORNS

BY MALCOLM ROSS SANDERSON (1985)

I have kept Buff Leghorns for 69 years. When I got home from Europe in the 2nd. World War, I had to start from scratch in 1946-1947. I answered an ad in "Feather Fancier" from nobody special and got a pair of Buff Leghorns. The cockerel was awful and I killed him. Then I sent to someone else in Ontario. No one in Alberta Canada has Buffs, even now. I got a very small cock bird, good style and fairly nice color. For 30 years I just worked and worked, at last no more high tails, I had them streamlined, just beautiful pullets with lots of size and color, some cockerels also. I was proud of them and won Grand Champion in Calgary for 9 years, nearly always on Buff Leghorns. One must cull, cull, and cull. I only breed from older hens and then only select ones.

Then about 3 years ago I had a very bad fire and lost nearly all my birds. The Buff Leghorns I have now lay pretty well, but are way down in size, color is pretty good, tails too small and just do not fill up and no 8 main tail feathers, just not good enough. Up here in Canada, the judges no longer go for that lovely rich buff color, they changed about 9 or 10 years ago. I used to have rich buff color, but had to change to a more lemon color that I don't like.

When I hatch, the very best chicks are always completely yellow, ones with darkish heads or not all yellow are not quite as good in adult color I find. Never use pepper or mealy birds in the breeding pen. It takes a good many years to get rid of it. I use only the very best type and best-colored birds in breeding. Look for under color. If mealiness is in the ancestry, it will crop out in some of them. I think some of it comes from the hens, less of it from the cocks. I find the large, long legged, and coarse female, brings reddish color into her male offspring. Do not use birds with black pepper in tails, even if good in type. I never seen any pepper in any Buff Leghorn males. I always had lots of vigor in my Buff Leghorns. The lemon color is very even and some judges like it, but white can come in a little with lemon color. I saw some Buff Leghorns in England last year, huge combs, dark, narrow but very large, also the same in Australia.

A LETTER ON BUFF MINORCAS

BY CHARLES LEMIRE (1979)

Mr.Honour; so glad to get your letter. I raised Buff Minorcas for 10 years and the only other person I could get stock from was Marcus Davidson. We used to correspond regularly. I lost my flock of 38 Buff Minorcas 2 years ago by two German Sheppards. At the time I was silent because I could not find any. I tried some of the commercial hatcheries, but the birds I got from them did not even resemble Minorcas. I would like to buy three settings of your Buff Minorca hatching eggs, to get started again.

I kept a pen of Black Minorcas only as a model to copy in breeding my Buffs. To get size was about a four or five year process. I used a RANGY Buff

Orpington (long bodied) male on my largest Buff Minorca hen. I got nine chicks from this mating. I got two cockerels of good feather; I used the best back on the mother. From this mating I got some good pullets of large size. I made a pen of four pullets with one of my pure Buff Minorca cock birds of good color. The results were very good. I often wished I had also used the pullets from the Orpington cross. I could have had two good families to work with. Marcus got a half case of eggs from this last mating (four cross pullets to the pure male) in 1963. He told me they were good.

My father had about 3,600 Buff Minorcas, some of his stock was from Schmidt. We hatched in Jan. and Feb. for our chicks, the rest of the season was for customers who wanted chicks. Dad bred for egg production, but he believed in large birds. I remember the color was buff but nothing special. Most of the Buffs I had went to stringmen; the rest went by way of Marcus to some of his customers. I had over 400 Buffs at one time. I raised many birds and used the best in my breeding pens. I had 12 breeding pens with 10 females in each, and five pens for layers. I sold market eggs at the farm.

Wendall Phillips of Rhode Island was a long time breeder of S.C. Black Minorcas. I used to have him come up by bus, a few years before he died. He would help pick out the best Minorca type in my Buff Minorcas. He would spend a lot of time studying them while cutting off small pieces of apples with a knife. After a time he would point to a bird or two, which I then banded. He always tried to get me to breed the S.C. Blacks. I am 42 years old and cannot remember a time I was not interested in chickens.

BUFF MINORCA BREEDING TIPS

BY CHARLES LEMIRE (1986)

The type of the Minorca is different from other breeds. Minorcas are right up with most heavy breeds. In type they are a tall bird, but must not be stilty. The body should be long and broad when viewed from the top and deep from the side. With a bird set on long legs, if you don't have a wide body, your bird will be stilty and you will have trouble with knock-knees. Some breeders advise compensation matings, example; mate tall to short legged birds and you will get an average type. This usually doesn't work. I advise the use of birds as close to the Standard as you can get. Take from this the best type and remate sons and mothers, and fathers and daughters; trying to get two separate lines established.

If you get a pen that produces good males, good females, or both; don't change it. I use the same pen for as long as it produces, 6 or 7 years if possible. By breeding this way you can keep a good line going. This way you can use other pens for test matings for qualities you want to develop. Knowing you have the old pen that produces known results. Besides breeding to Standard, always

maintain production and most importantly stamina. This will give you birds of worth to you and others that may want to raise them.

SUCCESS WITH BUFF PLYMOUTH ROCKS

BY C.R.BAKER (1917)

When I selected my foundation stock in Buff Rocks, I sought out the very best obtainable. I was fortunate in getting birds of as good quality as were in existence. They were the culmination of the best efforts by the “masters” of that time. I had to learn the merits and faults of my stock from season to season. My next problem was to get the necessary knowledge in the breeding ability of my birds. I was producing quality pullets, but good males were few. I studied my matings and learned which matings were producing both good males and females. I then discarded all the other matings, thus building my strain on single matings.

I learned the best breeding birds were just as valuable to me as to anyone else, and many times I have refused to put prices on them. I used many individual matings (one hen - one male), then kept the eggs separate and the chicks were marked. This provided accurate knowledge for advancement. From the beginning I have built my birds along Rock lines, good long, broad backs and a good sweep of top line of the body. A good long underline not only balances the fowl, but insures a frame that will carry flesh and room for egg producing organs. I can build a large, excellent bird along these lines that will attain Standard weight without becoming a bulky specimen.

An old veteran Rock breeder once said to me “mate your good birds together, and then they will produce good ones. Do not mate your good ones to a poorer one to offset a defect, for in doing so you reduce the good qualities of your good birds”. I have termed this constructive mating, and I have found it much preferred to the corrective mating. These good birds will possess the points for which we are striving and observation is the only way in which we can tell results.

In buff color I select my breeders as near the same shade as possible in both sexes. I desire a medium shade for all of them. Sound colored females are selected. I select sound colored birds as far as practical, and insist on sound under color. I prefer there be no break between the top and under color. It is rather hard to get a large number of this sort. In the early years with my Buff Rocks, I was troubled with many cockerels having white in their wings that had come from sound-colored sires. This fault was found to come from the dams. Mealiness came from “break matings” that is mating light and dark birds. Hens that were of a good color when they moulted, have proved to be my very best producers of choice birds.

DEFINITION NOTE

The fringe (or border) of a feather is that portion of a feather at the extremities of the web and tip where the fibers are not joined by barbules. In self or solid colors, this border or edge is glossier than the web. (From the 1919 A.P.A. breed books WYANDOTTES & PLYMOUTH ROCKS, page 18, the feather.)

NOTE ON BUFF LEGHORNS IN HOLLAND

G. W. TESSELAAR (personal letter from 1987)

In Holland we like a very dark buff as a warm and equal gold-yellow color, without light shafts or flour color in the surface or under color. The cocks have shining feathers in neck and saddle. The under color and surface color must be as equal as possible. The buff color is buff to the skin. Ideal is a warm gold-yellow of all gold. Red in the tail is a very big mistake, even as flourish-white color. We prefer an equal color over the total body. The cocks are a little darker especially in neck and saddle. Change in food is very bad for this color. Keep them inside, if outside, in only shaded areas shaded by shrubs or trees. Buff Leghorn large fowl are rare in Holland and I know of only one breeder of Buff Leghorn bantams.

Large body size is maintained by always breeding with the largest birds with good egg production. In our country Buff Leghorns are a bit smaller than the other colors. Mr. Schooten crossed Black and Buff Leghorns. He mated a Black Leghorn cock to a Buff Leghorn hen. The results of this cross were mated to good buffs. The (f 1) hens were mated to buff cocks and the (f 1) cocks were mated to buff hens. Only the best of type and egg production were used. The results were very good. The color was very much buff, only some smut in tail. The chickens never had green legs and achieved were good large birds. Mr. Schooten maintained for five years a bloodline, this is father-daughter and mother-son.

Mr. A. C. Meyssen mated a Buff Leghorn cock to White Leghorn hens. The first generation (f 1) were nearly white with some buff spots, many had green legs and the white was a dominant white. The (f 1) females were mated to the same buff cock and the second generation had still much white, and green legs. The third generation he again used the old buff cock to the (f2) hens. They are not what was expected as he made the mistake of using the old cock again and again, for he says the egg production is getting worse and worse. The buff cock I assume was from a poor laying hen and now Mr. Meyssen has established this wrong quality in his strain. I have advised him to set up a new line by buying one cock and one hen. I said mate up the new cock and hen and also the new cock and his current line of females in two separate matings. Never to use cockerels from his current line females and new cock, until egg production had increased to its original good level. The new bought birds must be of a very good laying strain

When somebody in Holland should ever want to cross white and buff

again, I will advise to use a White Leghorn cock as in Holland the White Leghorn is best for egg layers. For me a Leghorn must be a very good egg layer. This is one of the most essential qualities of the breed. We are never at the end of our improvements of the Leghorns.

CROSSING BUFF WITH DOMINANT WHITE

BY D. J. HONOUR 1988

In 1984 I decided to cross a good exhibition strain of White Leghorns with profuse tail feathering and fine size and type. I was to cross these with my Buff Leghorns in hope of getting nice full profuse tails on my Buff Leghorns. Prior to this I was given a proven method of doing this cross by the late Cyrus M. Lewis of Oregon. He had made this cross and followed through with it; getting good results. I was told to backcross to "pure Buff Leghorn males" each generation until at least the fourth generation. I was told to do it this way because of the silver gene and sex linkage of silver. I was also told to expect about ninety percent culls along the way and plan on spending about five years or do not bother at all. In 1984 I got a pen of one male and four hens of White Leghorns. I mated a really nice but very old Buff Leghorn cock (about 5 or 6 years old) to these four white hens. The fertility was very low and I only got 8 chicks from a number of eggs set. Only two of the eight were pullets. These were kept for about eight weeks to tell plumage color, leg color and sex. The cockerels were brassy white with yellow legs. The two pullets were both dark green in leg color, one was buff in hackle and breast and blue elsewhere. The other female was light blue. The two with green legs showed it at hatching time. None of the chicks showed any head spots or back stripes. The leg color appeared sex linked

Since I had the White male I put him with a few Buff Leghorn hens. Knowing I wasn't suppose to use this mating, I decided I would set a few eggs only to observe leg color and plumage color of the chicks. I got about the same number of chicks, no spots or stripes on backs and both pullets and cockerels were brassy white with yellow legs. I did not raise any of these to maturity.

With the two cross pullets (f 1), I mated up to another pure Buff Leghorn male, but this time a younger male was used. From this mating I got 25 chicks. In cockerels most were buffish with white in wing, tail, and under color; a few appeared nearly buff and a couple showed pepper. Leg color was yellowish green in both sexes. In pullets about the same in color, except none with pepper, a few pullets showed green leg color, but most yellowish green .

I saved four pullets from the (f2), all four had excellent size, type and station. Feathering was good, in color two showed white in the main tail feathers, back and wings showed a mix of white and buff. The other two showed sounder buff in tail section, back and wings. All four had whitish under color, big combs and greenish yellow leg color. These again were mated to a pure Buff Leghorn male. I got out 23 chicks. A lot of pepper appeared in three chicks (2

males--I female) and they had greenish yellow leg color. Out of the twenty others ten were fair in buff and ten were slightly white in wing and tail. Leg color was yellow. I kept 2 cockerels out of ten; eight showed some white in tail and wings while two were solid buff. I got four pullets of solid buff and six others with only a little white in tails.

All these were large and typy with good feather. Comb size was still a bit large. Leg color was yellow at maturity with both sexes. I again, mated the (f3) pullets back to a pure Buff Leghorn male. The chicks from this mating were like pure Buff Leghorns in both sexes. Size, type and especially feather length were much improved. I also used the (f3) cockerels on pure Buff Leghorn hens with good results, but white off color "mealy" tails were noted in a few pullets. Head points were much better in both matings and only yellow legs appeared. I did a few other experimental matings along the way. One such was, I mated the second-generation smokey white cross pullet with gold neck and green legs back to a pure White Leghorn male. I got two chicks, both white with yellow legs. I raised these two, one was a beautiful White pullet with yellow legs that would pass for a pure White Leghorn. The other was a cockerel that was yellow legged, but a bit brassy or creamy white in color. These two birds were not used.

In another experimental mating, I bred together the f3 generation. I only produced four pullets; one was buff with pepper; three were buff with slight white in tail and wing. One pullet with slight white had dark green legs, the other three had yellow leg color. In 1986, with the good results I had crossing a Buff Leghorn male on White Leghorn females, I wondered if the opposite cross would work? I got another White Leghorn male of the same strain and put him with my Buff Leghorn females. I wanted to see if leg color behaved differently or not into the second generation, also color. I figured I could get around the silver gene by using the first generation cross pullets back on my pure Buff Leghorn males, Knowing the f 1 pullets could not transmit silver to their daughters. With this 1986 mating I got thirty chicks. At hatch time all were white or smokey blue and white with yellow leg color on both sexes. At maturity I had nine pullets and one cockerel. Again bluish females showed up, but very light blue, some white females had faint blue "barring", others had traces of buff in necks, others nearly white. Type was excellent. I saved one cockerel, as he was half buff with white tail, I had two other cockerels of similar color, while a dozen other cockerels were creamy white. Every one of the thirty had yellow legs. The pure White Leghorn male surprised me by producing three cockerels with buff (gold), proving that in addition to blue, barring, and silver, he also carried gold.

In 1987, I put these nine pullets with a pure Buff Leghorn male. I got out eighteen chicks. I got several colors and leg color combinations. (A) White females with buff neck and dark green legs, white males with yellowish legs. (B) Buffish males with yellow legs, buffish females with yellowish green legs (I got buffish females with dark green legs but no males of this combination). (C) I got bluish-buff females (buff necks and breasts) with dark green legs but no males of this color. Yellow leg color appeared sex-linked in this mating. In 1987,

I also used the cross cockerel that was half buff colored with white tail and Wing. He was mated to pure Buff Leghorn females. I got out ten chicks. I got some whitish chicks and some buffish chicks, some of each sex, some yellow legged, and some green legged in both sexes. No males were raised to maturity, but it was noted that a few young cockerels were even in shade, but a very pale whitish buff. The buff being well blended and nicely distributed. There were five pullets selected showing degrees of buff from very whitish to fair buff. Better blending of color tones were noted in this mating. Of the five pullets, two showed nice yellow leg color and three with greenish yellow to dark green leg color. This mating seemed to produce extra nice type, station and style. It seemed important to note two pullets with good yellow leg color from this mating, indicating some degree of sex linkage possibly!

These crosses with White Leghorns and Buff Leghorns proved to be very educational. I was able to get back the buff color and establish longer more profuse tail feathering, the two things I set out to do. As an extra bonus I got good size, station, and style like I was unable to get with the original pure Buff Leghorns. It is important to note that I did keep a pure mating of Buff Leghorns from year to year. This gave me a control group to compare type with, plus supplied me with pure young Buff Leghorn males that I needed to back cross pullets with. In case the crosses did not work out, I had the security of knowing I could always go back to the pure old original line of Buff Leghorns.

I feel that dominant white eventually blends and works out for a better buff color than does recessive white. Recessive white seems to carry extra red longer. I was told not to get upset about green leg color from the crosses as yellow would return after repeated backcrosses to pure buff males, this did happen! I tried to stay away from pepper and blue and tolerate white (which is no color). Pepper is black and black is a strong color pigment, blue tends to split into both black and white and so is best not used. Any striping in chicks, or black stripes in hackle or saddle, I stay away from. I think staying away from these color defects was helpful, especially with the numbers, you have plenty to cull and select from with crosses. I did note that you don't always get crossbred vigor in the first generation of crosses. In one mating I noted the f 1 pullets were not overly vigorous and I figured that they lacked immunity to my flocks germs or perhaps it was the gene combination that showed reduced immunity. The next generation from these pullets were much better in vigor. I have been told that when you backcross, the original blood again dominates in percentage. In this same thought, often times "type" is recessive as well as other traits and often does not show in a first cross. This might explain why old breeders often advised "Stay with a cross (or new blood) until the second or third generation to give the traits you wish to select a chance to surface".

If you raise numbers and spend the needed four to five years backcrossing to pure buff males, you can work in "recessive white" or "dominant white" to a strain of Buff Leghorns. The deficient information on detailed chick color patterns, and the sometimes-small numbers may reduce the value of these experiments in crossing for the genetic minded, with color and leg color. The

fact that different lines and strains behave differently may mean different results! However, these experiments will provide a guide and inspiration to anyone wishing to try crossing buff and dominant white.

THE BUFF WYANDOTTE

BY JOHN A. DAAB 1928

Buff is a most pleasing color. There are seven different standard breeds of the buff variety, which shows that buff is one of the most popular colors. In spite of its beauty, or because of it, the buff color is difficult to describe. The Standard says a "medium golden buff". This may be clear to some, but to the majority it is not. To describe buff by the use of words is utterly inadequate. Even an artist cannot, in my opinion, reproduce the true buff color, which we find on a live specimen.

Showing up the real buff color to best advantage, depends greatly on the quality of feathers of the bird in question. By way of comparison, let us consider the proposition of dyeing two pieces of different materials with the same color and kind of dye, in this instance, buff. One piece, being of satin has a nice rich, smooth, shiny appearance. While the other, being made of cotton shows a dull dead color. Likewise consider two Buff Wyandotte pullets, for example. The first one, with feathers of quality-broad, soft, and velvety, shows the satiny smooth color, as did the piece of satin. The other bird has feathers of inferior quality, being narrow, harsh and of rough appearance. We may compare this pullet to the piece of cotton. This bird is of the same shade of buff, but the inferior quality of the feathers lessens the beautiful soft tone of buff.

It is plain that we must not neglect the quality of feathers in our breeding pens and even in the show room, with feathers so narrow that if they were silver-laced or any laced variety, there would not be any space for the lace. I think we Buff breeders should avoid the narrow feathers as it gives a bird a rough appearance. I began breeding Buff Wyandottes twenty-five years ago, and in those days the buff showed considerable black in the tail and wings, and ticking in the neck. At that time our object was to get rid of the black and the ticking in the neck; we weren't so particular about the soft shade of buff. In mating up our pens, all we were looking for were specimens that showed the least black or white in flights and tail, and birds with good under color. We had an idea that all that was necessary was to eliminate the black and white. As time passed on, we learned that there were other requirements and other defects that were equally as serious as foreign color. We were still ignorant as to the real buff color. We didn't quite know the difference between buff, lemon, cinnamon, and straw color.

At this time (1908) I began to visit various poultry shows, which habit every poultry breeder should follow, as there he can gain much knowledge that will help him. While at the poultry shows, I did not devote my time entirely to the Buff Wyandotte aisle, but visited the White Wyandottes, from which we

derive the model Wyandotte. I also studied the buff varieties of other breeds, to gain a more definite idea of the much to be desired, genuine buff color. In recent years, the black and white problem is the least serious one. What we are striving for now is a soft, rich, golden buff color; not red, straw, lemon or cinnamon. True, we are trying to keep our flocks as free from black and white as possible. When I find a bird that is good in type, has a good buff color, a good under color, and is a good all around bird, I do not discard him because of a little black in tail or wings, but I mate him with females that are clear or nearly clear in these sections. Likewise if I have females that are good in color and type, but show too much pepper in tail, I mate them with males, which are clear, or nearly clear in tail. If a male bird is somewhat strong in color with deep under color, I'd mate him with females not so strong in under color. In order to keep up the strength in buff, we must have good under color, but we cannot expect every bird to have this quality. Sometimes we must sacrifice good under color to retain the level of surface color. If I have a pullet or hen that is good in type, with a soft level surface color of the much desired true buff, I surely would hold on to her and mate her with a male that is good in under color.

In mating up my pens, I like to have the male bird good in under color. If this is the case, I don't mind the females being weak in this section, providing they have good surface color. Of course, if the male is weak in under color, then the female should be strong to counter balance this need. As I stated before, one must not expect sound under color in every bird in the flock. However, I do think it vital to have enough good under color in the flock to furnish the proper pigmentation to counter balance the shortcomings of certain sections in the individual bird. Do not mate a very light bird with a very dark bird, though it is impossible to have them all the proper shade. The female may be a shade or two lighter or a shade darker than the male, but extremely light birds mated with extremely dark ones will lower the percent of buff throughout. Avoid as much as possible any contrast in different sections, try and have one even shade in neck, back, wingbows and tail.

NOTES ON DUTCH BUFF LEGHORN LARGE FOWL

MR. J. MEURS, Holland (personal letter 1987)

The ideal buff color is obtained by always mating the best-colored birds. Never mate birds that are too dark. Never breed with birds, which are red in tail. I breed with one young cock and five old hens, also eight young hens and the old cock. I never use birds with too much smut in the tail. I keep the best in color, the surface color and under color. I prefer to mate young cocks and old hens and I don't practice double mating. I know that in America there are good Buff Leghorns. Seven years ago I had a young cock from America with a very nice color but unfortunately rather small. I mated him with heavy hens.

Buff is a very difficult color to breed. The majority of the offspring are in color not correct. The color is at its best just before the first egg. Later on they

are paler and somewhat spotted in coloring. Older hens become pale but are all right to breed with.

HOW TO IDENTIFY TRUE BUFF COLOR

BY WAYNE URBANAVAGE 1988

Buff color has been described and redescribed by breeders and exhibitors for more than 90 years, and for what ever reason, we still argue about what color is truly buff. For years many people proclaimed buff to be the color of a gold ring. If you can find two rings of the same shade you should consider yourself lucky, for gold does not consist of an exact shade of color, nor is there one shade of buff. You can read your Standard every day for the rest of your life if you wish, but it does not describe buff to be an exact color or shade. "Orange-yellow", "not showing a reddish cast", "nor so pale as to appear lemon or light yellow", leaves a lot of room for interpretation of color and shade. The Standard does say that buff is a "medium shade" of orange-yellow, but who knows where the median lies? So, for the sake of another argument, you could put 5 or more buff birds on display, each one being of a different shade than the others, and all being competitively equal in color; as to the standard description.

So when is a buff bird buff? When it fits the description in the standard. What is the proper shade of buff? That's your choice. The Standard leaves plenty of room for personal preference. Why do birds of the same breed, raised by different breeders, have their own distinct look? Personal preference! Birds of a different look, but fitting the standard description, may be equally champions in the show hall.

When is an exact color or shade of buff important? In the BREEDING pen, but not in show. The differences come about through personal preferences, and there will always be room in the show halls for all birds fitting the Standard description. No matter which medium shade of orange-yellow you choose, it's BUFF.

POINTS FOR BUFF WYANDOTTE BREEDERS

BY ARTHUR G. DUSTON 1928

The Buff Wyandotte classes today, largely fed from those glorious Cochins, are not what they were when Mattison and Dutcher, Piser and Riddell, Burke and others; took strings to Boston and New York. One who has followed them appreciates the wonderful soft color. The unevenness of color and the intermediate shape has been practically overcome .As with all newer breeds, when I tried them, we got red in the wingbows, white wing tips, black in wings and tail. Every conceivable shape and color. Today the color demanded is a much softer, lighter color than some years ago. The standard calls for an even

rich shade of golden buff. It was said to be like the twenty dollar gold pieces of 1896 or 1897. As we never had a twenty dollar gold piece, we, like many others, had to guess at the right shade and so some contention was caused! At M.S.G. the style is set, so Judge Howell with his consistent selection year after year of what we would call a soft buff, set the style for all buff breeders throughout the land.

The beginner and breeder must distinguish between this soft buff, which is real buff with a golden hue, and lemon buff. The lemon colored breeder is a failure, lacking the strength necessary to reproduce itself. If persistently used, these birds breed miserable, washed out specimens. A male with some black in the tail may prove valuable to add strength and depth of coloring from time to time. However, as with the Brahma, extremes of color will produce some good birds, but always too many culls. Draw your lines as closely as possible. Select your female first, because she is a Wyandotte and looks the part: broad back, flat shoulders, deep body, full round broad breast, cushion full but showing none in profile, short well spread tail filling the cushion, long broad coverts, a pair of stout legs set in the center of the body, and no peaked heads nor too broad skulls. She should look a layer, with full eye, vigor and intelligence in every movement. Don't use a little undersized bird because she has color and try to overcome this with a big cockerel. Know what you'll get? Nothing for shape! Remember, the female gives you the size, and see that she is right. You should realize that you are making more and faster headway by breeding one, two, or three good females to a good male than a dozen ordinary or poor females. One gives you good breeders; the other gives you a bunch of culls.

To obtain good buffs, one must breed a buff with real life in it. As with Reds, who wants a bird with light or silvery under color? So in buffs, a rich, golden buff with top color on the male of a rich sheen. The neck, hackle and saddle, breast and fluff, should all be one shade, allowing for the natural luster of the male character plumage. His under color should be strong to enable him to transmit color to his young. You may expect it to show lighter at the base of the neck and tail. The richer and better carried down the buff is, the more valuable as a breeder he will be! A light buff is an indication of weakness. If there is anything more persistent in reproducing itself than shaftiness (the quill of the feather being lighter than the web), we do not know what it is. As in the Reds, it is distressing. Don't use a male with this objectionable feature in breast or any section if you can avoid it. The color of the breast controls and governs the color of your pullets. This tells you why you do not want a shafty breast. Mealiness is another thing. If you use a male showing this feature, you are on the way to positive white. Here is where your old friend, the trap nest comes in. Is your proposed breeding male from a good sound female?

This is absolutely necessary to know. If you have handled your stock right, he should be a bit better than his dam, which would indicate progress. You should make progress. You should make progress each year. Some years will not show as much as others, but all years should show a gain. Select your females with a rich toned correct neck color, with lustrous buff

hackle feathers. Note the long feathers on the side of the body towards the fluff, we want them well-webbed and good deep tone of color. The back plumage may be broken in color, faded and not up, but if these two sections mentioned are right, you have a breeder of worth. A standard female may be mated to a male one shade darker than standard, and produce you some fine cockerels, but discriminate closely as to what one shade means. Know that the female does not have any slate in her under color or ticking in the neck. Don't waste time with such. You cannot improve hens with dark necks and light bodies, provided their necks are stronger in color than the male's breast.

CROSSING BUFF WITH RECESSIVE WHITE

BY D. J. HONOUR 1988

In 1984 I bought some Japanese White Phoenix. These were descendents of imported stock, directly from Japan. These birds had single combs, whitish earlobes, yellow shanks and white plumage. They had long tails and long saddles; females were poor layers of tinted eggs. The feather quality was very narrow and the white color was a creamy-brassy white. They were small in size between one and one-half to two and one-half pounds. My plan was to cross these White Phoenix with my Buff Leghorns, to produce a new line of Buff Leghorns with more tail feathering. The White Phoenix hens were such poor layers, and the eggs of low fertility, that I got nothing from them. So I trimmed the saddle and tail of the White Phoenix males and put them in with a few Buff Leghorn pullets. I used one male for a day or two and then put the other male in for a day or two. I hatched out ten chicks in April of 1985; of these, three were striped like Brown Leghorns and the other seven were mostly buff with creamy white. The striped chicks (1 male-2 females) were black and reddish buff, the dark buff predominated with black mostly in the tail and wing; the leg color was yellowish green. These three striped chicks were culled at about six weeks. The seven buffish chicks were all pullets and at maturity were a reddish buff with white in tail and wings, white under color and legs of yellowish willow. I selected three pullets of the seven. These were slightly bigger than the White Phoenix, with a wider feather (still too narrow) and with abundant feather. The fact that all the chicks were colored in the first generation, proved the white to be recessive white (no silver or sex-linkage).

The three f 1 pullets were bred to a pure Buff Leghorn male and twelve chicks were hatched (three light red, one whitish yellow, four buff, and four striped). In the four striped chicks, two were dark striped-brown with black and white stripes on their backs, and two were lightly striped reddish-browns with no black but with white back stripes. These striped chicks were culled. The whitish buff chick died on the second day. The three red chicks and four buff chicks all looked alike at three weeks and some already showed some white in wings and tail. None showed pepper and leg color was yellow. The f2 pullets were a little better in color (being more buff), but still too red with white in wing

and tail and whitish under color. Size was a little bigger, and tail length still good. Egg color was nice and white and legs nice and yellow. About five pullets were selected. There were two cockerels raised to maturity which were buff but a very deep shade with red showing in wingbow and lesser sickles. The cockerels were mated to pure Buff Leghorn pullets. This mating resulted in twenty-four chicks, very few chicks were striped. The buff chicks showed some white in tail and wings in all but three that were fair buff. Those with the best color (least white) with better bone, were selected. The f2 pullets (sisters to the f2 cockerels) were bred back to a pure Buff Leghorn male. Both buff and striped resulted from a hatch of about thirty. I decided to raise the striped chicks until about two months (when I would need more room) just to observe the color. The striped chicks at three to four weeks looked like the Buttercup plumage pattern but, instead of the double spangle, the black markings are more of a crude pencil pattern. The striped chicks at eight weeks tended to have greenish leg color and slate under color in all parts of both sexes. The males are reddish in color of breast neck and saddle. Penciling is disappearing, only traces in back and wing surface (outside of wing). Black is heavy marked in tails and wing primaries and secondaries. Females are buff in head, breast and buff on wing butt; markings of crude penciling on wing bar and back with black in tail and wing primaries and secondaries.

In this same hatch some of the buff chicks later showed white in many of the same sections as the black penciled striped chicks. Some of the buff chicks had greenish leg color but most were yellow. Some buff birds showed black striping in the hackle at maturity. In 1987 seven of the f3 pullets were selected, all had yellow leg color and fair buff color. A pure Buff Leghorn male with a short body and high tail was selected to correct the low tail carriage, high shoulder and long wings, that were direct Phoenix traits the f3 pullets still had. A large number of chicks were raised and no striped chicks showed up in the f4 generation. The color and type were much improved. Body size was up. All birds with white in tail were culled as well any that did not carry a wide feather. Selection resulted in six really fine females and one cockerel. This line with Phoenix blood, I consider a success. I got the longer tails along with nice refined combs and shapely earlobes. I was able to get a good buff color, wide feather; good tail spread, and fine Leghorn type with good station and size. The striping problem I would guess came from the Phoenix, as the pattern of the Silver or Golden Phoenix could have been hidden under the recessive white. It is possible the Leghorn breed carries striping hidden in Buff, possibly from ancient Brown Leghorn blood. The green or willow leg color with the Phoenix cross was always a light greenish yellow and after the second backcross to Buff Leghorns, yellow leg color prevailed. The red and white plumage colors were very stubborn in yielding to buff. I would guess the Phoenix carried red coloring, as even the "white" was originally a "brassy or creamy white". Crossing recessive white with buff was a very interesting experiment!

NOTES ON CROSSING MY BUFF ROCK BANTAMS

ROBERT O. HAWES (personal letter 1985)

We are all aware that once we get past the White and Barred varieties, that all the remaining varieties need a certain amount of work to bring them to a comparable stage of perfection, as these more popular varieties. This is not to say that there are not some excellent examples of those other rare varieties, but the consistency of quality is not the same as with the Barred and White. I have produced a few rather nice Buff Rock bantams, but as a whole they are not very uniform as to size or color. Last fall I acquired a nice trio of White Rock bantams with the idea of making some judicious crosses with a view toward improving the type on the buffs. I used three different Buff males on the White females and have produced some interesting patterns. I expected to produce solid colored chicks, since the whites are closely related in their origin to the Barreds, and might be expected to carry both barring and the extension of color to produce an overall body color. I also expected to find some gold (buff) females and silver males since the Buff/Silver colors are sex-linked.

Both White Rock females did carry barring but they did NOT carry the extension factor, they actually carried Columbian. One female carried gold (buff) and one carried silver under the recessive white. The gene for white prevents all color from being produced, and one can not tell by looking at a white bird just what is underneath in terms of pattern of color. This one mating produced three different combinations of color and pattern. All crossbred females were gold (as expected) but with some black in the main tail feathers, hackle and primary coverts. The black is quite inconspicuous and combined with the rather nicer shade of Buff produced in these females makes them difficult to distinguish from the genuine article at a distance. Some females were on the red side and these were discarded, but I have 4 females that are surprisingly good in color and with quite nice type.

The males were of two colors. Silver Barred Columbian and Buff Barred Columbian or Creme Barreds. The Silver Barred Columbian pattern is the pattern of the Delaware and I am donating one of these males to a Delaware breeder in our state (Maine) to put some vigor in the breed. I will mate the crossbred buff (black tipped) daughters to a pure Buff Rock bantam male. I expect that it will take 2 or 3 generations to completely remove the black. I have had no problem with leg color, all are yellow. I plan to try and get the type on my Buff Rock bantams and then work slowly on the buff color. The shade of buff is the big question. I think once you remove the black from the tail and hackle, the rest is mating to make the perfect shade of buff. Buff is a very challenging color to perfect. If you select birds to eliminate the peppering that sometimes occurs in the main tail feathers and the primaries one can end up with white patches in the secondaries and pale breast. Keeping a rich shade of Buff is a constant battle.

MATING BUFF LEGHORNS

BY A C SMITH

(From the magazine "Poultry Herald" 1919)

Buff is a color that is at best a trifle "flukey" in reproducing itself. In past years many shades have had their day of popular favor, but for some years breeders have been practically a unit for what is now generally called "golden buff. The popular conception of the term is a fairly strong shade of buff, which is emphasized, in the standard description by the term "rich". An even shade in all sections is also called for and produced reasonably well. The popularity of this particular shade is undoubtedly due to the fact that lighter shades were found hard to produce and even more to the fact that it was found they would not reproduce. The popular shade at the present makes show birds and breeders one and the same. The ideal mating is one in which both male and females are of standard color. If any variance is to be allowed or practiced, that variance should lean to the stronger color in one sex.

Too great a stress should not be put upon extremely strong under color, but shafts that are buff to the skin can ordinarily be produced with and even golden shade of buff. The first and best efforts should be exerted in producing and even golden shade and clean wings and tail; that is both these sections should be free from white or black. Both these colors are very objectionable to breeders, but they give some preference to black over white, as better and more even buff color accompanies it. Buff accompanied with white usually gives a mealy appearance, which does not make a bird attractive. The over-rich shade suggests red, seen at times in the shoulders and backs of males that are much too dark. Such males, though commonly placed in our exhibitions 15 or 20 years ago, have no place there or elsewhere at the present time. Birds that are a little deeper than standard color are however often used in the breeding pen when the other sex is of standard shade or perhaps a little lighter. Many breeders believe that a mating of standard shade grows lighter, producing white after a few matings. On that principle, birds as described above, are often employed to hold the real rich golden buff color.

BUFF COLOR

BY ANGUS JOHNSON 1928

In the first place let me say a few words in regard to color. We must all admit that buff is a shade that is soft, and has a soothing effect. It is recognized as such by all manufacturers of paints and dyes. Go and ask your paint dealer to show you a color card; notice the buff shade. Go into your Dry Goods store, ask the clerk to show you a buff shade of silk; see what they throw down to you. Now surely we must admit that such extensive firms as paint works and dye works, who have secured the services of experts regardless of cost in the mixing

and blending of colors, surely they know something of what real buff color is . .Now do not run away with the impression that I am a “lemon buff” enthusiast, far from that idea. Lemon simply isn’t buff at all, neither is brown, cinnamon, or brick shade. We see too much of this so called “hot color” at many of our shows. I claim it is impossible, and have yet failed to see anything of that soft soothing effect in these high colored shades.

Oh, yes, I know you will say (and many have already asked me) that if you continue to breed this soft shade, as I have described, your stock will eventually fade out to a creamy shade, with white cropping up in different sections. This I strongly affirm is not so. With the breeder who knows his birds, and understands mating as he should, I maintain you will find less defects from mealiness, lacing and foreign color. Now as to mating, I know that most writers, judges, and breeders also consider surface color first and under color a second consideration in the show room. While I am not disputing this claim, at present I am discussing mating, knowing that mating is the foundation of the coming winners.

In the first place select your male, see that he is just as even in color from head to tail as possible. Be sure his breast and fluff are as near as possible the same shade as hackle, wingbow, and saddle (lacking the sheen). Now comes the place for under color in a male of a soft buff color. See that it is rich right to the skin, yes if stronger than the surface, all the better. Yes, let me emphasize again, dig down into the base of the hackle and the root of the tail, and be sure that all is sound buff. Note the flights, that quills are buff also. Under no condition breed from a male with surface color as I have described, unless his under color comes up to standard as I have described.

The same rule applies to females as far as much as possible. Never use a dark surface colored female to mate with a real buff male, or the results will be much unevenness in color. It was not so easy twenty years ago to find specimens as I have tried to describe for your breeding pens. Thanks to some of our good old standbys, that have stayed right with the game, today there are several good reliable breeders who have spent the best years of their life in perfecting Buff Wyandottes as they stand today in all their glory. Who is there that dare say we have not one of the most beautiful as well as most useful of fowls in existence?

CORRECT BUFF COLOR

BY A I. GEIS 1928

True buff color is the minted-gold hue in every section on both sexes, glinting in soft luster in the males, and resting the eye in a subdued radiance on the female. Always the same beautiful color and shade. Shape must be considered with color and specimens with the least defects in the combination of shape and color are the winners. The Standard advice, that shape makes the breed and color the variety is not an inflexible, cast-iron rule of a 50-50 basis; but simply a working thought from which to form a proper judgment in

ascertaining the least defects, which prove the superior specimen. I think I have made as many color experiments as anyone who has ever had Buff Wyandottes. For some years I had the means, the facilities and the inclination to do it. I found that if you took birds of an even similar shade of surface color, whether they were light colored buffs or medium colored buffs or dark colored buffs and all birds rich in under color, and mated these kinds of birds together generation after generation, that while under color was maintained, the even surface color was lost. I made pair matings after pair matings of vivid under color birds and in a few generations the surface color would always be lost.

The English who are the best color breeders in the world realize the even buff color could not be held if too much under color was insisted upon. If buff was allowed to have black in their plumage similar to R. I. Reds, buff under color proportionately as rich as that in R. I. Reds would be readily obtained. The early R.I. Red breeders were very wise when they standardized with black in the plumage. Mr. Baerman for years attempted to breed what he called American Reds, a bird similar to the R. I. Red without black and with rich red surface color and under color as good as the R. I. Reds. He gave it up because he could not get the under color and keep the even surface color.

Some of our breeders are still going to extremes regarding under color. To me the crowning feature of a Buff Wyandotte is live, velvety, real true buff color. Many flocks of buffs lack this velvety feather quality and structure of feathers. We have too many birds otherwise good that have rough surface color, especially females. It is my feelings that these rough feathered birds are not show birds at all. This "feather quality" is just as much a matter of breeding it into the strain as shape, head points, or any other desired feature. It is one thing to write about good Buff Wyandottes and quite another to actually produce them. There is no royal shortcut to success. Above all, do not breed from birds with radical defects no matter how good otherwise. Insist on a high standard of vigor, health and egg production. One year I discarded my best pullet because she laid a very poorly shaped egg, although this pullet was the best female that I ever breed up to that time. You must study and work. Study your individual birds. Keep careful records. Make small matings, then cull, and cull, and cull again. We ought to look upon rigid culling and selection as being strictly for the benefit of those few that remain.

BUFF WYANDOTTES

BY: D.D. Colgiazier 1928

In mating your pens care should be exercised and females mated to males as nearly matched in color as is possible, that an even uniform shade of buff is produced. One of our large breeders in writing on this subject said, "match the female to the shade of the breast color of the male." In our experience of 29 years of breeding Buff Wyandottes, we find that the best results may be attained by mating golden buff that blend in unison, as like begets like. Do not sacrifice

surface color for under color; however endeavor to blend the two. If you are in need of new blood there are three routes by which you may go. Buy a male bird, or if you have good males get one or more good females; you can also go the egg route, but be assured that you are dealing with a reputable breeder.

Permit us to suggest that you never use birds in your flock, no matter if it has many good points, if it has enamel in the ear lobes, stubs or down on legs or toes, willow or green legs, large course beefy combs, split or open wings or crooked tails. Cull all disqualified birds out of the flock.

THE “BARGAIN VALUE” OF GOOD BREEDING BIRDS

BY DANNE J. HONOUR 1987

Breeding males should be better than the females and contribute to higher quality offspring. The simple process of introducing a few “highly bred” new blood males into the flock occasionally will keep the quality of birds at the top in egg production and abreast with improvements. What does it cost to establish and perfect a strain of fowls that will produce, year after year, birds of the highest standard type? What does it cost to keep this strain up and to improve it year after year? Figure in the cost of feed, gas, advertising, labor, phone calls, utility costs, housing, cost of culls, lower grades, mating failures, holding over older valued birds, mailing costs, shipping costs, showing costs, etc. You soon realize the price of a good bird cannot be anything near the price of common meat market fowl.

Have you ever realized what real first class specimens in any variety really represents, in the way of work, study, skill, and knowledge of breeding and mating problems? What the actual cost and value is in top individual birds? When buying a bird that has a long line of outstanding ancestors, you are investing in a bird of value to you as a bird that will improve your flock. The money in a top breeding bird can easily be worth many times over the cost to the buyer, in the increased breeding worth and showing worth of the offspring produced in the buyers flock.

Whenever possible buy the best quality you can afford, quality is a hard item to come by and the quantity of top caliber stock is very limited at best. Small breeders rarely have more than a few such to spare, larger breeders only slightly more. These birds are also the most valuable to the owner too. It may be worth the breeders while to refuse to sell his better grade; this too limits supply and increases the price. It sometimes happens that it is just such a sale of top stock that allows one breeder to move ahead of his competitor. How many times does a breeder get beat by stock of his own breeding, in the hands of a customer?

The real top-notch stock is always limited to a few breeders flocks throughout the entire country, “going to headquarters” often proves to be the only place to find the topnotchers for breeding. Ask yourself can you afford to

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

sell your best at the low prices some purchasers think they ought to buy them for? If the price of a good bird seems high, don't complain; just think for a minute what it actually cost this breeder to perfect to this stage, this bird? You just very well might be getting one of the really "honest to goodness" VALUES to be had today. Buyers, just remember the breeder has had to learn his skill, a skill that requires years of practical application to gain a working knowledge of. That should be worth something to both parties too.

BUFF UNDER COLOR

BY FRANK F. CONWAY 1928

It has been my experience with Buff Orpingtons, that under color is a breeders proposition, that is, some strains can get the nice golden buff surface color over the back, saddle and breast and fluff by using the rather lighter shade of buff under color. Whilst others are successful in obtaining good surface color breeding from a richer under color. There are two kinds of under color, firstly, that soft shade of rich under color and secondly that dark under color that is not exactly buff, but rather dull muddy under color of the R. I. Red lighter shade. The latter in my experience will only produce two shades of buff on surface color, that is, that the center of the feather along the shaft will be darker than the outer edges. Then again one may expect to have females with considerable lacing

Personally I like a medium soft buff under color on the female, and a shade darker under color in males. We Buff Orpington breeders and judges do not lay too much stress on clean tailed birds in our exhibition birds, as do the Wyandotte and Leghorn men. It has been our experience to prevent our buffs being too light in surface color that is verging on lemon. We have maintained a certain amount of dark coloring matter in the main tail feathers. The coloring is not a distinct black, yet not solid buff. We like to have our males in the breeding yard of sound buff in the main tail feathers, but our females are not quite so solid buff in the tails. Through this procedure, we are able to hold our "golden buff" color and avoid to a certain degree the white that appears at the base of the tail and sickles, and white in the flight feathers. It can be taken for granted, that if a male or female is weak in under color over the kidneys and under the neck hackles, the offspring will come with white in flights and carry some defects as mentioned. A good hackle on a female is most important when one expects good males. Of which the female hackle must match that of the male, and the breast and thigh feathers and those feathers directly behind the tail of both male and female must match.

NOTES ON THE CREAM GENE AND BUFF

FRED P. JEFFREY (personal letter 1986)

I must tell you of my experiment with Black-tailed Peach Old English Game bantams. This is the cream gene (ig), so the variety could just as well be called Black-tailed Cream Old English. In any case it came from extracted crosses of Black O.E. with B. T. Buff O.E. It has one very important characteristic in that the MALES are free of red in the sex feathers. One might hypothesize that buff breeds must carry cream (ig) and then there must be added another gene (do not know of such a gene by symbol), which changes to rich buff. This is just theory.

Cream is an interesting gene, which, in my opinion, is basic to the buff color. Buffs are basically cream with the addition of some, gene or genes to darken the cream to buff. The truly significant feature of cream (ig ig) is that it is the gene, which eliminates (or reduces) the red from the buff male sex feathers. I think one could select B. T. Buffs forever and never get a buff free of black in wing and tail. There has to be a gene to eliminate this black and I do not think it has been described. The only way to find this gene and name it would be to cross pure Buff X pure B. T. Buff and run both second generations and back crosses to each parental type. There could well be some blending which would make classification difficult in all cases, but I think there has to be such a gene.

I am again breeding B. T. Buff O. E., a very beautiful variety. I got off the track a couple of years ago by emphasizing "Black in wings". Co Co males have beautiful black in wing but really are Ginger Reds. It is very difficult to get good black in the wing of true breeding B. T. Buffs (Co Co).

I got some B. T. Peach from my B. T. Buff mating, so that is proof that the cream gene is recessive. I also find that classification is not always what I would like, in that a darker cream might be mistaken for a light buff. It is easy to get defects in color in the B. T. Peach, in that some birds there is a weakness of white shafts and some white in surface color because the under color is white. I am going to try to make a B. B. Red with cream instead of red.

ORPINGTON BUFF COLOR TIPS AND OTHER TIPS

BY J. RALPH BRAZELTON 1985

The ideal buff color has never been achieved, if history is to be believed. A long time breeder can explain how he breeds for color, but it won't have the same affect in other flocks. Judges have a good bit of trouble agreeing on what a good buff color is. Then through the years, styles change. At one point the deeper, more reddish buff was considered desirable. Later, the faded lemon color was the style. Through the years there have been those breeders who took a middle of the road view and espoused neither the dark nor the light buff.

One needs to consider also that what Grandpa considered a typical specimen and the ultimate in his day, is not the way we view exhibition type and color today. We like to think the many generations of breeding for improvement have done just that. The gene pool of each variety is so varied that it is difficult to imagine we've "done it all ourselves" when we get the nod from the judge.

Again, we can justify our pride if we really have labored toward a goal with some success

There is a line of thinking that assumes that buff color may be enhanced by certain feed and management practices. Yellow corn in the feed is supposed to enhance buff color. Iron rich soils or the feeding of it is supposed to help. Sun and heat have been excuses for variations in color results. Confinement is another tool used by exhibitors. After searching the world for a perfect buff bird, you will probably discover, as Sir Lancelot, that the prize was much nearer home than you thought. There are so many variables in color-breeding that even breeders who have worked with buff color for a lifetime, say they must raise dozens of birds in order to have one that is a candidate for champion.

This dissertation should not be taken as to discourage anyone from breeding for buff color, rather the opposite. Many beginners in breeding for buff in many breeds will despair, because they have been unsuccessful in attaining that buff that their mentor has advised. Beauty is still in the eye of the beholder... SO DON'T GIVE UP!

General tips

Nowhere is sanitation as important as it is in your incubator. You may notice if your incubator was not sterilized between each hatch, that the first hatch seems to produce the best chicks. Subsequent hatches, if the incubator is not sterilized, will show the effects of pathogen buildup. Small incubators, cleaned of all visible contaminants, can be fumigated with laundry bleach. Use it full strength in a small dish inside the chamber. The heat will cause the gas to be dispelled throughout the incubator. You may leave it in the incubator for several hours while you regulate the thermostat. Let it air for a time after you remove the dish. Eggs can be fumigated after being in the incubator for several days, by using a solution of bleach (one teaspoon) to water (one quart). Fill a small dish, leave it in the incubator for half an hour, and then remove it.

Low fertility reports have reached me. My personal belief is that our commercial mashes today do not contain enough "ANIMAL" proteins. Chickens running at large consume a surprising number of earthworms and insects. Confined, they miss their natural food. Vegetable proteins make a poor substitute. I was raised on a dairy farm and our flock received an abundance of skim milk, we had no fertility problems. With the profuse feathering of the Orpington, clipping or pulling the feathers surrounding the vent in both sexes often aids fertilization. The bulk of Orpington breeders are small in number and unless owners frequently add new blood, inbreeding can affect fertility also. New blood can prove hazardous unless one knows the history of the source.

We add a wet mash at noon to which we add cod liver oil or wheat germ oil. It helps. For a number of years we kept our Orpington flocks large. In that way we could avoid too close inbreeding and still retain the valuable characteristics for which we had selected. We kept separate matings of Clevenger, Conway, Davidson, and Bower lines, with the occasional female from one line added to a mating of another. We have abandoned the separate

bloodlines and have merged them into matings of 6 hens for a cockerel and 4 hens for an older male. We do not try to make a “best” mating. Rather we scatter our choicest females among the various pens so that each male has an opportunity to produce top offspring. Thus we can share with our customers our best.

NOTES ON BUFF COLOR CROSSING

PAUL F. KROLL (personal letter from 1985)

I heard Charlie Burmaster say that Arthur Schilling liked “lemon buff” and once showed an exhibitor his gold wedding ring and said, “there, that’s buff!” I can’t agree wholeheartedly with that analogy either. A case full of wedding rings at the jewelry store reflects an entire spectrum of gold tones! Here we go again! I learned from listening to lots of the “old-timers” that leg color is one of the first things to go awry in an outcross. Willow legs is not all that uncommon in any outcross, but especially prevalent in anything to do with Buff. This I picked up from discussions with Alex Duffy and Marcus Davidson as told to me by my late, great friend, Charlie Burmaster. You are correct in discarding all the males from the first cross, as the dominant silver gene will prevail, no matter what. I remember W. Burt Gaude telling me this from his experience making the Buff Leghorn bantams. I inherited large Buff Rocks from Charlie Burmaster when he passed away in 1977. I bred them until 1983. When I got the flocks, I got 3 hens and 18 young. I culled the young and bred the best cockerel to the hens and 2 other cockerels to 7 pullets in a flock mating. I remember Charlie telling me that Maurice Wallace and John Kriner had told him that a brother-sister mating was possible—only once. There was a brother-sister mating in their somewhere. I got good results and with feeding lots of whole oats for bone building, I got size up and type was not bad. Still, when I showed the Buffs against Whites or Barreds; the size was not really comparable. I was dissatisfied and wrote to John Kriner for his recommendations. He recommended that I breed a good-colored Buff cockerel (or cock bird) to a White Rock hen.

I procured the White Rock hen in 1982 and bred her to an excellent Buff cock bird (stud mating). The cross pullets came all solid buff, with varying degrees of black peppering in the tails. One pullet had an almost solid black tail with slight black ticking in her hackle. Wings were solid buff, but the quills of the primaries and secondaries were white nearly all the way out to the tips. Under color was quite buff, except for the hackles and breast areas. Fluff was solid buff and there the quills were. I remember Wilson Chadderon saying “The use of pepper in the tail of females helps keep the buff pure, especially under color”. One pullet was nearly the color of a Quail Belgium, quite dark, reminiscent of Black-breasted Red female color without the stippling and she had a lustrous buff hackle. Her legs were willow-colored. The pullets were yellowed legged except 2, which eventually showed willow-colored shanks.

Their hock joints and feet were quite yellow, but the shanks themselves were willow. The cockerels came in every color of the rainbow. I expected this, as John Kriner had warned me. Their overall predominant coloring was that of buff barring: buff and white in defined pattern. Superimposed over this was an almost Columbian pattern of various degrees of barring (black and white). The hackles, saddle and wing flights showed the black and white pattern while the rest of the bird was buff barred. The main tail feathers in all the cockerels were solid black. As you would expect with the hybrid vigor, the feathering was super-wide. I was impressed favorably with the progeny of this cross. The size was enormous and the type was wonderful. I know that wide feathering wouldn't last beyond a few generations, but it would remain wider than the original Buffs I had started with. Unfortunately, my results are inconclusive, since I gave up my flock that same year. I think the importance for us in the long run is to realize that each and every cross is an individual attempt or experiment. No two are exactly alike. It was suggested to me that I continue to use (pure) Buff males on the offspring of the crosses. I believe this to be the way to go. Perhaps a breeder should keep the best of the females around to go back to, should the speeding locomotive jump the track somewhere. This was the excellent suggestion of "Red" Gaude. He insisted on keeping lots of surplus birds around, because "you never know when you have to go back to pick up a few pieces.

I planned to breed the first pullets back to their father. I know this was the plan used by John Kriner when he mated Buff Brahmas to Light Brahmas. I was cautioned against using a white male on buff females by several of the men I've quoted as having given me advice. You see, it is the belief of these fellows that the male is mostly responsible for the color and the female for the type. The female is also accused of determining most of the comb characteristics; of course no hard fast rules can actually be depended upon with any real degree of accuracy! It is here that I believe the commodity called "breeder instinct" comes into play.

DEVELOPMENT OF BUFF COLOR

BY STUART A. HOWLAND 1928

I bought my first trio of Buff Wyandottes 30 years ago from the late L. C. Piser of Shushan, New York. If I remember correctly the cockerel was of three different shades, with a little black in flights and tail feathers, but after a few years I bred out the black. It is a pleasure to notice the wonderful improvement from year to year. Now we have them equal in type to the whites. If every breeder of buffs would cull, cull, and not put a breeding pen together (not even if they are perfect in color) unless they have a broad saddle and well spread tail, without which they are not Wyandottes. Sometimes we get "daffy" on comb, color, etc., forgetting TYPE. We must have type, after that, color, etc. This continual strife for perfection is what keeps the Buff Fever burning!

FOR ALL BUFF FOWLS

BY T. F. MCGREW 1928

For all buff fowls, the surface color must be one even shade of rich golden buff. Different shades in different sections is a bad defect. One even shade of golden buff throughout is proper, all other shades very improper. The lemon shade of buff was shown a preference at the Palace New York show of 1911. This same shade was followed for placing awards on buff fowls of all breeds until the proper color became a thing of the past. We claim that buff popularity has been driven out by the judges who select lemon in place of buff for color. This has been done in the face of the wording of the Standard which reads: Buff—a medium shade of orange color having a rich golden cast; a color term used to describe the plumage of all standard buff breeds of poultry, that is not so intense as to contain a reddish cast or so pale as to appear brassy or light yellow”. There has never been a show in this country where the daylight was as good as it was at the Sesqui show in Philadelphia. While there I was asked, what has become of the buff fowls? The women and I went to look at the buffs and she remarked, these are not buff, they are pale yellow. She said she purchased some Orpingtons of that shade 5 years ago and within 3 years the plumage color of their offspring was almost cream. The world is full of fowls of a pale buff or lemon color throughout. At the Sesqui show there was only one fowl that had true buff color, and not to exceed three at New York outside of the Buff Leghorns.

No one can even think of favoring the dark or Rufus red for buff. This would be more objectionable than can be the too pale color. No one can hope to succeed in the fancy who cannot sell the stock he grows. To have products sell well, they must be pleasing to the public. The general public as we find them in the show room, are partial to buff fowls. Mr. Robinson has called attention to the fact that the shade of color has been more improved in Buff Leghorns than in any other buff fowls. He has made this claim continually for 8 years. Buff Leghorns lay well, eggs average well, and they are larger than the small exhibition White Leghorns. If this can be in Buff Leghorns, it can be in all buff fowls. Why not have it so?

NOTES ON S.C. BUFF LEGHORN BANTAMS

W. B. (BURT) GAUDE, 1984

I started my own strain of S. C. Buff Leghorn bantams over 25 years ago. I found in Kentucky, a real good buff colored bantam male, great type but had pink legs and a rose comb. I crossed him on a small buff hen (origin unknown). I raised several rose combs for two years, after that I raised all single combs. Last year I started breeding in a female I got from Texas, I am still using her in a stud

mating this year. I have some great chicks out of her. We need more Buff Leghorn bantam breeders if they are ever to become popular at the shows. Arthur Schilling used to stress balance and underline, which is something many of our modern judges never heard about. I had the good fortune of knowing Arthur real well when I lived in New York State and I learned a lot about Leghorns from him.

Now, about using high tailed females to help the tails on your males; by all means! Be careful with outside blood, you sometimes sacrifice too many good points to accomplish what you set out to do. This year is the first effort I have made to breed in any outside blood, but most breeders that have Buff Leghorn bantams, either directly or indirectly got their stock from me. In buff feathers I like good width, and I especially like a good buff quill as it is hard to get and also good under color. With 8 tail feathers; I have had 3 in the past 10 years. I always bred them but nothing happened. Several years ago I read an item by an old breeder. He did a lot of breeding of 8 tail-feathered females but he admitted, he ended up with no tangible results. My advice is not to worry about 8 tail feathers, they are nice if you get them but there are many other things far more important. I always eliminate any birds with off colored eyes, especially light or gray. A real gray eye can be an indicator of disease.

Marcus Davidson always had a pale, light lemon buff in his Standard Buff Leghorns. The males were especially light. I know of many of Davidson's Buff Leghorn customers that could never breed anything from his light colored birds. In his customer's hands they bred even lighter in shade and quickly they would show white in sections. Davidson always feed a lot of buttermilk, but I cannot believe that would have helped him retain buff color. George Rex and my father W. H. Gaude always liked the darker rich golden buff. My father died in 1931 at age 51. There are very few good buff breeders today and no really good judges of buff. Judges pick the lemon buff for some reason and this is wrong. I had Buff Rock bantams for a time in the late 1950's and 1960's; they were some my uncle originated. I like to use a rich dark buff in my males and I try to match the male's breast with the females back color. I want the male about 2 shades darker than I want in the cockerel offspring. I prefer to breed from a rich shade of buff, in fact I have to, as many of my young males will run a shade lighter. My females often have too light a shade of color and I select for rich color and quill color, to offset this. My Buff Leghorn bantams are a bit prone toward white in the wings and I get lots of it when I mate up the lemon shade, so I stay away from the lemon shade of buff.

In relation to buff edging (a lustrous dark buff lace on a lighter dull buff ground), very few people ever notice it. With lacing, it seems to come with better coloring. I don't think you have much to worry about, as it is a very minor thing. However, if you are trying to reduce it; try selecting those females that show it the least or even lack it, and do not breed from those showing it the most. Mate up to a male not showing any trace of lace in his breast color. If you have nice type, etc.; keep working with the strain. I feed growing mash for 8 weeks, and then the chicks are fed layer mash and oats, sometimes a bit of dog

food. I find you must hatch late to keep size down in the Buff Leghorn bantam.

A FEW NOTES ON BREEDING BUFF

BY W. R . URBANAVAGE 1988

Breeders have emphasized for years that buff is a variety that does not breed true. When bred from year to year it tends to fade away to a dull lemon color. There are many mistakes to make when mating up the buff variety, more than any of us care to mention. Probably the biggest mistake we make is to cull out a bird with good type and breed characteristics for the sake of breeding good color. Black, blue, white, lacing, barring and all other color defects can be bred out of this variety, and so can type! Buff and all other varieties are always more enjoyable to breed when you don't have to worry as much about type. When trying to hold onto the true lustrous buff color there are tricks you can use to reproduce this variety. Some breeders claim the use of black or pepper in the main tail feathers may help to hold buff color. When using pepper to darken the color you should always counter balance it by using a mate who is clean of black throughout the entire body. My favorite way to enhance or improve surface and under color is to use a male that carries some red in the under color of the saddle area, while being of sound buff in all other areas. This trait seems to enrich under color and improve surface color at the same time. I do allow for a red feather or two in the saddle, but never a black one.

Everyone seems to complain about buff pullets with lacing, but as much as this undesired trait has no place in shows, these pullets can be used to reproduce luster and depth of color when bred to clean males. Although this will call for double mating, this is one of the easier ways to hold color in males. If you truly want to enjoy breeding the buff variety, then never forsake type for color. Do not be afraid to experiment with breeders, not all birds breed true, and you could be surprised at what you might learn in the process.

LEGHORN HEADS

BY D. J. HONOUR (1987)

Male combs must have fiber and firmness enough to not be flabby and fall over. When the bird is vigorous, the comb is of bright color, lots of activity helps the blood flow and produces healthy comb color. The five-point comb with a raised off the neck blade seems to be the best for symmetrical balance on Leghorns. The comb and blade should be firm but not too thick as to be beefy, and in texture a rather fine surface is better than too coarse. Coarse combs give a too rugged, crude, and mean appearance. The points are to be rounded, the first point is the smallest, and the third point the tallest. The old rule of measure of head was: from the eye up to the third comb point, was also the right length for the wattles; and the earlobe is 1/2 the length of the wattles. The blade should not

be too beefy and should terminate square, not fishtailed in blade. The blade should stand up off the head level and not follow the neck, it should not shoot upward higher than the points either.

Combs should be free of folds, creases, twists, bends, wrinkles, and thumb marks. This is easily stated, but rarely does one see a truly elegant fine grained, nicely outlined comb on even the best show birds. Eyes, bright and expressive. Eye color and shape lend much to beauty and also indicate good health. A large round red bay eye with good shaped pupil and iris, and slightly bulging from the socket is to be desired. The beak should be properly curved; the right head width and bone structure helps here. Combs and first points that protrude too far forward over the nostrils, makes wrinkles and folds. Wattles that are too large or coarse may wrinkle up around the lower beak and face. Wattles can be too long, some turn inside out near the bottom, some have creases near the bottom and some that are too long, are also loose and shapeless. The wattle attachment tissue, smaller size, and fine texture; have a great deal to do with perfection in wattles. The earlobe should have the proper shape and size, being wide and not too long. In males the small, wide, shapely earlobes are best and generally it is gained by very small rounded lobes on the dam. Females with nice big lobes often look good but produce males that have too large an earlobe that hangs down too long and lacks shape. There is a great deal of truth in double-mating combs.

For the most part so far, has pertained to male combs in Leghorns. In the female, the comb is to have the first point standing erect, the rest of the points and blade gradually falling to only one side. The general size and shape of the points and blade should correspond to the male outline except proportionately smaller and falling over as just stated. Small combed females or erect combed females are useful as male producers in head points. Double points are to be avoided on both sexes, as well as too many points or too few, especially too many points.

Leghorn breeders should be aware of the Minorca comb, the Minorca comb has one extra point, six all totaled, it is much larger, and in the female it has the double loop fold in the front. The Minorca is prone to have a coarse texture and too much overhang above the beak in males due to the double fold required in the female. Both sexes are prone to deep thumb marks. The small comb has many advantages for the exhibition Leghorn breeder. It reduces what is there that can be defective, and the refinement brings quality of texture and neatness of appearance. It also does much against protection of cold from frostbite damage.

The Leghorn is a bird of curves in every section. Let's not forget the pose, the length of neck, the eye, the skull, the comb, the wattles, the lobe, the beak; all sections should have the graceful curved lines.

MY BUFF LEGHORN BREEDING PENS

BY D. J. HONOUR (1987)

My policy is to have vigor and egg production first. I like to use well-matured pullets and young hens, under two years old. I know some have good luck with old females, but I find you have to set hatching eggs late in the spring. Old females are not good layers and the eggshell quality and low fertility of their eggs are not up to par. I like to use young males, as this too, helps early hatching, but I have used old males four and five years with good results in many cases. I doubt if longevity can be bred up to any big extent and be worth all the extra effort and problems of advanced age breeding stock.

I like to see improvements in type etc., in sons over their sires and improvements in daughters over their dams. Sometimes a mating does not work and I will try again to get results from a different mated combination, hence the use of some older breeders. Another case would be using a sire on his daughters or granddaughters hoping some trait sought will resurface or be strengthened. Perhaps the single most important thing in improvement is selection. The stricter the selection the more likely results will come about along in the desired areas. Selection works best when the traits are narrowed down to only a few or even one at a time. Another year, other traits can be strengthened, after results in the former selected traits are achieved. There are cases where extreme matings may work best. Let's say a strain has low tails, a very high, even squirrel-tailed male might do more good to correct this fault than a good tail angled show bird. I like good vigor and egg production, as it helps to get out large numbers of chicks from each mating. Then selection can have a chance to work and you are assured many variations and degrees in many trait qualities. The breeder has to know when to outcross, when to inbreed, if to line breed, and if to crossbreed. Many breeders make use of all these over a period of years with the same variety. Each method has its purposes. Crossbreeding is often used as a last resort; close inbreeding has very limited uses. A combination of outcrossing followed by linebreeding and continued in cycle again, seems to work well for many breeders.

Size, length, station, and feather, are all very important. Size differences can often be seen in the same age group of young. It is wise to weed out the smallest every time the group is culled. Weight and shank size are good gauges to use here. Length of body is better gauged at older ages and by handling the bird's keel and back, also depth of body can be checked by placing your hand down from the shoulder to the breastbone and hips to bottom of the keel. Station is important to the type. The long legged male and female may appear awkward as cockerels and pullets, but as long as these young maturing birds are not narrow in body or knock-kneed, select the long legged kind, you will like the style in the cocks and hens. Nothing looks worse than short-legged "squatty" Leghorns. The length and width of feather are very important to type. It is the finishing touch. Often well-matured cockerels and pullets will give good indications as to feather, but generally young cocks and young hens in condition, are at their natural peaks as to feather quality. With advanced age, often poor moulting, and poorer health, feather quality is found to be greatly less than as

young. A small percent of birds may always retain good feather at all ages. Feather length in the different sections are perhaps difficult to establish, but can be fixed in time and be made a strong strain trait. Each strain varies; this in itself proves the point. Width of feather is to be desired over narrow stringy feathers.

I like to go with type first as a breeding requirement. Size, length, depth, station, good keels, wide heads, and profuse wide feathering; all figure into my type matings, along with many other minor things. In the female I like size, but. I find large fat females to be poor breeders. I like good eye color in both sexes. I seldom use serious defects and never disqualifications. In both sexes, comb, wattle and earlobe refinement is helpful in producing show quality head points. I find heads a problem, as it is difficult to produce type and color and at the same time produce superior heads. From a breeding standpoint I go with type and color before I get too strict with head points. The comb, earlobe, and wattle have numerous defects; some breeders reduce the size of each as a means of reducing the degree of these defects. I have seen strains where the breeder concentrated on head points, usually in just one sex. The results, nice show heads that win, however type and feather are generally only average. The worst part is these average birds with good heads win over birds of better type and feather, which according to the "standard" should not happen based on the allotted points given to each section.

In the Male I like good color. I pick some buff males for evenness of shade; these are often a bit light in shade. I keep a few males with rich color in quills, and under color, these are usually a darker buff shade. I usually end up with an uneven buff male or two that excel in type, profuse feathering or extra good head points. I find that 4-8 matings a year helps keep several lines going, to work with different traits. I can then justify keeping 8 males around for breeding.

HOW I BREED FOR TYPE IN BUFF LEGHORNS

BY C. M. HERREN

(March 1921 The Leghorn World)

If we had our color fixed, then type would be a comparatively easy matter, for it would be selecting each year a nearer and nearer ideal type until ultimately we should arrive at the ideal. As we find the variety today, it means that when we mate for type, we must always keep in mind color. Sometimes we shall sacrifice a little in color to type and sometimes we shall sacrifice a little in type to color, in each instance making the gain in one more than balances the loss in the other. It is from this viewpoint that this article is written. In breeding for type, as in breeding for color, one must take into consideration dominant characteristics, considering as carefully those that are undesirable as we do the desirable ones

When I look back over my more than a decade of breeding Buff Leghorns and recall the struggle to get birds that were beautiful in type, possessing all those graceful curves and the lordly carriage of their cousins, the White Leghorns, which make the Leghorns the most wonderful of the domestic fowls; I am free to confess that for a long time it seemed that I should never attain to a satisfactory result. I am also free to say that but two things kept me faithful to the undertaking. These were my admiration for the beautiful type of the well-bred White Leghorn and that, to me; buff is the most beautiful of all the colors of domestic fowls. When I compare (contrasted is a better word) the type of the Buff Leghorn with those of the Whites, I wondered if the Buffs could ever be brought to anything like that of the Whites.

Good type characteristics were conspicuous by their absence. Few birds possessed many of the desirable ones. We had the beefy comb, coarse in texture and most frequently thumb marked. The wattles were long and coarse and the lobes often ill-shaped and showing much red. There were also the high, pinched tail, with the break at the base, the short back and the absence of station. To overcome so many dominantly bad traits seemed a hopeless task, yet the improvement in ten years has been remarkable, especially when we think that we have at the same time had an equally hard task to improve and fix color. Often we found some of our young that seemed to have made improvement in type, but seemed to be backsliders in color; or if they had improved in color, they seemed to have magnified all the undesirable type characteristics. How I overcame to some degree these undesirable type traits is what I shall try to tell.

I started with stock that came from a reliable breeder. I visited some of the larger shows of the state. At one, I purchased the winning cockerel, after learning that he had descended from a good line. I mated him to a few of my best hens, and as soon as the offspring had matured, I placed on the block every pullet and cockerel that did not show improvement over both sides of the mating. I had two cockerels that showed decided improvement over their sire. One was equally as good in type and better in color. The other a deeper color but better in type. I sold all but the best of the old hens, mated these two cockerels to the remaining hens and a few of the well-developed pullets. With these two pens I had two related lines to breed from. Each year I found some improvement. As soon as the mating season was over, I sold the old males and each season saw better cockerels of my own raising heading the pens. My idea was that if the old males did not breed better than themselves when mated to my best females, I did not want to continue them at the head of pens. If they had bred better than themselves their young would probably do the same. If the young did not breed better than themselves, then I wanted neither the old ones nor the young.

I kept the better of the females through the third laying season for two reasons. I knew vigor of the stock must be kept up and that it could not be done by breeding cockerels to pullets in successive years, and I had more faith in the female transmitting desirable traits than I had in the male doing so. After many trials purchasing hatching eggs from other breeders, I eventually got some good youngsters with which I could establish another line of breeders, in fact two

lines. By following the policy of using only cockerels that were better than their sires and by saving only pullets that were better than their dams, finally on the eighth successive year I produced an exceptional male in one mating and an exceptional female in another mating. These two birds gave me a third line, not too closely related for linebreeding. Now let me illustrate my plan by speaking of two special matings.

Last season a certain pullet produced several young that won the blue, however some showed just a slightly high tail carriage and some showed light feathers. All showed superior station, fine curved backs free from breaks at base of tail. Her young showed more desirable traits than undesirable and naturally I was on the lookout for the cockerel that would eliminate the defects and at the same time not lessen the desirable characteristics. A cockerel from another mating was early selected. He had a long back, exceptionally low tail, and deep under color, with smoke in tail, with strong pigment shafting. In another mating, the cockerel is all that I could wish with one exception, that he carries his tail just about five degrees too high. His color is superior in every respect, if there be a tendency either way, it is to the light. From the moment I discovered his superior qualities, I have been on the lookout for a female that would, when mated to him, give offspring with all his desirable traits, and with just a little lower tail carriage. She was found in a pullet that is long in back, high in legs, tail carriage not more than thirty degrees above the horizontal. She is the best-typed pullet of last season's hatch, but not a show bird because of pepper in wings and tail. From this mating I expect a goodly number of young that will have a lower tail than the males and shall not fear any large number having pepper.

I have tried to impress the importance of ancestry of both the males and the females in these special matings, and know that the slightly undesirable characteristics are not strong, for they have been lessened from year to year, while the desirable characteristics are strong. Had I not been using the trap nest and had I not known the ancestry of the birds in each individual mating, I should have made the mating in the same way, but I could not have had so much faith in results. Let us consider what would be the result if I had mated the male in the first special mating with the female in the second one, that is, the low tailed, long backed, deep under colored male with the pepper and with the female of like coloring and type. We would have the type strengthened, but at the same time we would have produced a coloring that would ostracize the offspring from good poultry society because of the dark. Again, consider results if the cockerel of the second special mating were mated with the female of the first one. We would have to look for even worse results. We would have a very large percentage of young with high tail carriage while the white in tail and wing would be increased and rendered harder to eliminate in the future.

In conclusion, I wish to say that the large majority of cases, if the question arose as to whether I should sacrifice type or color in my mating, color was sacrificed in the interests of type. The results have been so good from the type point of view that from now on I shall be able to give more attention to

color and less to type. However as long as I breed the Buffs, I shall try to improve both.

“MATING BUFF VARIETIES”

BY JOHN H. ROBINSON (1899)

from book “Poultry Craft”

The buff varieties, with the exception of Cochins, are all new, and the up-to-date Cochins might without great impropriety be styled a new variety. Though buff is called a “solid” color, it is by no means an easy color to handle. Breeders find it quite as difficult to get one uniform shade of buff in all sections and keep it, as to get any combination of colors and markings described in the standard. At present the popular shade is a golden buff, between the reddish buff and the pale yellow, which were the extremes of color which different breeders have been calling buff. In mating buff fowls, the best method is to use birds of both sexes as near the desired golden buff as can be obtained, avoiding the mating of birds having color defects in the same section, whether the defects are similar or opposite. The common color faults in buff fowls are white, or black, in wings and tails; red on the backs and shoulders of males; very light breasts on females; black ticks or lacing on necks and backs; mottled plumage, slate under color, white under color--no color. Black or gray in any part of the plumage except the primaries and main tail feathers, should cause a bird to be rejected, no matter how good otherwise. In the sections excepted, a little dark color may be admitted if the mate of the bird is good buff in them. In any case it is not advisable to breed from a specimen in which the foreign color is distinct. Birds with positive white in wings and tail should be rejected; also those in which the upper and lower webs of the feathers are of distinctly different shades. Faded, and slightly mealy wings and tails, may be admitted if the bird is pretty good all around, and can be mated with one good in wing and tail. A bird extra good in wing and tail can generally be used to advantage, though rather weak in other sections. In breeding to get the red out of the backs of males, the lightest females that can be found that are a good bright even surface color, the same on back and breast, should be mated to males as free from red as they can be had, and fairly uniform in all sections. Specimens with pale eyes should be rejected. In an exhibition bird surface color is worth more than under color; but in breeding, a bird good in under color will get more good even colored chicks than one better on the surface and not so good in under color.

“BUFF LEGHORNS”--NOT TOO MANY LEFT!

By C. AALBERS

(From the Dutch magazine “AVICULTURA” 1973)

One can still see some buff colored ones in shows in Eastern Holland. Also in Germany the Buff Leghorn is not very popular any longer. One can still see, black, gold types, and silver types in the Hanover show. There may be some buff colored ones and they are of good quality, although the color is a little harder than in Holland. It has always been difficult to breed the right buff color. They used the "Cochins" to breed, as they had the best colors, although it was a much heavier chicken. They succeeded in breeding the buff colored Leghorn, but it was difficult to get rid of the Asiatic blood. It all takes a long time and patience. The differences between the German, Dutch, and English chickens is minimal.

The Buff Leghorn spread from Denmark and England to other countries but the modern ones do not resemble, at all, the original ones in color, when they had the name "Yellow Italians". The yellow was more shammy color and not all golden, which appears in farm chickens and they would have a black tail. The "Yellow Italians" went to England and on to the U.S.A. As people did not agree with the yellow color they did not succeed. It is not more difficult than other colors, but one needs to have some experience in breeding. The amount of quality animals with the good coloring is smaller than other one-colored animals. The newcomers will be easier discouraged because of this reason, while at the same time the experienced breeder will be encouraged with small successes. It will be very difficult in general to have a lot of success to get the right color more so than with other colors; The buff color of the Leghorn will always be a little harsher than the Buff Orpingtons or the Buff Wyandottes. This is because of the nature of the feathers, which is different in the light races where the feather is harder than the heavy or medium heavy races. In the heavier (harder) feather the color stays more. In the medium and heavier races the under down shows more and this is not the case with the Leghorns. The under down is allowed to be a little lighter but NOT almost white. The animal cannot be used in shows and certainly not for breeding.

The breeder has to strive for a uniform golden color with maybe a little lighter or darker shading. But one has to be careful for a too dark color, which would look reddish. The most important thing is uniformity in neck, shoulders, and saddle of the rooster. White feathers in tail and wings are not allowed. A tinted down color is necessary. The roosters are more difficult to breed with uniform colors than the chickens (hens). To get good color, breed a rooster with several hens who have most of the good coloring. One can add a few more hens that are maybe just a bit lighter or just a bit darker, but they have to have foremost the uniform coloring. It is useless to pair animals with the wrong coloring. There are breeders who believe that if one pairs a dark and a light animal, one will get the right coloring. Absolutely the wrong way of thinking! One can expect animals with white pens (quills), white down, and a spotted upper-color.

As the rooster is the major partner in the mating procedure, he should be an excellent animal. Also the breast color in the rooster is very important. If the

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

color is too light then one should not use that rooster. The color in the male animal should be uniform; concessions can be made with the hen. So before breeding, give the animals a thorough going over, so that the colors are okay. The pens (quills) have to be buff all the way to the skin. Once one gets animals with white down and white pens (quills); one cannot get rid of that color quickly. It may take years.

NOTES ON DUTCH S. C. BUFF LEGHORNS

MR. H. SCHOOTEN, Holland,(personal letter 1987)

I breed with the cocks and hens, which are the best in color. I see to it that especially the hens are not too dark. I neither take a light buff cock and dark buff hens, nor do I breed with dark buff cocks and light buff hens. The offspring from these are almost always too dark. I don't practice double mating. I always mate one cock with two hens. I like to breed with hens and cocks of two years old or older. The buff color shows itself best in older birds. I pay much attention to the quill colors and tail colors. The feathers must be large and wide.

On the inside of the tail, there may be some grayish spots; we call it "smut". If there is no smut at all the birds are too pale and tend towards too much white. You may not be able to see the smut from the outside of the tail. Never allow white in the under color. I never breed with birds with white in under color. Never allow Buff Leghorns to be in the sun. The feather shafts must be buff, never white, especially in the wings. I pay much attention to this.

YELLOW AND GREEN LEG COLOR

BY D.J.HONOUR 1990

With leg color it is good to know something about inheritance, for sometimes it can be a problem. Then there are times an outstanding bird may be off in leg color, but it can be used. In some cases it may take a few generations to make use of, but if rare quality is at stake, it may well be worth the effort. Often careful records or pedigree matings might be needed. With Leghorns we are dealing with yellow leg color as a breed trait. Some times we find green leg color .Id Id = pure yellow male, Id id =impure yellow male,id id pure green male,Id = pure yellow female id = pure green female, Note females are either pure for green leg or pure for the yellow leg. Females cannot be impure because of sex linkage. As a willow (or green) legged female begins to lay, the yellow bleaches out and legs can appear light bluish (or slate colored). To test mate a yellow leg male to see if he is impure and a carrier of green; mate him to a green leg female. If all chicks are yellow legged, this male is pure for yellow. You need a good number of chicks to get a good representative and an accurate genetic picture.

If you mate a green leg female with an impure yellow leg male you will

get; 25% yellow leg males (impure), 25% green leg males (pure), 25% yellow leg females (pure) and 25% green leg females (pure). All males from this mating that are yellow legged will be impure and carry green. Do not use willow (green) legged males (if you want breed yellow legged birds), willow males are pure for the willow leg color. Yellow-legged females are pure for the yellow leg. Willow legged females can produce yellow legged offspring when bred to yellow legged males. Yellow-legged males can carry the willow leg color. The best time to classify shank color is at maturity, at hatch time yellow legged chicks can later be willow shanked. Willow x willow produces 100% willow offspring. Willow has two recessive genes and recessives breed true. Willow has yellow epidermis (outer layer) and dark slate dermis (under layer). The gene which inhibits the development of pigment in the under layer is sex linked dominate. If a pure willow legged male (id id), is crossed with yellow-legged female (Id-), the first generation will be yellow-legged males (Id id) and willow legged females (id-). If the impure yellow-legged males (Id id) are crossed with yellow-legged (pure) females (Id-) all males will be yellow legged but only 50% will breed true, 50% of the daughters will be yellow-legged and 50% willow-legged.

WHEN TO HATCH BUFF MINORCA CHICKS

By D.J.HONOUR 1980

Chicks that are hatched from the same flock of breeders will grow and develop very different, it depends on the date the chicks were hatched. (EARLY HATCHED) DECEMBER 1 -FEBRUARY 15, (NORMALLY HATCHED) FEBRUARY 15 -APRIL 15, (LATE HATCHED) APRIL 15-JUNE 15, (SUMMER HATCHED) JUNE 15- AUGUST 15, (FALL HATCHED) AUGUST 15 - DECEMBER 1.

The following are general descriptions of the different season's hatches, and how they can be expected to perform Early hatched chicks grow the fastest and mature the earliest. Their body weight is less than normally hatched or later hatched chicks. The egg size will be smaller for a longer time and they will never produce as high a % of large eggs.

Normal period hatched chicks will weigh ½ to one pound more at maturity than do early hatched chicks, and egg size will be normal for the strain being bred. Late hatched chicks will be about one month longer in reaching maturity, than early or normal hatched chicks. Late hatched chicks will however, produce large-sized eggs much sooner after coming into egg production.

Summer chicks are smaller in size at maturity, and take longer to mature than normal hatched chicks. Fall hatched chicks grow to normal size, but egg size is small and will seldom reach normal for the strain. The body size and eggs size has gone down in many breeds and strains, so this schedule, should be used as a guide in breeding these traits back in.

Much also depends upon how chicks are grown, whether or not they are

range-reared or reared in confinement. The different hatching times can also cause brooding problems. Fall and early hatched chicks will need extra brooding in cold climates, and may not be hardened off when they get weaned from the heat.

BUFF COLOR

BY MAURICE F.DELANO 1910

There are very few fanciers of any breed that do not admire a buff bird of true golden shade and of even color. The writer has bred over twenty varieties since he began eighteen years ago, and the buffs have always been first in his affection.

BUFF LEGHORNS

BY F.L.SEWELL 1907

Monmouth Farms' S.C.Buff Leghorn cock bird was of the rich orange buff. The return to a richer hue is a pleasing variation from the pale shades frequently seen in Buff Leghorns, which sometimes passes for "light lemon" in winter and fades to little or no color in summer; for our part we prefer buff of the warm orange tone, that can stay throughout the seasons, always a pleasing effect on the green lawn.

BUFF ROCKS

BY A.O.SCHILLING (1910)

Buff Rocks at the M.S.G. 1910 show, shown by C.L.Pensyl, had the intense rich, golden, buff color of the orange cast free from any brick-colored or red pigment which usually is found in these strongly colored specimens. If breeders will obtain this shade of color, they will find that it will stand the weather better than the lighter shades and will add much to the beauty of the breed.

BUFF LEGHORNS

BY MAURICE F.DELANO (1932)

I judged the Buff Leghorn classes at the Harrisburg, Pa. Show Jan.1932.The National Buff Leghorn Club meet, brought out the best class of the year. Wonderful smoothness of color prevailed. It is a question whether many good Leghorns are not too soft in shade for a true golden color, as called for in the Standard. They are really a chamois buff. The Buff Leghorn breeders

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

need a little more bone and station in their cockerels to hold the variety in line with the improving White Leghorns.

BUFF LEGHORNS

BY HENRY P.SCHWAB 1925

At the Madison Square Garden show (Jan.21-25 1925, the S.C.Buff Leghorns numbered 101 and exceeded the S.C.White Leghorns. The quality of Buff Leghorns at the Garden have improved steadily and the showing this year was very gratifying. Very similar in type to the White Leghorns, a big improvement in this respect over recent years. Buff color is one that is extremely becoming to the Leghorn shape. There is good reason why this variety should increase in popularity. Here was seen a remarkable class of 101 S.C.Buff Leghorns in condition and quality with several breeders of national reputation competing and making it one of the very best of classes. We are pleased to note the improved size and type of the birds shown. Heads are also coming much better and the even, sound buff color was here at its' best. Grand quality of feather and sound, clean buff color was the rule.

BUFF LEGHORNS

BY A.O.SCHILLING 1913

Yellow and black don't mix to produce buff. Yellow ,red and white will mix to produce buff. (From American Poultry World Jan.1913)

BUFF PHOENIX

From Poultry Press Oct.1984

Frank Daily of New Jersey was working on Buff Phoenix at the time of his death about 1980.He was using S.C. Buff Leghorns from Marcus Davidson's breeding and White Phoenix.

WHAT IS A BRAGGS MOUNTAIN BUFF?

DAVID ANDREWS (Jan.2006)

The Braggs Mountain Buff is a large, strikingly beautiful buff chicken with generous golden plumage. Being dual producers of eggs and meat, they are ideal for the small farm or backyard flock. They possess the unique quality of being prolific layers of jumbo sized brown eggs. Egg customers and those purchasing retirees from the original breeding flock have had great praise for

these chickens and their unusually large eggs. This new breed with these unique characteristics has the potential to become a universally popular poultry breed. These large golden buff chickens are the ideal all purpose breed. Whether you have a small backyard flock or raise chickens on a larger scale for production of meat and brown eggs, these beautiful golden birds will perform extremely well for you. Their large size and attractive light yellow skin make them popular for meat production. As layers of extra large and jumbo brown eggs, this breed is second to none.

Now that the electric incubator has become easily available, broodiness in hens is, for most farms, a major inconvenience. Unlike the other buff breeds, only rarely do Braggs Mountain Buff hens become broody.

These golden buff chickens make a very attractive flock. They are excellent foragers. Having gentle dispositions, they also stand up well.

Most breeds require several weeks or even months to pass through the phase of laying tiny "pullet eggs". Braggs Mountain Buff pullets lay eggs graded as medium to large with the second or third egg. At nine months of age the pullets lay about 30% large, 30% extra large, and 40% jumbo as measured by the standard egg weight scale. As the pullets become older the eggs become even longer so that by 10 months of age the majority of eggs are jumbo. The pullets may be a little older than some other breeds when they begin to lay, but it can be great fun to watch the ever larger eggs appearing in the nests.

A Braggs Mountain White?

Many other recessive genes, such as that for feathered legs, have been eliminated from the Braggs Mountain Buff by selective breeding. There remains, however, an occasional recessive gene for white feather color which exists to the extent that about five percent of Braggs Mountain Buff chickens may turn out to be white. This gene for white feather color seems to be linked to genes that favor the larger sized eggs. Eventually this can be eliminated from the buff strain. If you do prefer a white chicken, we may be able to supply small numbers of Braggs Mountain White chicks.

Recipe for a Braggs Mountain Buff

Mix thoroughly a combination of about 40 percent Rhode Island Red or derivatives of Rhode Island Red (e.g. *Production Red*, *Cherry Egger*, *Red Star*, New Hampshire Red), 20 Percent Buff Rock, 10 Percent Black Langshan, 10 percent Light Brahma, 10 percent Buff Orpington. For the remaining 10 percent season with traces of Barred Plymouth Rock, Jersey White Giant, White Leghorn, and Black Australorp to create a truly *All American Chicken*. Spend the next eighteen years picking the most handsome and vigorous individuals for breeding purposes, while at the same time selecting for a golden buff feather color. Using an egg scale, choose only the very largest and highest quality eggs for the incubator. Then you will have your own replica of a Braggs Mountain Buff!

The alternative to the above, of course, is to take advantage of the opportunity to purchase chicks from the original flock of Braggs Mountain Buffs.

Note: "Bragg Mountain Buffs" may be too close to Buff Rocks (these could qualify as a strain of Buff Rocks with loose feathering and light yellow skin) to ever be a distinct breed, however much credit is to be given here for doing a fine job selecting buff color, vigor, meat qualities, laying ability, nonbroodiness, shell quality, shell color, and extra large egg size. These are important ingredients for any line of fowl and things not done often enough. D.J. Honour 2008

BUFF ORPINGTON CROSSING

DEAN SHUCK Dec.2004

I think that in order to make a better Buff Orpington one has to study the origins and history of this breed. They were originally bred from Golden Hamburgs, Red and Colored Dorkings and then heavily infused with Buff Cochins. They were decent layers but nothing to brag about even in their early days.

In later years they received further infusions of Buff Cochins blood to deepen their color and increase their frame size in order to compete in the fad competition of the early 1900s. This left the birds with a lot of extra frame with very little flesh to cover it. As a result they ended up with lots of feathers, little meat and few eggs to set.

Back then the show breeders had their little "secret" outcrosses, such as using large Cornish to increase weight. This becomes evident if you saw some of the early soft feathered Buff Cornish that suddenly sprang up as if from out of thin air. Even today the Buff Cornish occasionally throw a youngster with lots of shank feathering. The breeders back then aren't any different than they are today. They utilized all sorts of out crosses to other breeds and they would rather tell a big lie than admit to what they had done. [We can't be considered purists with crossed up stock now can we?]

The show bred Orpington stock will work great for the female base for creating a new line. You want large birds and it is the hen who determines the size of the offspring for the most part.

Hatcheries concentrate their selection pressure on egg production even in those breeds that are not known for laying more than a few eggs per year. Hatchery males would work fine over large framed hens and would increase the egg production in the F1 offspring simply through short term heterosis alone.

Increasing the weight, needs to be done from the male side too. I would recommend breeding a tall, deep bodied, egg bred, hatchery Buff "Orpington" male over some large Buff "Cornish" hens. By hens I mean 2 year old hens with a lot of frame, heavy, and laying the largest eggs they will ever lay in their lives.

Once this male line is established it is time to cross these mixed Buff males over the large show bred Orpington hens from the other strain. Other things that create bigger birds are to only select the largest, uniform eggs, free of defects, for hatching. Hatching early in the season and keeping feed in front of your breeders at all times during daylight hours will greatly help to increase the size of the chicks at hatching. Cull heavily those birds possessing poor breed traits, those birds that are slow growing and also those that are slow feathering.

With common sense selection the rest shouldn't be very complicated.

Dean adds the following Nov.2007;

One time I was trying to save a line of Cornish that I had paid a lot of money for and lost the male. Rather than waste the hens I used a large White Orpington male over my White hens. The offspring weren't all that heavy but they were larger framed at 5 months than most of the adult Jersey Giants I have seen in the show rooms. They would have gotten plenty large if I had been in a position to have fed them out to maturity. [Long story]

The opposite happens when you cross a Cornish male over Orpington or Rock hens. The offspring get heavy and put on flesh on the same order as the old style 12-14 week strain broilers. Like these old strains of broilers they can be retained for at least 2 seasons for breeding and increasing the size of your Orpingtons and Rocks. If you are using both Buff Cornish and Buff Orpingtons or Rocks the color becomes very rich. Evidently there is a Buff enhancer that comes through the Cornish side since even the White males used in the Cornish X White Rock meat crosses used to throw at least 4 or more buffish chicks in a 100 chick order. No doubt a throwback to the ancient genes of the Malay on the Cornish side.

INHERITANCE OF PLUMAGE COLOR IN CROSSES OF BUFF AND COLUMBIAN FOWL

BY L.C.DUNN (1922)

The Columbian plumage coloration in domestic fowls is distinguished from buff coloration by the presence of a gene S which determines the restriction or inhibition of buff pigments from the feathers. This gene is sex-

linked and dominant over its allelomorphs, which permits the development of buff pigment. 2. Fowls with the Columbian coloration do not differ from buff fowls in any single gene governing the development of black pigment. Multiple genes appear to determine the difference in the amount of black pigment developed. 3. Columbian and buff fowls are genetically alike in plumage pattern, that is, in the ability to develop black pigment in the feathers of certain areas (hackle, wing and tail feathers). 4. The buff coloration appears to have diverged from the Columbian coloration, or the reverse, by a single gene mutation affecting the development or inhibition of buff pigment; and by the accumulation through artificial selection of multiple genes for the development of black pigment in the Columbian varieties of fowls, and by the reverse selection in most buff varieties.

BUFF COLORATION IN THE SHOWROOM AND BREEDING PEN

BY DAN HONOUR (Sept.2007)

Part one; Buff in the showroom

"Quality buff" means "medium" or in the middle as to shade of color. Next a sound, uniform, matching, and even color in all sections. Last is luster and feather quality.

Let's consider the standard. This means we have to consult the definitions, the scale of points and the value of defects. The definition of buff; a medium shade of orange color having a rich cast. Not so intense as to show reddish cast or so pale as to appear brassy or light yellow. Surface throughout, an even shade of rich golden buff, free from shafting or mealy appearance. Head, neck, hackle, back, wingbows, and saddles richly glossed. Undercolor, usually a lighter shade but matching the surface as near as possible; free from foreign color. Different shades of buff in two or more sections is a defect. A harmonious blend of buff in all sections is desired.

There are no disqualifications in buff. I have seen buff birds with faded and bad condition, or having so much white they appeared pile-like, or so black they appeared black tailed buff. These are extremely poor specimens that do not belong in the showroom and do nothing to add to buffs' popularity in the eyes of the public.

Buff has defects and this needs to be considered when selecting birds to be shown. These are what the judge looks at. Shape and type make up the highest point value (63%). Buff color makes up 37%. Defects can be in every section of the bird and cuts are made for each section. Mealiness each section 1/2-2, light shafting 1/2 -1 1/2. Black or white each section 1/2 to limit of section. Unevenness of color 1/2-1 1/2. Slate undercolor each section 1/2 -2. This will give you an idea of how to rate and discount your birds.

What it boils down to is; we want a medium shade of buff with uniformity. The buff defects all work against uniformity and evenness.

The last thing we want to look at is luster and feather quality. These affect condition and appearance. Luster is a special brightness that gives a glossy, luminous appearance to the surface due to reflection of rays. It is usually found on birds in good physical condition. Lack of luster (dullness) is cut in each section 1/4 -1. Feather quality is feather size, shape, and texture. Size and shape of feathers influence type and shape and texture of feathers influence condition. They also influence the ability to wear due to strength of quill. Feather quality means "width" of feather or wide webbing of the surface. Quality feathers have a wide, rounded, blunt end. This provides a lot of surface area for color pigmentation (pheomelanin) in buff and presents a full plumage appearance for condition and a full plumage for overlapping, which makes for smoothness. A narrow feather makes a rough and ragged look. A wide feather has a smooth surface texture which is supple and less brittle (maybe because it has more oil on the surface). Feather width is important for many reasons and deserves your attention.

Part two; Buff in the Breeding Pen

This could be a long and detailed topic, so without getting into the fine points, I can generalize and give some guidelines. Know the buff defects and know how to use them in breeding as all birds have defects to some degree. Take note and look very closely, it makes a difference when putting the matings together. Sometimes "superior type" birds can have glaring color defects, and because of type need to be used. Compensation matings are used to counter-balance extremes or reduce defectiveness. This is best done by using a mate that is sound in color and not by using the defects' extreme opposite. There are good breeding faults; like excess pigment or richness of color. This may be strong color in the quills or undercolor. Here again use it on one side of a mating and have its mate in the middle range rather than the extreme opposite.

The showroom calls for evenness. The observant breeder will note that there are small differences in the amount of pigment, the different feathered sections (feather structure causes this) carry. The two sexes also have different feather structures, due to hormones. In general these sections go together and carry like pigmentation and luster.

Hackle, saddle, wingbow of males-hackle females.

Wing flights and main tail, these are wide strongly quilled feathers that carry the most surface area and pigmentation, so are often a subtle shade darker.

Breast of male and back of female.

Main tail coverts (sickles on male) and secondary wing feathers.

Thigh and stern and vent feathers (fluff).

Buff breeds lighter and breeders know the value of excess pigmentation and make use of it from time to time. It is a mistake to breed the light, pale, lemon shade as color runs out to white. Many birds carry pepper (small amounts of black) or salt (small amounts of white). Here again mate these with a sound colored mate. You may have to reduce these amounts gradually over a couple of generations, repeating the process. It is not necessary to double mate for buff color as very good results are obtained single mating without all the waste of double mating.

It sometimes happens that an entire flock is lacking a trait or the proper mate cannot be found within the flock. It would then be wise to buy a bird with the needed trait. It will save time and money to do so.

A BRIEF HISTORY IN THE UK OF THE BEAUTIFUL BUFF LEGHORN ... IN NOT SO BEAUTIFUL HANDS

BY ROSS GIBSON (about 2006)

In the last few years several breeders have been making a concerted effort to improve the large Buff Leghorns. The most notorious of this trio Neil Penny is no stranger to N.S.W. and Victorian members. For those who don't know him just keep an eye out for any hump backed whales whilst you're in Canberra that will be Neil. Neil is better known for his exploits with Brown Leghorns. The second of this trio Steven Lane is more likely to have his head in a Rugby scrum for Newcastle, not a pretty sight, but his saving grace is that he does exhibit some rather handy large whites. The third of this trio is a quietly spoken bloke by the name of Greg Smith. Greg is the sort of chap who wouldn't say "boo" to save himself. We've been mates since we were five, having gone to the local schools in Tamworth and then to University together. Needless to say I need to be careful what I say. Anyway over the years when Greg gets himself to a show he usually doesn't leave too many ribbons for anybody else. So what do these 'gentlemen' have in common? Well to their credit they have taken up the challenge of improving the large Buff Leghorn. You will notice that I used the words improving, rather than rebuild, this is because we do see the odd Buff Leghorn (Large) exhibited, so they are out there, just not in large numbers.

A Brief History

Five years ago Greg Smith got into his head that he wanted to breed large Buff Leghorns, but at that time there were no large Buff Leghorns known to him in Northern N.S.W. Greg was fortunate, as have all Tamworth Poultry people in having the resources at hand of the very knowledgeable (late) Doug Swadling. Doug would be most remembered for his Black Minorcas whose were second to

none. Apart from the Minorcas Doug had a profound knowledge of the Buff color having bred top class buff Pekins and also being the originator of the Buff Plymouth Rock. So after some discussion with Doug Greg was able to get hold of a buff Rock cockerel which he then mated to some Blue Leghorn pullets. It should be mentioned the standard to which Doug attained with his Buff Plymouth Rocks was extremely high. The buff color being where it should be, all the way to the skin and the leg color was the yellow leg we all aspire to in our Leghorns. The other point, which needs to be pointed out, is that some 10-15 years prior Doug had used a Buff Leghorn in his creation of the Buff Plymouth Rock. The Benefits of this to Greg's project were to be seen very early on in the breeding program. Following is a brief outline of his activities with his Buff Leghorns

Year 1: The results of the first cross as you can imagine were some very robust multicolored utility fowls. But amongst the Black and the Blue they did have a good amount of Buff. Greg also mated a Buff Rock Cockerel to a very small Buff Leghorn cross hen. (She was really only a Buff chook)

Year 2: In the second year Greg mated these first cross fowls back to the Blue Leghorn females to increase the Leghorn Blood content. Greg's second pen consisted of a crossing between the two different pens in year one. From this Greg was able to breed some better-typed birds which retained the buff color.

Year 3: In the third year Greg decided it was time he needed to add some Buff Leghorn blood to not only maintain Leghorn type but also to hold the buff color he had already attained. Luckily Greg was fortunate enough to be able to obtain a Buff Leghorn Cockerel from Michael O'Connor. As they say you should never judge a book by its cover, that was certainly the case with this fowl. This bird has nicked superbly with Greg's Leghorn Rock crosses, the offspring being larger stronger and much more vigorous than your average pure Buff Leghorn.

Year 4: Greg has continued to use his O'Connor bird to good affect over his daughters and has consolidated other matings improving type by reintroducing Black Leghorn blood.

What is amazing is the quick period of time Greg has managed to get his Buff Leghorns to a very creditable stage. As Neil Penny and I can testify he really had very little to start with. As has been mentioned earlier, what seems to have happen is that the Buff Leghorn genes in the Buff Plymouth rock which have lain dormant for 15 years appear to have nicked with the infusions of Leghorn blood to allow type to set very quickly. Neil Penny as has been mentioned has been working on Buff Leghorns as well. Neil at Newcastle Show several years ago thought a couple of blokes from Tamworth were having a go at him when he was given a Blue Leghorn Buff Rock Cock bird weighing in the vicinity of 10lbs. Neil now realizes what Greg was giving him having crossed this monster ("I think were Neil's words at the time) over his existing line of Buff Leghorns. The results Neil reports are very pleasing indeed. The third buff breeder in this little story, Steven Lane was able to get hold of some birds from

Greg Smith and I believe is having some good success with these, along with some other experiments he is undertaking.

POINTER ON BREEDING AND IMPROVING BUFF LEGHORNS

By A. A. OSWALT, Toledo, Ohio

(*THE LEGHORN WORLD* March 1925)

The beautiful golden buff color put on a Leghorn makes one of the prettiest fowls one can imagine! Buff Leghorns have been bred for many years but not as much improvement has been made in them for better feathering, better type, better size and head points as there has been in some of the other varieties. Mr. Oswalt takes occasion to call his fellow breeder's attention to these vital points and he tells you how to overcome these defects. We hope every Buff Leghorn breeder will read this article and think seriously, think long enough to go out and improve his matings to the very best of his ability this year. Buff Leghorns deserve the best efforts of a much larger circle of breeders and if the present breeders will work hard on the points suggested by Mr. Oswalt the variety will grow rapidly in popularity. — H.V.Tormohlen, Editor.

It has been my pleasure in the last few years to take in some of the largest poultry shows in the country. As a breeder of Single Comb Buff Leghorns my interest usually centers in Buff Leghorn alley. As we all know there has been a wonderful improvement in the last few years in this breed (by some breeders). Some are still showing the little undersize buff of long ago, with bad breaks at the base of tail, narrow tail feathers, with no tail covering, little narrow stringy breast and saddle feathers. I have seen males at our largest shows that were of no account as show birds or breeders. The old cotton tail buff appeared in some of our largest shows last year. No breeder can expect to get anywhere at this time with those kinds of birds. When you look at the winners in these shows, then look at the birds with serious defects, one wonders if it is not due to lack of interest or faulty mating. There is plenty of room for improvement in the best of them. And the breeder that is still breeding the little old undersize cotton tail Buff, is so far behind he will never catch up. The Breeding Pen: Are you breeding birds of Standard size and weight? If not you had better start right now for birds with no size of body cannot get by the judge in the shows any more. Look at your Standard and see the Leghorn cuts and note the size of body. Judge Lamon at the last Madison Square Garden Show made it clear that birds showed at that place must be of good-sized body and up to Standard weight.

Selecting Female Birds

In selecting the female, let us pick out the best type possible and pay strict attention to the feathering. See that they are well covered up at the base of tail with tall coverts extending well back over good wide and long tail feathers—this

is a great help in getting heavy furnished tails on the males. She should have a well spread tail, for a pinched tail is a bad defect on a show bird. Pick your females that have good wide feathers on the breast for they are a lot more pleasant to look at than the little narrow stringy feathers you see on so many Buff females. Use good full-breasted females, many of the females as well you see in the show room are shy in breast giving it a flat appearance. Take another look at the Standard and note the shape of breast. See that you have good yellow legs on your breeders; this is one of the beautiful sections of the Leghorn breeds We all know that the pigment will fade out of the legs, but not before a large number of eggs are laid, there is no excuse for showing pullets with weak leg colored legs and trying to make one believe it has come from heavy egg production. The beautiful head points of the Leghorn female are of vital importance. See that you select as good a head as possible. Stay away from the folded comb for it is a serious defect to get in a flock. Choose a good five-point comb that is fine in texture, good and smooth and not too large. See that she has a good prominent red eye, nice smooth clean face, small neat lobes and good yellow beak.

Selecting Male Birds

Now we must select a male bird that is near the Standard requirements as possible; he must have type and color with a good long back and low well-spread tail, with good width of feather, well covered up at base of tail and a wealth of furnishings. The more furnishing you get the better, for one never sees a Buff Leghorn male with too much covering over tail feathers. Another point we must not overlook is male head points (a weak section on Buff Males). Let us choose a male with as small a comb as possible; see that it is smooth and free from thumb marks. Keep in mind the big prominent red eye and a good clean face with stout yellow beak, neat wattles and good white lobe. Now we know that we cannot get all the good points in one bird. Mate up the best of your flock, seeing that each female is strong where the male is weak and vice-versa. Do not mate together the same weakness because they are winners at some show. It is better to have a few choice specimens mated properly, than to have a large mating just thrown together. If the breeder will just pay a little more attention to the Standard of Perfection and forget what they think ought to be, they will make it a lot easier for the Judges and will not have so many kicks coming into the showroom. Show more of your birds in the shows, ask the judge questions, and find out the weak points of your birds. Most all judges will answer all questions you have to ask. More valuable information can be obtained in the showroom than anywhere else. Boost the Buffs; you need not be ashamed to do it, for they answer all requirements in every respect.

HOW TO GROW GOOD COLORED BUFF LEGHORNS

(A.k.a. GOOD BUFF LEGHORNS- HOW I PRODUCE THEM,
THE LEGHORN WORLD FEB.1928)

(The Leghorn World May, 1926)

There is a lot in breeding, in proper bloodlines and ancestry but there is also a lot in raising chicks if proper results are to be obtained. This is true of any variety of fowls. Mr. Oswalt is a long time breeder of Buff Leghorns and so he talks about the variety he knows most about and his article is worthwhile to all breeders alike who are anxious to get the most out of their new crop of chicks. Leghorn World Editor.

Some people seem to think that the mating of a well-matched pen of Buff Leghorns is all there is to producing good colored birds. From the time the little buff chick is hatched until it reaches maturity it has to have some special care or it is not going to be a good colored bird. The mating of good colored birds together is only about one-half of what it takes to produce good color. No matter how well your pens are mated you cannot produce the desirable shade of rich golden buff without proper feed and care. The care of the chick starts when it is removed from the incubator to the brooder. The brooder should be run at least forty-eight hours to be certain that it is working properly before the chicks have been placed under it. The brooder should be heated to 98 degrees the third week and 84 degrees the fourth week. When the weather is warm enough the little chicks should be allowed to run on the ground, great care should be taken that the chicks do not get chilled because chilling stunts the growth and causes bowel trouble. The first meal after their removal from the incubator should consist of fine grit or sand and with some fine ground charcoal to tone up the bowels. About twelve hours after they receive their grit they should be fed their first food which should consist of yolk of hardboiled egg and pinhead oats and good fresh water that has had the chill taken off. This feed should be fed for about three day's .The second day some tender green stuff should be added. This feed should be fed about four times a day. At the end of the third day a good chick scratch grain can replace the pinhead oats and a good chick mash can be added. It is a good thing to cut down the grain to three feeds a day after the chick is about a week old and keep the mash in front of them all the time. Also hoppers of grit, oyster shell, and charcoal.

When they are about three weeks old a good scratch grain should replace the finer grain and should be composed of equal parts of fine cracked corn, wheat and hulled oats. Always remember that the floor of the brooder house should be covered with good fine litter; this will induce exercise and keep the chick active. This litter should be kept clean and changed often; this can be governed by the amount of chicks that are in the coop. When the little buff beauties are removed from under the brooder great care should be taken that they do not crowd because crowding causes suffocation and sweating, and sweating causes faded feathers and is also the cause of a lot of white feathers in Buff Leghorns. The little chicks should have good shady and grassy runs. A

Buff Leghorn that is allowed to run in the hot sun all summer will have a blotchy surface color in the fall. A cornfield is an excellent place for the young birds to run in. An orchard is also a desirable place to grow young stock; there, insects will be found and green stuff is continually cropping up out of the ground, which is greatly relished by the young growing stock. If you have not an orchard or a cornfield, shade can be furnished by planting sunflowers around or in rows across the runs. Your best-colored birds are the ones that grow the fastest and mature at an early age. The buff bird that takes from eight to nine months to get its full growth is generally of a blotchy appearance and not the nice smooth color of the ones that mature at five months of age. You will also find that a chick that does not get any green food will not grow as fast and be as good color as the bird that has free access to it all the time. A good growing mash that may be fed to good advantage and help the color question is composed of five parts wheat bran, five parts wheat middling, three parts corn meal, one part beef scrap, one part corn meal, and one-half part of powdered charcoal. Examine your chicks often and see that they are free from lice and mites, also keep their roosting quarters clean, see that they have plenty of fresh air while on the roost at night. Do not crowd too many in one coop so they will sit tight together on the roost for on a hot summer night they will sweat sitting on the roost. Again let me remind you that good shady runs with plenty of green food and fresh clean water are very essential in the growing of good colored Buff Leghorns. We have followed the above method and find it takes very little work to get the young stock ready for the showroom.

SOME POINTS ON BREEDING AND RAISING BUFF LEGHORNS

By S. W. PRICE, Oklahoma City. Okla.

(The Leghorn World May, 1923)

There are Many Splendid Fanciers of Buff Leghorns who find it Difficult To Put in Writing Their Ideas about mating and Breeding Their Variety. Others Lacking in Experience Will Also Appreciate the Article by Mr. Price, Who Has Proven Himself a Breeder Who Can Accomplish Results. How He does it is pointed Out in This Article, and it is Worth Reading.

—Leghorn World Editor.

In order to gain and hold popularity a strain of chicks must combine exhibition quality and the ability to lay eggs in large numbers. We have succeeded in obtaining these qualities to a degree, although we do not claim an exceptionally high egg-record strain and do not believe there are many such strains in existence. We have, however, built up a strain of Buff Leghorns that makes a creditable showing in the large shows where competition is keen and at

the same time produces a number of females that lay more than two hundred eggs per year. The purpose of this article is to point out some of the methods we have used to attain the success we enjoy. In the first place, every bird in our yards is trapnested every day in the year and a record is kept. Chicks are pedigreed and the band shows sire, dam, month and year hatched. Rigorous culling is practiced all the time. No bird that has been seriously sick is kept and particular attention is paid to vigor. A bird from the strongest egg lines is eliminated if it does not show high Standard quality and the best exhibition bird would be culled if she were not a good layer. We mate our pens in January and by that time all of the pullets we have saved for breeders have been in full lay for some time and we have an egg record on them for two months or more.

The first step in the mating is the selection of the male birds we shall use. After selecting the males, we handle and rehandle them until thoroughly familiar with all of their faults and good points. A list of the females we expect to use is then made and the pedigree of each is looked up in the records. We then pick females of the correct bloodlines for each male. A chart is now made on which to record the strong and weak points of each section of the females. This chart shows trapnest leg-band number, also sire and dam of each bird. The various sections are shown in divisions and subdivisions COMB: Under this heading we note number of points, shape. Size and texture. EARLOBES: Color. EYE: Whether good, fair or poor. WING: Color of web and quills is recorded; bad feathers are noted if there are any. TAIL: Subdivided for Color and Shape: under Color we show any defects such as salt or pepper; under Shape. Breadth of feather is noted, whether well spread, medium spread, etc., tail carriage, high, low, etc.; under this heading is also noted the amount of saddle and how well coverts cover main tail feathers. VITALITY: Whether indications point to good or fair vitality. COLOR: Subdivided for Surface and Undercolor: under Surface we note whether dark, medium or light, evenness of color and if there is shafting or edging it is noted here; Undercolor is shown by dark, medium or light, and color of quills next to skin is noted. TYPE: Here we note the type and general symmetry of the bird and record whether she is good, fair, or poor. EGG: Kind of egg laid in regard to color, shell texture, size and shape.

Every female that is a candidate for the breeding pen is then very carefully handled and a complete record is made on the chart. We then take the bloodline mating we have made and study the chart record of each bird to see if she should be mated in the bloodline as intended. If the female happens to have a common fault with the male or if there is anything to indicate poor quality in the offspring the female is eliminated. After we have completed the two matings on paper the birds are put in the pens and even then it is necessary to make some changes as they do not all look right together: but with the preliminary work, not nearly so much changing of birds is necessary as when the actual matings are made in the first place. By the use of the chart, defects are caught which might otherwise be overlooked. Another advantage is in having a record of each bird that has been in the breeding pen and it is quite interesting to study the chart

record of a bird for different years and note the changes brought about by the molt and from other causes.

Good breeding and intelligent breeding are vitally necessary but the breeder cannot do it all. Stock from the best breeding pens on earth is sadly disappointing if poorly raised. To produce a good mature specimen there must be the combination of good breeding and good raising. Chicks do not need and should not have an endless amount of pampering but they must have good care, and a lot of common sense must be exercised. They should be kept comfortably warm, fed often and not too abundantly and kept busy. You can't stuff them in the morning and then forget about them the rest of the day if you wish to be successful in raising good stock. There are a number of food elements necessary to the proper growth and development of feathers, bone and flesh. If you do not know what they are, make it your business to find out and then see that they GET what they need. With the best of breeding and raising, every chick will not make an outstanding specimen if they did, the breeding and raising of poultry would not be nearly so interesting because it would be too easy. If they are properly bred and raised a certain percentage will prove to be good, and to me the interesting part of poultry work is to watch the improvement that is made from year to year.

HOW TO PROPERLY MATE BUFF LEGHORNS

By C. M. HERREN. Lajunta, Col.

(The Leghorn World Jan.1921)

No Variety in the List of Pure Bred Poultry Offers a More Fascinating Study and problem Than the Buff Leghorn.Mr.Herren was Asked to Write This Article for The Leghorn World Readers and We Believe He Has Succeeded to a Marked Degree in Giving Buff Leghorn Breeders Something Worth While and to Think About.

In breeding any variety of poultry, the breeder must keep in mind dominant characteristics. He must also keep in mind the fact that there are characteristics that are dominant but undesirable in his particular variety. He must also keep in mind the fact that with many breeds of the newer varieties few of the desirable characteristics have become dominant. As we proceed with these articles, I shall endeavor to point out those desirable characteristics of the S. C. Buff Leghorns which have not yet become dominant, but which all really enthusiastic breeders are striving to make dominant and which will eventually be accomplished and toward which great strides have already been made. I shall also try to point out those undesirable characteristics which may be regarded as dominant and which we are gradually eliminating. The first essential to success in the breeding of any variety after mentioning those things that have become trite from oft repetition, such as: Enthusiasm, intelligence, industry and eternal

vigilance, is the trap nest and a pedigree system. By the use of the trap nest and the pedigree system, the breeder will be able to discover what female is proving a good breeder, giving a large percentage of young that are as good or better than herself and by pedigreeing her young, he will be enabled to keep in mind the particular line of each individual's breeding, with the prevailing characteristics of that line. He will also be enabled to guard against too close line breeding.

Before I forget it, let me say that while the male is an important factor in the breeding process, he is a wise man who bears in mind that the female is of much greater importance. Biology points out the fact that in the early history of animal life, the male existed for the sole purpose of fertilizing the ova of the female, and that in many instances after the mating process, the male perished, sometimes making a luscious meal for his paramour who slaughtered him immediately after the mating. It is also a determined fact that the female passes to her posterity with a greater degree of faithfulness the characteristics, which she possesses than does the male. Do not infer that I would have you think that a scrub male mated to a superior female will give us good results from a breeder's viewpoint. It is essential that both are good, but it is more essential that the female be superior if but one side of the mating can be superior stock. After the trapnest has shown what females may be relied upon to reproduce their likes, or better, the next step will be to determine whether their young possess the ability to pass on the same good traits. If they do, a female line on which dependence may be placed has been established. In determining a female line that may be relied on for desirable results, the observant breeder has also discovered a male on whose line he may depend, or if he has not discovered such a male, he is confronted with the necessity of finding one from some other breeder. The power to transmit characteristics has been called prepotency. When both male and female lines possessing prepotency have been found, we still have problems to solve. None of these females will be perfect, neither will the male be perfect. Not only will both have desirable characteristics, which may be more or less dominant, but also both are sure to have undesirable characteristics, which are decidedly dominant. If we mate male and female having the same slightly undesirable but dominant characteristics, we shall magnify these undesirable characteristics and make them harder to eliminate in the future. Accordingly, when I find a line of females having desirable characteristics well established, with the undesirable characteristics few, slight and not strongly dominant, I try to mate to them a male, good in the same desirable characteristics of the females but being strong to a marked degree in those parts where the females are weak. If the male be slightly weak in any respect, (and what bird is not) I mate him with females which are decidedly strong in those parts. Bear in mind that we have not in such matings used any bird that has any strongly marked undesirable features. Such a mating does not tend to strike a balance; it tends to eliminate the undesirable traits and to strengthen the desirable ones. To be sure, there will be a number of the offspring that will seem to have inherited all the undesirable characteristics of both sides of the mating, but there will also be many that have

inherited all the desirable qualities, most of them more strongly fixed. There will also be a large number that are neither decidedly poor in quality, nor decidedly good. The main thing has been accomplished, that is a general improvement, with a few that are superior to either side of the mating.

From such matings as described, sometimes there will appear an individual bird with all the good qualities of both sides greatly magnified with a single exception, perhaps that exception will be a little foreign color. The question arises, "Shall we condemn that bird to the block?" Suppose this is the best bird of the season's hatch with that single exception. You hesitate to send him to the block and you hesitate to use him in the breeding pen. Here is where your trap nest and the pedigree system will solve the problem for you. If the pedigree of the bird shows that the one undesirable feature was not characteristic of his ancestry for two or three generations back on both sides, it will be safer to breed such a bird with the expectation of good result than it will to breed one that has improved but little over his ancestry. The one bad trait is simply an outcropping of ancestry that will occasionally occur in any strain, but where it has been dormant for several generations, it is not likely to recur with any great frequency, and we cannot afford to reject the opportunity for improvement along almost every other line. The method above described will give one a line of birds that we may rely upon to give reasonably good results. Slightly related lines may be introduced by carefully selecting new blood, but by all means introduce this new blood with extreme caution for it will be quite possible to undo the work of several years with a very little new blood. With two or three slightly related lines, well established, all showing the characteristics for which you have been striving, it will be quite possible to make your matings not too closely related, and yet near enough so as to avoid danger of evil from entirely unrelated stock. In the next article, I shall attempt to tell how I mate for color, but the person who has carefully read this article will anticipate what will be said in that.

BUFF MINORCAS

BY FRANKLANE L.SEWELL

(Jan.1916 Reliable Poultry Journal)

*Panama Pacific International Expo World's Fair,
held Nov.18-25, 1915*

Buff Minorcas; This variety of Minorca as yet has not been seen in the eastern shows, of the fine quality bred by Lindgren Bros. Kingsburg, Calif. S.O.Lindgren told me that this variety has been in the making in their hands for 15 years. They started them when located in Iowa. They are now of large size and they approach the type of the Black Minorca with long body, sturdy frame and Minorca head furnishings. The plumage all over is a soft, even tone of light

buff. It can be confidently expected that the new Buff Minorca will be in demand. All varieties of Minorcas are more popular now than they have been for several years past. The Buffs as bred by Lindgren Bros., deserve a high place among show quality egg producers.

MAURICE F. DELANO

*("I shall never cease to be fond of the golden buff color"
Maurice F. Delano.)*

BY GRANT CURTIS (Dec.1922 RPJ)

In 1889, Mr. Delanos' father (Charles) was in a grocery business at Troy N.Y. A woman from the nearby countryside gave young Maurice some baby chicks. Thirteen were buff colored and three being Light Brahmas. Maurice fell for those little golden beauties. They had black tails instead of buff and there were other things about them that did not belong to self-respecting Buff Rocks. Buff Rocks had not yet been admitted to the Standard. Maurice's first love, he never got over the special fondness for golden buff color in the plumage of a well-bred fowl.

Maurice Delano is a man who dared, back there when Wm. Barry Owen departed this life, it was a courageous act for Mr. Delano to purchase the Owen Farms poultry establishment—the largest of its kind in the world, and to assume personal management of it as the owner of the business. Mr. Delano has proved to be the right man for the place. Fact is, he is the only man who could have undertaken it with a reasonable chance of success, the backward times duly considered. For years he had been closely associated with Mr. Owen as farm manager, in complete charge of the fowls, including selecting and mating and it he who had prepared all birds for exhibition, etc. Moreover, Mr. Delano had been in the standard-bred poultry business from boyhood. Since graduating from the Boston School of Technology he has engaged in no other work—has followed no other profession. Truth is, we do not know of any other man in this country or Canada who is better posted on the leading popular breeds of standard-bred fowl than Maurice F. Delano.

It is not alone a matter of "knowledge" with Mr. Delano. Additional to this he is a man of character and high ideals. He is in the poultry business "for life," so to speak, and as owner of the Owen Farms poultry establishment he is building a broad foundation on that basis. Forty-two years of age, he has the best part of his business career still ahead of him and is determined to make a worthy success of it. Said he, at the Boston show:

"In dealing with customers of Owen Farms I make it an invariable practice to look ahead five to ten years. I want Owen farms to be known and trusted in every community where choice poultry is understood and appreciated. In dealing with customers I keep this point in mind constantly. If a friend or neighbor of my customer in any community buys somewhere else this year,

there is a good chance of his buying from Owen Farms one, two or three years hence, provided I treat my customer well, because these pleased customers find personal satisfaction in their good fortune and they make practice of telling about it, time and again. This truly is profitable advertising and I have found that It continues to bring trade year after year: asked about the state of season, Mr. Delano said: "Last summer it was dull, very much so, but by early fall there was a noticeable improvement and November proved to be the best month I have had since I bought the Owen Farms poultry business. 'My cash receipts were \$5,100 and I am booking a fine lot of egg orders for spring delivery. During the late fall and the fore part of December I sold three orders that were very encouraging, the times considered. For ten choice birds I was paid \$1,000; for another string of a different variety I received \$1,500, while the third order was for \$2 Th. In every case these were high-class birds, sold on the basis of satisfaction guaranteed and my customers were much pleased.

"Better still, in an important sense, each one of these orders was a 'repeat order.' What I mean is, these same customers had bought from me the year before. These three sales illustrate clearly the value of the Owen Farms' business policy never to have a dissatisfied customer if we can help it."

Asked which of the varieties he handles are most in demand at this time, Mr. Delano said: I have had the best sale in Rhode Island Reds here lately. I refer to last year. Next have been the White Rocks and I think they would have equaled the Reds if I had had as many birds. Next in order come the Buff Orpingtons, White Orpingtons and White Leghorns. This was last year, mind you. For the present year the Leghorns will pass the White Wyandottes and crowd the White Orpingtons."

White Leghorns are a new variety at Owen Farms. They were added to the list three or four years ago. Choice specimens, representing the best blood lines in the country (Dan Young), were purchased and during the last two years Owen Farms have exhibited these birds at Boston in strong competition, winning their share of the prizes. At this season's Boston show, January 11-15, 1916, Mr. Delano's winnings on White Leghorns were: 1, 2 cockerels; 1, 3, 6 exhibition pens; 5, 6 cocks; 2, 3, 5 pullets; special for best three cockerels and special for best three pullets. Owen Farms produce about eight thousand line-bred, Standard fowls each season. January 14th, the date of this interview, Mr. Delano reports I that he had thirty-six to thirty-eight hundred head, including hundreds of extra choice birds reserved for breeders. Their mating list for 1916 was to be out early in February. It will be sent to R. P. J. readers free on request, post paid Owen Farms accept orders for day-old chicks, but do not advise their customers to buy them. Said Mr. Delano." In my best judgment, based on experience and observation, this is an unnatural method and as a rule it should be limited to utility stock of a low value, except perhaps during the very best shipping season, say in May and early June. The danger of chilling, or partial chilling enroute is too great for really valuable chicks."

The foregoing statement as regards the purchase and shipment of truly valuable standard-bred chicks agrees with the experience and belief of the editor

of R. P. J. Where long distances must be covered, we strongly advise against the purchase of expensive, high-quality day-old chicks during March and April. We feel that this advice should be given to our subscribers. Persons who buy costly day-old chicks in the northern tier of states or in Canada for shipment during March and April should understand that they do so entirely at their own risk.

A TWENTIETH CENTURY POULTRY FARM

BY GEO.W.TRACEY (about1911)

GEO. W. TRACEY, AMERICAN POULTRY WORLD REPRESENTATIVE, REPORTS THE MARVELOUS DEVELOPMENT OF THE POULTRY BUSINESS AT OWEN FARMS. MAIL AVERAGES 1,000 LETTERS PER WEEK. POULTRY INDUSTRY OWES MUCH TO WM. BARRY OWEN. EXPERT BREEDERS IN CHARGE OF DIFFERENT VARIETIES

Much has been written concerning Owen Farms and Wm., Barry Owen that it seems superfluous to give an extended history of this noted establishment and its owner, but it must be kept in mind that the clientage, so to speak, of a poultry journal keeps constantly changing. An interesting article in one issue is still news and information three or four months later, to a host of subscribers that have been added to the subscription list of a popular and constantly growing poultry journal. Especially is this true of AMERICAN POULTRY WORLD. Since this time a year ago, 30,000 names have been added to its subscription list. Many of these new readers are taking a poultry journal for the first time will breed poultry either for business or recreation. For the benefit of the latter class, this article will be devoted to a few things in connection with the greatest poultry establishment in the world. Wm. Barry Owen, the proprietor of Owen Farms, is no sentimentalist; he has undertaken the establishing of a business devoted to the breeding of Standard-bred poultry. We might say the poultry business was in Its Infancy when Mr. Owen took it up. At that time there were plenty of wealthy men breeding poultry, but they didn't let the world know much about it. Mr. Owen's forceful personality and what he had to say about Owen Farms and the men who were connected with it, the breeds and their business methods, as expressed in his advertising, made great 'Impression on all who read It. 'Mr. Owen divined that if there was no demand for the breeds he was keeping for himself or for other breeders, the demand could be created and so by generous advertising he not only gave prominence to the breeds of his choice, but he also caused others who keeping other varieties to follow the wake, and the result has been manifested by the great increase of enthusiasts all over the country .To more fully realize this one has compare the poultry journals of the present day with the same journals they were at the period when I began advertising. A page was then a rarity, now the various journals fairly teem with advertisements of breeders who are doing sufficient business to use a page or to adequately advertise their breed or variety, and this generous advertising has

resulted in the elevation of the poultry industry to the present prosperous conditions.

As the poultry industry has grown, so has Owen Farms. Each year's business doubled that of the previous year up to 1910, when it was 4 times as large as that of 1909. These cold facts speak for themselves, while this wonderful increase in business is mentioned, not only for the benefit of Owen Farms but also for the benefit of beginners, who are about to purchase his or her first setting of eggs, or whom may be contemplating investing in a trio or pen for breeding purposes. The show record of Owen Farms at the premier shows of the Chicago, Boston and M.S.Garden, New York, clearly show that they were the show kings of the century. Every one conceded that they have produced more high-class show birds than any other one concern. But the question with many was, if we should send to Owen Farms for a sitting of eggs would we be able to raise the same quality of birds that were shown by Owen Farms themselves. This question has been answered many times in the affirmative by the great winnings made by the customers who have won many valuable prizes on birds they raised that were hatched from eggs purchased from Owen Farms. As a most conspicuous example can be mentioned the noted Buff Orpington cock bird that won first at Chicago, December 1909. This same bird also won first at Madison Square Garden a year later, and again this year, defeating the best American breeders, as well as birds entered by Mr. Bell, the leading English breeder. At Boston two weeks later, this bird again won first and was the sensation of the show. Thousands reading of his fame came to the Boston Show just to view this wonderful product of Owen Farms, hatched from a sitting of eggs purchased from them in 1908. This and hundreds of other instances should convince the skeptics, if there be any, that Owen Farms are absolutely honest in their dealings, that eggs purchased from them are from the same matings that they use for themselves. This honesty in dealing with their customers is what has led to the tremendous increase of the business.

The Immortal Lincoln said in substance that "you can fool some of the people sometimes, but you can't fool all the people all the time". Especially is this saying applicable to the poultry business. There have been instances where by flamboyant advertising, the American poultry public has been deceived, but history shows that deception and dishonest practices were soon exposed. With Owen Farms the policy of fair dealing and absolute satisfaction to every customer has resulted in not only holding old customers but also it has constantly added new ones. Formerly Mr. M. F. Delano, manager of Owen Farms, was his own stenographer and typewriter, but the present business has grown to such mammoth proportions, that it requires a force of 5 stenographers. What an extraordinary business and what a wonderful interest that the work of this office force reflexes: 150 letters a day, 1000 letters or more a week, in the busy season, and each and every one of these letters read and answered by Wm. Owen or Mr. Delano. Can you imagine any two-business men in the country that work as hard as these men? Mr. Owen is a wealthy man and it's far from

necessary for him to work in the manner in which he does, but his heart is in the poultry business and most sympathies with his customers.

We believe the thoughts that are uppermost in the minds of most of the readers of AMERICAN POULTRY WORLD at this season of the year is not how to construct a modern curtain-front poultry house, not how to best preserve eggs, not how to take care of July and August hatched chicks and each other unreasonable topics, but what will we do in the way of improving our present flock of chickens; will we retain the present breed or try some other, if so what breed will it be, and who will we patronize either in stock or eggs to further our desires or ambitions. It's always best to patronize the successful breeder especially when it is proven to you that your interests will be thoroughly safeguarded by such a breeder, and in recommending Owen Farms to your consideration we are confident that you will have no cause to regret having dealt with them.

The varieties bred at Owen Farms are White and Barred Plymouth Rocks, White Wyandottes, Orpingtons White, Buff and Black, and Rhode Island Reds, Rose and Single Comb. The marvelous success of Owen Farms can be attributed to the expert handling and scientific mating of each of these varieties. A noted breeder once said to me, in speaking of one who is undoubtedly the greatest force and who stands for the word progress with all its essentials in the Standard Bred Poultry Business, he owes a whole lot of his success to the fact that he has a happy faculty of surrounding himself with smart men. He knows one when he sees him, and those are the kind of men that are on his staff." The same may be truthfully said of Wm. Barry Owen. It's unnecessary for us to dwell upon the well-known men that Mr. Owen has in charge upon Owen Farms. Newton Cosh has a great reputation as an expert Barred Rock breeder. His experience with this variety dates back many years and it's none the less advantageous to his reputation to add that for years he was the main stay and advisor of much mourned M. S. Gardner. Mr. Cosh is also a close student of the Rhode Island Reds and has been called upon to judge this popular variety. Then there is Clifford Nickerson; no more faithful man ever lived. It does you good to see him at work with his favorites. His chickens are next to his babies, and he knows how to breed and raise them. There is no better-posted student of poultry breeding in America than Mr. Nickerson. Last but not least is Frank H. Davey, the latest acquisition to the staff of able men that Mr. Owen has surrounded himself with. Mr. Davey's fame as a judge and breeder of White Wyandottes and White Plymouth Rocks is worldwide. The birds that Owen Farms always feared the most, when exhibiting at Madison Square Garden, was the string bred by Mr. Davey, and this great flock has added luster to the crown worn by Owen Farms as leading White Rock breeders. It seems superfluous to mention the manager, Maurice F. Delano. His ability is cheerfully admitted, his name and fame, as a poultry expert is worldwide. We deem it unnecessary to write anything further in commendation of Owen Farms at this time. We will refer you to their advertisement in this issue. This advertisement gives a lucid explanation of everything you desire to know, as to their business methods and the prices of

eggs for hatching. In addition to reading this advertisement we request every reader of this article to send to them for their fine descriptive catalogue, from a perusal of which you will get a clear idea of the individuality of every Pen upon the place. From this catalogue you will learn of the many wonderful prizewinners that head their pens, also a description of every great female that is in the matings. Send for this fine book without delay and address, Owen Farms, 115 Wilham St., VineYard Haven, Mass.

NOTE: *Maurice F. Delano, died Nov. 4, 1960 at the age of 84. One time manager of Owen Farms. Master Breeder of Buff Rocks, Buff Orpingtons and R.I.Red. DJH*

IMPROVEMENT OF HATCHERY FARM FLOCKS

BY HERBERT H. KNAPP, Shelby, Ohio (about 1930)

In beginning this series of articles on the improvement and care of hatchery farm flocks requested by the editor of R. P. J., I should like to comment on the necessity that exists for spreading such information.

From boyhood Mr. Knapp has been a poultry breeder. He did great work in starting the International Baby Chick Association, of which he was president during the first five years, and has remained a director until this year. At Shelby, Ohio, he conducts a good-sized hatchery and for years has had about 10,000 good-quality breeding fowl in the form of farm flocks, under contract to supply eggs for his Hi-Grade Hatchery. Mr. Knapp always has made it his special duty to visit among his flock owners to help cull the flocks, supply better breeding males and give sound advice on care, feeding and business management. He understands the needs and opportunities of farm-flock owners

Some may inquire, "What is a hatchery flock?" It should be well known by this time, that the commercial hatchery is one of the most important links in the poultry chain. It is the greatest source of supply for replenishing the flocks of utility poultry. Two thirds of the laying flock must be replaced each year and five hundred million chicks are required to do it. The old hen process is entirely too slow and besides it takes the layers off duty too long. High production breeding has reduced the maternal instinct. The small home incubator took too much of the owner's time. Be the incubator ever so efficient, it finally is always up to the operator who soon realizes that artificial incubation is a science. One cannot depend upon luck and accidental good hatches. That is gambling and gambling is nearly always disastrous in the end. Witness the stock market! It was twenty-five years ago when a few far-sighted poultrymen realized that if poultry were to remain in the picture, it must become a specialized business. It could keep pace with other expanding industries only on a basis of quantity production and quantity production invited inferior quality. It was fortunate

indeed that there were among the pioneer hatcherymen those who could sense the need for quality. It was a hard fight for those men who could have made a fortune had they pursued the line of least resistance. There were many that did and they flooded the country with baby chicks of inferior breeding and mostly with no breeding at all. Money could be made distributing chicks at low prices cured on the open market. This was a serious menace to those hatcherymen who began with a breeding program to build up quality. There was plenty of business in those days for any and all who started hatcheries. The quality breeders required a longer time for expansion but they could secure a better price for their chicks and had no difficulty in selling all they could hatch. Being idealists, these hatcherymen had a desire to see the entire industry placed on a higher plane. Then came the organization known as the International Baby Chick Association. With this reference I will refrain from entering into any discussion of that organization to which I have devoted considerable of my time. Before beginning on the matter of hatchery flocks, I should like to make it clear in the minds of readers that there are two distinct classes of hatcheries—the large commercial plants with capacities which require 100,000 to 1,000,000 eggs from ten to fifteen varieties of chickens to fill them, and the hatcheries with capacities of 25,000 to 100,000 eggs all from one to four varieties. The latter type usually is operated by specialty breeders who supply high-class from eggs that were selected from the chicks for breeding purposes and for the stocking of commercial egg farms that depend upon high-production breeding. The specialist hatcheryman is necessarily a man who understands breeding problems. The breeder hatcheryman has the patronage of the larger hatcheries in building up and maintaining the quality of the flocks that furnish them eggs.

For keepers of Hatchery Flocks, this series of articles is intended to supply information that should be helpful to those who are keeping flocks to provide eggs for hatcherymen. A hatchery with a capacity of 100,000 eggs requires 10,000 to 12,000 hens to supply the eggs that go into the incubators. It usually is more economical for the hatchery owner to keep these hens in flocks that average about 200 birds. The farmer owns the flock and supplies eggs only during the hatching season, which runs, as a rule, from January to June. The price paid the flock owner is based upon a current market price at the time of delivery plus the substantial premium agreed upon, and this premium depends upon the quality of the breeding stock. The hatcheryman will accept no eggs that weigh less than 22 to 24 ounces to the dozen. This makes it necessary for the flock owner to dispose on the regular market of the underweight and ill-shaped eggs and those with faulty shells. A good hatcheryman in establishing a new flock will be particular to supply the flock owner with only the best chicks obtainable. He will also assist him by supplying such information as will be necessary to rear the chicks properly. It is a well-known fact, however, that there are still numerous hatcherymen who do not supply any helpful information to their flock owners and it is to such flock owners that my attention is directed and for whom this series of articles is intended.

It is the policy of this journal, and has been for many years, to do everything possible that will help improve the quality and profitableness of the American hen. The improvement of farm flocks supplying eggs to hatcheries presents one of the greatest opportunities in the industry, not only to improve the quality of the product but also to make farm flocks more profitable. The far-sighted farmer who cares enough about poultry to start 400 to 1,000 chicks each season should secure his chicks from high-grade stock even though he could buy an inferior grade for considerably less money. The saving in buying a cheaper grade of chicks is not a saving in the true sense of the word and in the end the purchaser usually will find that they have cost enough to have paid for the better grade. If you buy the better chicks your opportunity to establish a good hatchery flock and to secure a higher price for your eggs and surplus breeding stock is much greater. The rapid expansion of the hatching industry is creating an ever-increasing demand for good hatchery flocks. There are now thousands of such flocks and more and more are being started every year. It is to these flock owners that we shall direct our remarks in the articles to follow. If you, Mr. Flock Owner, will start with the first one which it is planned shall appear next month, and read each one carefully, I feel confident that the information will be helpful in making your flock more profitable to yourself and more satisfactory to your hatcheryman.

I believe every poultryman should specialize in some one branch, be it the production of market eggs, baby chicks, broilers, pullets, breeding stock or any of the other several branches of the poultry industry. There is money in each and every one of the special lines or men would not continue in them year after year. Do the thing you like best and do it the best you know how.

To sum up: Make haste slowly, use good houses, good equipment, good blood and common sense.

S. C. BUFF LEGHORNS

BY HERBERT K KNAPP, Shelby, Ohio, (RPJ Jan 1930)

You have asked me to give your readers some Information about what I am doing to improve my favorite variety, the Buff Leghorns. Years ago, when the Baby-Chick Branch of the Poultry Industry was truly in its' infancy and I became devoted to its up-building and development, I soon realized the great magnitude of this branch for the future and also what might take place on account of a scarcity of 'seed stock' with which to keep pace with the enormous development, therefore I resolved to fight for Standard-bred stock for the entire Industry. I was sure that the Baby-Chick Branch could not be built up on so flimsy a foundation as mongrel breeding stock.

Therefore, in founding the International Baby Chick Association, It became one of our chief objects to strive to obtain better and better Standard stock. My next step was to hammer away for the introduction of production qualities in so-called Standard exhibition flocks. I was told that the fancy and utility could

not be combined. To the minds of some of the fanciers, it was like the crossing of two breeds. But, Mr. Editor, It has been done, and without the sacrifice of beauty in either type or plumage color. John Martin did it with White Wyandottes, Arthur Schilling with White Leghorns, E. W. Mahood with Rhode Island Reds, etc. These men started with show stock, but by trapnesting and selection developed high-egg-production qualities, without the sacrifice of 'good looks,' as the saying is.

"In the case of my Buff Leghorns, I adopted the other course: started with birds that attracted my attention because of their good production qualities. Next I spent several years eliminating poor type and color. In that period I hesitated to cross in with other strains that might have improved the color but would have almost surely reduced the laying quality. That veteran White Leghorn breeder, Dan Young, once asked me whether in my opinion was better to start with fancy stock and develop production qualities, or start with high production birds of mediocre Standard qualities and improve the type and color by selection. My opinion still, is that one process is about as good as the other. The big point is that they both require years of time.

"When I first started with Buff Leghorns, they had the characteristic high tail carriage of a heavy-laying strain. The backs were short and bodies deep. In some cases the legs were so short that the birds waddled like ducks. The plumage_color was anything but right. Now, however, when I look over flock after flock of several hundred pullets each (totaling close around 4,000 S. C. Buff Leghorns) and see the uniformity of type and color, the nice long broad backs, the deep breasts and the large lop-combs that indicate good production qualities, I am sure it has all been worthwhile. The best indications how-ever, of the progress that has been made during these years of effort to secure the desired combination, are the hundreds of fine letters we receive from satisfied customers, some of them coming from as far as Cuba, Hawaii and Denmark." "The Standard-bred hen of today, to be highly profitable, must have the best of utility qualities. In our further development of the poultry industry, the beautiful must be made useful and the useful be made beautiful" H. Knapp, November 14, 1929.

HATCHERY FLOCK MANAGEMENT

BY HERBERT H. KNAPP, Shelby, Ohio (R P J Jan.1931)

Now that the breeding season is almost here, the hatchery-flock owner must see that his flock is in a good healthy condition and ready to be mated. If your pullets were hatched at the right time, say from the first of March to the middle of April depending upon whether they are of the heavy or Mediterranean breeds, the latter including all the Leghorns, they have all been laying long enough to be producing eggs of good Standard size. Pullets will naturally lay undersized eggs the first two or three weeks, or until the egg organs are

developed. Such eggs are unfit for hatching. These small eggs usually are fertile and hatch well if set, but they will produce undersized chicks, which rarely develop into Standard-sized birds. It is therefore necessary, if pullets are to be used in the breeding flock, to be sure that they are hatched sufficiently early to be full grown before they start to lay and that they have been laying several weeks before eggs are to be saved for hatching. It was believed at one time that all hatching should be done from hen eggs for best results and that eggs from the first season's (from pullets) laying should not be used. It is the opinion now of most breeders that chicks hatched from eggs laid by well-matured pullets laying Standard-sized eggs are equally as good as chicks hatched from hen eggs. In our own breeding work we find a considerable advantage in the use of eggs from hens that have completed one laying season or more. The first laying season will usually demonstrate the laying ability of a pullet. This laying ability may be detected by the trapnest or by one who is expert in determining the physical qualities of birds by handling at the proper time of year, preferably just before the molting season. The first of October the high-producing hen still retains her old feathers. Her abdomen is large, soft and velvety with a good spread between the pelvic bones, which are thin and springy. Her body is relatively deep and wide. The beak is short and well worn, as are the toenails. In the case of yellow-legged varieties the legs, feet, beak and skin have but little color, being faded to a pinkish white. Eye expression is important. In breeding our strain of S. C. Buff and S. C. White Leghorns we have found that in selecting breeding birds by trap-nest records alone, other valuable and important characteristics would be overlooked. A hen may lay an abnormal number of eggs, but they may be under Standard size. The most valuable market quality in eggs is size, assuming that they are fresh, of course. They cannot make the top grade without proper size. The hen that lays 300, 22-ounce eggs in a year is a dangerous bird to use as a breeder. The use of cockerels from a bird like that would ruin any flock.

All good characteristics should be considered in breeding. Health, vigor, type, color and size all are to be considered if a profitable strain is to be maintained. These things are not to be picked out of a trapnest. The trapnest is fine so far as it goes, but a lot of good judgment must be exercised in connection with its use when selecting breeding birds. Size and vigor are the first things to consider in making your matings. Vigor of course implies that the birds are healthy. By size I mean that undersized birds should not be used. If the pullets were hatched at the right time they should be right up to Standard weight. Short-legged, short-backed, runty birds make poor breeders. Birds that are thin and anemic should be disposed of. There was a time, a few years ago, when the breeders of the heavy varieties, such as Barred and White Rocks, made a practice of using oversized birds. These birds were not only very poor layers but they put on too much fat. It was not unusual to find such hens dead under the roosts. These extra-heavy birds are poor breeders and would better be sent to market.

In eliminating the off-sized and ill-shaped birds and using for breeders only birds of uniform size and type, it will not be long before very few of undesirable type will appear in the flock. Color is another factor that must not be overlooked in mating the laying flock. If your flock is one of the white varieties, your problem is comparatively simple. Occasionally in these, however, foreign color will make its appearance. It is only in recent years that White Wyandottes has been free from occasional dark feathers—which was a throw-back from their Silver Wyandotte progenitors. It will pay to eliminate from all white flocks birds that have feathers showing decidedly black spots. White is a serious defect in Rhode Island Reds, especially in the wings and tail. Buff varieties can be improved rapidly in color by careful attention in the selection of the matings. If breeding birds are allowed to carry white, brown or black feathers, the flock will never be that beautiful even shade of golden buff so much desired. Males with dark brown or reddish wingbows should never be used in buff varieties.

Males Are Half the Breeding Flock

While this may not be true literally or numerically, the males in a flock may be responsible for even more than half the results, both good and bad. A male with several bad defects could ruin a flock, while a high-class male mated to mediocre females would make a great improvement in quality. Especially is this true of varieties with intricate feather patterns. Even Barred Plymouth Rocks of common barnyard quality and almost devoid of barring, when mated to high-class males that are barred to the skin will throw youngsters that will look quite uniform in color with very decent barring. When it is considered that only one male is needed to each fifteen or twenty Leghorn females and twelve to fifteen of the heavy breeds, it readily can be seen that an investment in high-class males is the most economical way to improve the flock. The place to purchase these males is from a breeder of known integrity who has a reputation and understands how to get results. The most successful breeders breed in line. It is the only way a strain can be established. If you are supplying eggs to a hatcheryman and depending upon 'him for your chicks, he should give you chicks from the same strain each year. Do not be afraid of inbreeding. The only intelligent way to establish a strain is by constantly eliminating the defects and breeding in the desired characteristics. Too much crossing of strains results in the loss of established characteristics and years of patient effort. A good way for a flock owner to establish his own strain is to purchase chicks each year from eggs from his own flock hatched by his hatcheryman. Secure good males from the same breeder each year. Half the males (the best) may be used two years, making it necessary to purchase only half the number needed each year. Much of course will depend upon the culling and selection of the females each year. At least one half of the best hens should be saved in their second year. Your profits as a hatchery-flock owner will depend largely upon the number of eggs your hens produce and their quality. Your hens must be healthy, so be careful of the sanitary conditions in your laying house and around the chicken yard. Damp litter means colds and roup, hence loss in production. Keep the laying house dry and clean. See that mash troughs and water vessels are replenished daily. You

can buy the approved types of equipment cheaper than you can make them. Feed Is the Important Item In egg production. It always pays to buy a feed that contains in the proper proportion all the ingredients needed. It not only means more eggs but larger eggs and less culls. Hatchability will also depend largely upon the Ingredients In your laying mash. The two ingredients absolutely necessary to make good hatchability are milk and alfalfa, the latter being the more important.

LEG COLOR DILUTION

DANNE HONOUR wrote: 10/11/2005

I was wondering what is known about leg color dilution? I know there is sex linkage, and some colors/color patterns with feather dilution genes also seem to dilute leg color. Recently I am wondering if two doses of a dilution gene reduces the shade of leg color? I have some Buffs with rather light yellow legs rather than rich yellow or orange yellow legs. Would having white-legged ancestry have anything to do with it? I also have a friend with a similar problem in a White variety with yellow legs being very pale, not having anything to do with laying or age. How do you breed up the rich yellow leg color? Both of these stocks are otherwise good. Keeping within these lines and working with them is preferred. Outcrossing, if needed would be a last resort, as many outstanding other traits might be lost for the sake of a minor trait-leg color shade. However it is a fine point that would be nice to know what to do with. Thanks for any guidelines. Dan

Danne;

Yes the gene Inhibitor of Dermal Melanin (Id), is sex-linked and Id is dominant to id+ (non-diluted or melanized legs). Now, all that is in presence or absence of melanin. Willow is yellow with id+/id+, while slate is id+/id+ with white. White (W) and yellow (w+) are not sex linked. They are autosomal. It is clear though that there are tremendous variations in the saturation of the pigment. Now, we have all seen stark white legs, creamy white legs, and pinkish white legs. Also, we see bright almost orange yellow, medium bright yellow, pale yellow and nearly white they are so pale a yellow. My guess is that shade is determined by a factor or factors which intensify the levels of the yellow pigment (carotene) whether the birds are W or w+. This would be a separate factor(s) than W/w+ and could be RNA, a separate gene(s), and/or a modification of some kind. Yes, outcrossing to white leg definitely does this. I suspect that the real stark white or slate legs have intensifiers which remove the modification yellow factor making for W and absence of the other factor; stark white. The dark yellow legs would have w+ and the presence of intensification factors for carotene. If you have outcrossed to white, or slate, then you have picked up the absence factor and it has to be bred out with w+. To get it back, I would cross the darkest yellow-legged birds with another line with really dark legs and select from there. If you have set the w+ factor with the absence factor,

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

then you will be pure for pale legs. It is dominant to the presence factor. I don't have anything more direct, like gene notations and such, but this is what I have observed with these factors over the years. Hope this helps. Brian Reeder
10/11/2005

BUFF LEGHORNS

BY FRANK L. PLATT Sept .1911

Buff Leghorns in America have become second only to the White Leghorns in popularity. F.S.Smith of Hamilton, Ohio, has pictured his first cock S.C. Buff Leghorn at the great Kansas City show and his first pullet Cleveland Ohio show. To the majority of persons who do not raise chickens at all and to those who raise but a few each season, the statement that one man (F.S.Smith) raises 15,000 fancy and utility S.C.Buff Leghorn birds is most outstanding. Anyone interested in Buff Leghorns that will give you quantities of eggs write Mr. Smith.

MARCUS DAVIDSON –MISTER BUFF

BY D.J.HONOUR 1977

I met Marcus at his place in Bath, Pa. in 1976. He was past the age of 80 and was just about through with his breeding career. He still had some birds and I looked them over good. It was evident that because of his health, his birds and poultry houses were not in good condition. I did buy some Buff Leghorn large fowl. They were small in size and fair in color. I did learn that he bred from ten pens of Buff Leghorns, and over the years they were one of his chief breeds. The birds I saw were close to a medium buff color with a light buff quill and under color. Marcus said he knew the value of strength of color, but too strong or dark shade tends to be not as even. The lighter shade was the color that ran more even and looked good for showing. When these light birds are used in the breeding pen, they are too light to make the most useful color breeders. They run too light and the color would run out to mealiness, or white.

Marcus advised to compensate the light and dark shades in every mating but within very limited color ranges. Have the male's breast color match the female's back and strive for evenness of tone. The less the extremes differences, the smoother the blending in the offspring. Keep in mind color breeds out. Have some excess of color somewhere in the strain at times. Marcus said in his early years (1915-1920's) he worked hard to develop a top line of Buff Rocks. He had upwards of 24 pens put together with great care and thought. After getting the buff color in Buff Rocks as fully equal to Buff Cochins, he could use his Buff Rocks to improve and strengthen buff color in his other buff breeds. This was better than the old practice of using Buff Cochins, as Buff Cochins made stubs and loose feathering too troublesome. Marcus stayed in the area and used lots of

local grown grain as well as dairy products like buttermilk and whey. He keeps lots of trees like Black Walnuts for shade as well as berry bushes, and weeds, like pig weed, morning glory, and grape vines. It was a treat to see what remained of Marcus Davidson's breeding program and to meet a noted breeder of buff poultry.

BUFF COLOR

BY MARK PETERSON

(Written for the Australian Plymouth Rock Club)(Cochin International Newsletter August 2001)

Where to begin is a question in itself so I will give some background on myself and any qualifications that I have a right to pen this article. My first fowls that I raised as a young man were Large Partridge Cochins. I worked with them for about four years. Somewhere along the way these birds picked up Pullorum Typhoid and as nice as they were they had to be destroyed. So went my career with Partridge Cochins. Liking the Cochin Breed itself, I next was able to secure Large Buff Cochin chicks from Arthur Manly in Fresno, CA. This was in the spring of 1968. So I started my journey with Buff colored fowl. We should back up here just a minute and as a footnote, say that Arthur Manly was a good friend of Marcus Davidson of Bath, PA. He secured his breeding stock from Davidson.

Marcus Davidson was the foremost breeder of the buff colored birds in the U.S.A. at that time. In my opinion probably the greatest breeder of buff colored birds we will ever have. On his farm he raised all Buff colors of birds: Cochins, Orpingtons, Rocks, Leghorns and Minorcas. My first trip to his farm was in the early 1970's. At that time Marcus was in his late seventies and had primarily Large and Bantam Buff Cochins, Buff Leghorns and a few Buff Rocks. Upon our visit we discussed, at length, buff colors. From the seminar he was conducting for my benefit, I obtained as much information as I could. Marcus Davidson was a very humble person and was totally unselfish with any information that he could convey that would help me with my breeding program.

Here is what Marcus Davidson told me about buff color and since that time it has been my goal in trying to breed good buff color. The shade of buff that you desire to reproduce doesn't make any difference whether it's a light shade of buff or a darker shade of buff as long as it's even. By even I mean the hackle, the breast, the saddle and under fluff. As for the under fluff or under color the lighter the surface color, the lighter the shade of under color will be, the darker the surface color, the darker the under color will need to be. Under color will be the hardest to keep in the hackle, as it always wants to get lighter in that area.

It has been my experience that the darker your shade of buff becomes the more pepper you will get in the tails of the females, and the males can get to the

point where they will get solid black tail feathers. In these birds you will more than likely have outstanding under color good right to the skin. This is true even in the hackle area, which we said was hard to achieve. On the whole these birds for the most part will be too dark a shade of buff bordering on reddish, especially in the males. The females however may be useful if you are trying to darken your birds in buff color. I will say here that in a breeding female with good body type, I'm not afraid to use one with some pepper in her tail feathers as I think it helps with the under color. But for show purposes she would be discounted for this.

Now on the other hand if your birds are a lighter shade of buff you will need to guard against the opposite of pepper in the tails. This will be light under color and signs of white in the primaries and toe feathering in Cochins. In Plymouth Rocks I've found with the light color buff you also tend to lose leg color with this light surface color. You will also usually have poorer eye color, particularly in the females, but will eliminate the pepper in the tails, especially in the males. When breeding the lighter shade of buff, pay close attention to the quill color in the primaries. Use birds that have as good a buff quill as possible. This I have found will also help hold your buff color and keep the white out of the primaries. I've listed some things to watch for with both the darker shades and lighter shades of buff. Ideally a good medium shade would be perfect, but this is where the challenge comes in trying to keep your medium ideal buff color. My experience has been that it's easier to lighten the color than darken the color, especially with females.

I've had even more trouble with Buff Plymouth Rock females holding their color. It may be because they lay eggs at a younger age than the Cochin Females do. From whichever shade of buff color you choose to breed be careful not to breed from too much of an extreme color difference. By doing this you will probably be all right with the males but the females will be mealy. Their color won't be a nice even shade of buff. Instead will look dusted with cornstarch or flour. To avoid this we need to go with only small color differences when trying to make your shade of buff a little darker or lighter. I think this keeps the shafting out of the feathers also. Shafting once you get it is hard to get rid of, so I always select away from it if possible. This may be the place to mention that shade from the sun will help keep the buff color that you have bred. When I visited Marcus Davidson all those years ago I thought his place somewhat overgrown with tall horse weeds we call them, about 8 feet tall and big wide leaves. It looked overgrown, but that was the idea. They made a perfect sunshade and his buff colored birds were a beautiful even shade of buff color. How he ever caught a bird in that tangle, I never figured out, but they had great color. So some good shade will help you keep the evenness of color, especially in the females, as they seem to bleach out the most from too much exposure to the sun. Here again I think it's compounded when they are laying eggs, as not only do they lose skin pigment and eye color, they also lose some feather color. I've come to the conclusion in my 25 plus years of breeding buff colored birds that if it was that easy to do, more people would breed buff colored

birds and the color would be more popular. I like all colors of birds, even if I'm partial to buff colored birds, I think that I've come to appreciate a good colored bird even more over the years as I learned the complexities and difficulties of breeding a colored bird. In closing I hope that I've answered some of the questions surrounding buff color that you may have had. I tried to keep with some of the basic things that I look for and personal experiences that I've had breeding the buff colored birds. Nothing beats some trial and error. After all these years every year is still a learning experience for me. Some years you take two steps forward and the next year one backward. It just takes determination on your part to reach that elusive goal of the perfect type bird and the color you have been striving for.

THE BUFF LEGHORN

By T.W. STURGES (1911) *The Poultry Manual*.

The Buff Leghorn came to us from Denmark, and the first exhibit in England was in 1888. When I first began my Periodical visits to the Crystal Palace shows, nearly twenty years ago, they were few in number, but they soon caught the eye of the Fancy, and were fairly popular before the Buff craze set in with the introduction of the Buff Orpington in 1895, though they do not seem to have taken the same hold on popular esteem.

The original Buff Leghorn was not what we understand by a 'Buff' today. In the words of Mr. Verrey one of the oldest exhibitors "The cocks were of an almost cinnamon color on and back, with a lighter hackle; the tail feathers were white in the center, margined round with an edging of buff, the effect being very striking." In the desire to improve the color of these "Chamois" or "Yellow" Leghorns with their white tails and open white-laced feathers, resort was made to the Buff Cochin, the fountain-head of buff color. The details of the crossing, which thus took place, are narrated by Mrs. Lister Kay, in Mr. Harrison Weir's book, *Our Poultry*. Having Purchased Leghorns from Denmark a cock and two hens - she mated the cock, which is described as of "lemony color", with a poor comb standing off the back of the head at an angle of 45 degrees, and with two flights almost white, and squirrel-tailed, with two Buff Cochin hens, and also with two leghorn hens. Details are given of the breeding for eight years, 'til Leghorns were produced in 1893 with only one part Cochin and thirty-one parts Leghorn, showing how the Cochin shape had been bred out while the loveliness of the color had been retained. The labor involved in this breeding was enormous, and I know of no other instance in which the public has been admitted to the confidence of the breeder as fully as in this case. The hundreds of birds bred not fit for show were either killed or exported to America, and for many years, 1892-7, Mrs. Lister Kay carried all before her in the show pen. The desire to be on a level with specimens led fanciers to import birds back from America, and with the new blood thus obtained the number of breeders rapidly multiplied. There is little doubt that the Buff Rock was

introduced by English breeders both to maintain color and size, and in recent years specimens have been shown bearing, in the more bulky size and shape, evident traces of this cross. The breed, however, never became very popular, and although a club has been formed for its advancement it does not seem, to make much headway. I have bred them for twelve years, and while they are excellent layers I do not find them equal to the black or the white, and they are not so hardy. The Club has recently set its face against the demand for increased size, being determined to keep the breed true to the Leghorn type. For some reason or other, good combed specimens are rare. The original stock was weak in this respect, and the small comb of the Cochin has left its mark, more especially in the pullets.

Utility Qualities.

For egg laying they are above the average, and the eggs are a good size, although usually slightly tinted in color due to the distant Cochin cross, as well as to that of the more recent Buff Rock. They are very timid fowls and seem to have forgotten the slow-moving instincts of their Cochin ancestors. To those who love the buff color and a well filled egg basket they can be recommended, while the exhibitor will still have his hands full to maintain the color and improve the head points.

The Color and hints on mating of Buff Leghorns.

The color should be one even solid shade throughout, though it may vary from a lemon buff to a rich orange shade. The rules for breeding are the same as for Buff Orpingtons, to which the amateur is referred. The cinnamon color still shows itself and is an undesirable shade. The points to bear in mind are: 1. That there is always a tendency to loss of color, as in all buff breeds, and that to breed good cockerels the hens should be a deeper shade than the desired tint, and conversely, in breeding pullets the male should have a reserve of color to impart to the pullets. 2. That undercolor is a matter of the highest importance. If neglected white tails and flights are certain to come. 3. That color should be infused gradually, i.e. the sexes should not be of extreme shades, or patchiness is sure to result.

Mating for Color.

There are fashions in color. At one time, not unreasonably, the darkest birds were all the rage. There is a great tendency in Buffs to breed lighter each year, and if two Buffs of a very soft, light shade are bred together, some of the progeny will be almost white, and very many of them will have white feathers in flights and tail. The present day tendency, which has prevailed for the past five or six years, is to go for very pale colored birds almost of a lemon shade. Such birds are very handsome, but they are comparatively of little value in the breeding pen unless mated to birds of a darker shade than themselves. The old Standard said "Clear, sound, even dense buff to the skin from lemon to orange (not red or chocolate), allowing a little richness in top color of cocks". The

words "lemon or orange" have slipped out of the present standard, but "any even shade of buff" still holds good. If a good soft medium shade, like that of a typical Buff Cochin, were more in favor, there would not be the difficulty in breeding good specimens of both sexes from the same pen. As it is today, it is almost necessary to have two breeding pens, one for cockerels and the other for pullets. This is detrimental to any breed. As a matter of fact, it will be found that at the great classic shows it rarely happens that the winners in the two sexes come from the same yard. It is more common for one to win the chief prizes in cockerels and another in pullets. Certainly the breeder who has limited space or limited means will be better advised to concentrate his money and his energies on breeding exhibition specimens of one sex, although it will be at once apparent that if one man can breed good pullets and another good cockerels, the same results would follow if the respective pens were concentrated in one yard and mated as they are in the separate yards. It is difficult to advise on the best way of mating, since methods are various and nature is capricious. Besides, what answers one season may not answer in another, and, strange as it may appear, mated pens that breed well in the beginning of a season may fall away in the end of it, or vice versa.

There must, of course, be a reason for the elusiveness of buff coloring. Sometimes this is easily accounted for, especially in large pens containing seven or eight birds, by some hens being much better layers than others, and the difficulty of knowing which hen is laying (unless trap nests are used) at one time or another. But I do believe the health and stamina of the birds has much to do with it. If the cockerel is especially vigorous his coloration prevails and if the hens or pullets are especially fit and in good trim, so their color is more certain to be imparted. Again, at the beginning of a season, if the cockerel has not been over-shown, he is more powerful in the color line than later on, when his energies have been dissipated. Hence the advisability of a rest from time to time to renew his loss of coloring matter. For the same reason I hold that a cock cannot be depended on for the same amount of color as a cockerel. This may be an advantage, at times, if he has been too harsh in color as a cockerel; and the same holds true of the hens.

I should hesitate to lay this down as an absolute law, but observation convinces me that there is something more than mere fancy in it. It is an undoubted fact that most buff birds lose their individual color with age, and molt lighter each year, though there are exceptions to this rule; and, further, that the progeny of any birds of any given shade are usually lighter than the parents; and I see no reason, therefore, why this loss or accentuation of color should not vary during the mating season, owing either to the health of the bird or to the coloring pigment having been temporarily exhausted. This tendency to loss of color leads to a statement of a general law for mating.

Mating for Cockerels.

Choose a cockerel of the shade you desire for the show pen, if you can get him. The fashionable shade is at present nearer to the lemon than the orange, but

a good medium, rich, golden shade, without any suspicion of redness, is the best. Avoid bay colored wings, or deep cinnamon flights; see that his under-color is sound. When the feathers are lifted, see that the shaft of the feather is buff, and of the same shade as the feather, and that it is buff right to the root, or as near as can be. The flight feathers should be buff and not tinged with white (a frequent fault with the paler shades), and if possible the covered part of the secondaries should be buff, though a little sprinkling of black here is not a serious defect. If you can get it see that the neck hackle feathers are also of sound color underneath. The most common failing is for these to be buff only on the surface and to be washy underneath. If he has a red eye so much the better. In type and size let him be as good as you can procure. To a cockerel as near like this in color, etc., as you can find mate three to six hens or early pullets, a shade or two *darker* than him-self, but not more. Too great an infusion of color will only lead to unevenness in color, which will manifest itself on the wings of the cockerels bred from him. The under-color should again be noticed. A medium under-color with a buff shaft is best. If too dense, the excess of color will show itself. If too light or white, even though the top-color is darker, the progeny will be splashed, and white flights are sure to be present. Mealiness is a failure in the soundness or evenness of the color of the feather, as if the buff color had been finely sprinkled with flour. It is most commonly found on the small wing-coverts of the pullet or hen and is put down as a serious defect. It a singular fact that this fault occurs most frequently in the pens which breed the best and soundest colored cockerels. I have sometimes examined and found as many as 75% of mealy pullets bred from a pen, which has produced a large proportion of winning and high-class cockerels. If a bird is good in other ways, and the mealiness is not excessive, I would not hesitate to mate it with a sound colored cockerel for cock breeding. But a mealy pullet never, so far as I know, breeds a sound pullet.

Mating for breeding Buff pullets:

In this case the pullets should be chosen as near to perfection as one can get; of a soft medium shade, quite free from mealiness, sound in top and under color, and quite free from smuttiness. Let them be as large and typical as possible, remembering that you must have large stock birds if you are to breed large chickens. The pullets bred will resemble their parents in size and color, and in a great degree type also, if well mated. As there is a tendency for the progeny to come lighter each season, mate up hens, if you can find them, which have kept their color during and after the molt. There are a few examples here and there to be found where the hens molt out as fresh and sound as a pullet. These are invaluable for breeding good stock of either sex. The cockerel to mate with, for the purpose of breeding pullets, should be a shade darker than the pullets, to compensate for loss of color. Take care he is not red in the wing, or harsh in tone of body color, but he may well be a shade darker than the fashionable show color. If he is a brother of good show pullets so much the better.

Soundness of under-color

The great point to look for when mating stock. Birds may look very well and yet when handled may prove to be nearly white in under-color. This indicates a lack of coloring pigment. In this case, like will not produce like, even as far as top-color is concerned; but most of the progeny will be mealy, or patched with white on the secondary feathers, or white in the flight feathers or tail, and perhaps in all these parts. If one has pullets like this and is content to improve slowly, then a sound under-colored cockerel may show improvement in some of the stock.

Preserving the Buff color

Little more remains to be said, except that it requires as much pains to preserve the buff color when it has been bred as to breed it. Exposure to sun and rain quickly puts the best-colored pullets out of condition, though cockerels stand the elements much better. Most of the exhibition specimens that grace the show-pens in the autumn have been carefully sheltered from the rain from the age of about four months, when the chicken molt begins. They may be let out early in the morning and towards sunset in the evening, or in well-shaded runs they may be out during the day. To allow a bird to get wet with rain, and then be exposed to the hot sun to dry, quickly fades the feathers, on the back and saddle especially; and the feathers show a faint fringe or lacing of a lighter shade. Yet it often happens that fanciers of limited means and small covered runs grow and exhibit some of the best.

Weeding out the chickens:

Even at the time of hatching some wasters can be detected. Any with fluff on the shanks, or deformed toes, or with a dark patch of color on the head, especially if with a striped back, like a newly hatched Brown Leghorn, can be put to one side, as also any hatched with side spikes to the comb. Birds of a medium shade of buff are likely to be the best. The fluff at time of birth is a good indication of the future under-color. A chick with light fluff, indeed all shades of fluff, will come darker with its first chicken feathers, and darker still when it puts on its first adult plumage at about four months; and at each molt afterwards go lighter. Chicks with much black in the flight feathers can be discarded, as this never grows less. But white in the flight feathers up to three months old often comes a pure buff with its final chicken molt. If this molt is any way retarded through cold or weakness the adult feathers may come with a light tip, especially in the wings. Some breeders assert that this gradually becomes buff as the bird develops. I have not found it so, though I have known a cockerel with sound under-color, but white in the flights, molt his adult plumage in the second year quite a sound buff, as also in the case of early hatched chicks in their second molt in the autumn. But I have never known any which show signs of white in the secondaries cast it off afterwards, and these are of no use except for utility purposes. Cockerels which look a typical shape at three months

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

often grow very lanky when passing through the molt, and until six months or more, and then "come down" as it is called, and make large typical birds. A cockerel which develops its' plumage slowly often makes the finest adult. Pullets showing mealiness never improve, and can be put on one side as layers only. Every breeder knows to his cost that many which seem sound at first often develop this blemish at later stages. Not every promising chicken maintains its place, and the weeding process has to be long continued. Yet the sooner it is begun the better the chances for the rest. Black in the early stages and white in the later are most to be feared.

SINGLE COMBED BUFF LEGHORNS

BY DR. L.E.HEASLEY 1925

Nineteen years ago I suffered a physical breakdown in a dental office and sought health and a new occupation. Between the doctor's regular scheduled treatments, I unconsciously found rest in spending my spare time with the farm poultry. It was a flock of S.C. Buff Leghorns. I suddenly awakened to realize that a new interest held me fascinated. They were now to me, living individual identities, seen by a now trained scientific mind. I followed a "natural instinct" and found myself trying to locate the best layer and best-colored bird in the flock. I entered a laying contest (Mountain Grove, Mo.) in 1913-1914 and made egg records then above 200 On birds that also won first places in the shows. A disastrous fire at the poultry plant, wiped out the main buildings and nearly 1000 choice birds. I then worked as Assistant Professor of Poultry at Michigan Agricultural College and Federal Agent in Animal Husbandry for the U.S.Government. I left the latter position to take charge of the breeding work at Ferris White Leghorn Farm.

During the last few years, while working with White Leghorns (in business again for myself), I was able to mate up each year some of our own old original strain of Buff Leghorns. These Buffs are a great improvement over those we had before the fire. The Buff Leghorn, as a variety, is decidedly better than their popularity and numbers would indicate. The longer I breed poultry, the more I appreciate the wonderful economic and artistic qualities of the better-bred Buff Leghorns. They make a beautiful carcass when dressed out and make a beautiful appearance when dressed up for show. Their beautiful plumage requires no washing to exhibit. They are known as "easy keepers".

ALL THREE PARTS

MY STRAIN OF BUFF LEGHORNS

By D.J.HONOUR

From: Brian Reeder 2/24/2003

Danne Honour has been breeding buff leghorns since 1973. Anyone interested in buff or Buff Leghorns should talk with Danne. He is very personable and knows his stuff when it comes to buff. I have been asking him to write a bio for us on his buff breedings from the beginning in 1973. He has just sent me an article he wrote in 1981 about the beginnings of his breeding efforts with this variety. It is a very informative and enlightening glimpse into the resurrecting of a breed variety and the efforts and struggles of bringing devolving breeds back to soundness. It is also a testament to the efforts of real breeders, and what we often go through in saving strains. Anyone who has seen his strain of buff leghorns as they are now would not recognize them as compared to the description in this article. He has truly succeeded and resurrected this variety and his current birds are testimony to his skill, persistence and effort. Thanks Danne! Brian.

Mr.Honour, You have got to be the Buff Leghorn King! These pictures show the birds to be big and strong. They must be on the large side. They have every appearance of being robust, strong, and healthy and big for their breed. The ones I see from time to time are smallish, very elegant, but not powerhouses as yours appear to be. I am wondering if what is out there that would help you or hinder you.

Richard Schock 12/12/2003

PRODUCING A STRAIN OF BUFF LEGHORNS -PART ONE -THE BEGINNINGS

BY DANNE J. HONOUR 1981

I started breeding Buff Leghorns in 1973, and it proved to be a real experience and not all pleasant. I found it was not possible to continue with any strain or bloodline. Inbreeding and the lack for breeders resulted in a very delicate variety. Some birds I found fair in some traits, but none were vigorous or productive. All were undersized. Most females were too light in color, and yet males carried dark red sickle feathers. If I did not get eggs from pullets, I rarely got an egg from older females. The eggs were often not fertile or else would not hatch. The young got sick very easy, and I could not inbreed at all, or the vigor was even less.

I continued on with a handful of offspring each year. I had to stop all inbreeding and I had to cull most heavy by not letting any weakling live, and to cull even those of medium health. I culled every old hen that did not lay at least a few eggs the year before. I practiced survival of the fittest and few lived. This strain had nice large white earlobes, and a wide feather; color was fair and type was fair. I was determined to at least save the wide feather and nice earlobe, if nothing else. Size was too small and egg production was poor. I had to get fresh

blood. I did not know of any good strain of Buff Leghorns and I was afraid to use either White Leghorn or Brown Leghorn. I did not like the slow-feathering and poor combs - poor type that other breeders got when using Buff Rock.

I decided to use three Buff Minorcas females with my best Leghorn male. I got a nice lot of chicks as the Buff Minorcas layed decently. From this cross I picked out about four of the best pullets, and backcrossed to another Buff Leghorn male (not the father but a bird of similar breeding. I got some fair pullets with yellow legs and mated them back to their grandfather. In type this next bunch ran mainly of Leghorn type, but a few came with coarse combs and males that lacked in tail furnishings. By now the vigor was much better and I got better layers. I had continued to cull for vigor and the birds had to 'rough it', and they had to live through rather cold winters with limited protection; but by April (without lights) the females would lay and the eggs hatched well. I stopped backcrossing as I thought maybe the poor egg production and low vigor would return from using the pure Buff Leghorn. At this point I was able to raise a good number and could cull extra hard for type, color and size. I could then pick both males and females from my small general matings.

Size remained good, but I am not sure if the better vigor or the Minorca blood helped. In egg size, it remained mostly Medium with some large. The pure leghorns layed mostly small with a percentage of Mediums. The Minorca blood added a little longer back, as the pure Buff Leghorn was really too short in back. The Leghorn type, egg size, and body size seemed to dominate more than I thought it would, which was what I wanted anyway. I later learned that F. S. Smith did the very same thing I did, using Buff Minorca. Smith produced his famous Large-typed strain of Buff Leghorns in this manner. I was able to continue breeding Buff Leghorns thanks to the Minorca outcross. I produced two Champions in Buff Leghorns with my strain. Cyrus Lewis told me he used White Leghorn (a hen) and backcrossed to a Buff Leghorn male for two generations. Then bred the third generation among themselves. He bred some good ones, but this method does not seem to work when using a White Leghorn male. I am sure this method of using White Leghorn is very hard, and something few breeders would follow through.

PRODUCING A STRAIN OF BUFF LEGHORNS

Part two 1981-2003 REAL BREEDING

BY DANNE J. HONOUR

(March 2003)

In the early 1980's, after getting some vigor and egg production in my Buff Leghorns, I set out to make some serious improvements. It was the only breed and variety I had by then. Dan Boone Sr. wrote me after seeing my ad in POULTRY PRESS in 1980. He said he wanted some Buff Leghorns. He had them in the 1950's after he got out of the Tosa Fowl (Phoenix), his were Marcus Davidson breeding. He got some more from Davidson in the late 1970's, but they were small and lacked vigor. Dan's son was interested in the Buff Leghorns

and Dan wanted some of mine as a birthday gift. I had a few days off work and took the birds up and planned a visit. While there, Dan thought I should look up C.C.Fisher and talk Leghorns with him, as he too lived in Vt. I decided I would. It proved to be one of the best things I had done. When I got there he had a small pen of Buff Leghorn standards that I really loved. They had a nice rich color, wide feather and good heads; they were like none I had ever seen. He however had none to spare. I gave him my phone number and address and said if you ever have an extra one please let me know, as I wanted something from them. He told me they were from the old George Rex line. I knew Rex had been dead some time, but Rex had liked a darker bird. Since these birds were so different and to my liking, I thought this bloodline was possible. I could not forget those birds and decided to work harder on those I had. Then about a year and a half or two, I got a letter from Mr.Fisher. His health was declining, and did I still want the Buff Leghorns. I went up to get them, he had an old trio and a young pair. The birds were not very productive, but I did get a number of chicks from the young male onto my females. I used that male and many of his sons, for the next few years, until I got the wide feathering, good heads, and medium color. C.C. Fisher died in May 1985 at age 85. I however was very grateful for those Buffs as they did me a lot of good. I worked with good numbers for the next 5 years growing out about 300 a year. Egg production was decent and I really had some fine colored buffs. Tail furnishings and type could have been better, so I started to work on those traits, not knowing just how to go about it. It was during the time period 1985-1989, that I did some crossing with Henry Ahlfs' profuse White Leghorns (dominate white) and CY Hyde' yellow legged White Phoenix (recessive white). These matings were done to try and get more tail and saddles. I have written on these crosses in other articles. At the same time I kept the Buff Leghorns going in the regular matings. It was in this time period that I became good friends with Mr. Marsh (Pioneer White Leghorns). Mr. Marsh would come up in Sept. or Oct. each year and go over all the birds with me. I had already looked the birds over and we would compare notes as we handled each bird. I not only enjoyed his visits; I liked having a fresh eye and opinion. I learned a lot from this. It was in the years between 1987 and 1992; I felt I had a truly good strain. I was producing regularly many very fine females with the type and color I was seeking. I was happy with them, but didn't think too many judges or breeders fully appreciated them at the time, but I knew they were on par with the better White Leghorns. I sold out of both large and bantams Buff Leghorns in 1994, mainly because of work, and had no birds. A judge and friend kept trying to get me back into them, so by 1999; I got a few large buffs back. I then called Dan Boones' son up to ask him something about his father, only to find he still had my old line of Buff Leghorns, he had not added a thing to them since 1986, when he last got some more of my line. I got two males and to my delight saw many of those old traits I liked (wide feathers and good heads) still in them. Once again the Boones' helped me out. Looking back the most important bird I have had was that young C.C.Fisher buff, as he stamped his trait into my strain. I have been active breeding them again for a few seasons. I still cull heavy for

vigor, and raise large numbers. It sure helps from a color standpoint when you have 50-100 males to pick from, for next year's use. I still like well-furnished long tails and saddles, and will select towards that. Those long tails and saddles add so much style and elegance to them. It is also the reason I breed Phoenix as well. Danne J. Honour

PRODUCING A STRAIN OF BUFF LEGHORNS

Part Three THE STRUGGLE FOR SADDLE AND TAILS

Comments added by Brian Reeder. Thank You Brian. (D. J. Honour)

Danne; I have gone through and made a few corrections. They are in parenthesis where they go and are highlighted and in red. Great work. Brian Reeder (Dec.2005)

BY DANNE J. HONOUR (Dec. 2005)

Over the years breeding Buff Leghorns, the elusive (well-furnished tail and long saddle) trait, has caused me much trouble. Not being able to produce this characteristic; and yet wanting to, caused me to investigate the matter in greater detail. It is interesting to note that even today in Europe (especially Holland and Germany) the heavy profuse feathered Leghorns with long saddles, are known as "American Type Leghorns", Dan Young's legacy from the early 1900's.

I had tried to get it in three ways. One by selection of those birds shows some tendency. Two by crossing in White Leghorns noted for it. Three by crossing in Phoenix. Looking back, I was on the right track. Two factors may have played a big negative part, buff color breeding and using the Buff Leghorn male line of decent. In buff color, buff has gold as one of its' genes, and gold is sex linked, hence the reason buff males were used. The buff color has several factors which combine to make buff, without most of them you do not have buff, with only some of them, only a poor colored buff. Backcrossing several times to Buff Leghorn males resulted in good buff color but also diluted the tail and saddle genes; as luck would have it. Each generation I was cutting by 50% the tail and saddle genes (*more precisely, in each generation such as this, you ran the risk of getting fewer recombinants with one dose of all the genes you needed*), by using males known to be void of tail / saddle length genes and having tail suppresser genes.

I recalled a conversation I had with Henry Ahlf a few years before he died. Henry's White Leghorns had long saddles and tails. I asked him if he ever outcrossed for new blood and if he did, did he lose the long tails and saddles? He said he did outcross once in a while, and to retain the saddle and tail, he kept his male line, and used a new female. Then would mark the chicks from this pair, would cull every male and also the hen. Then would pick the best pullets and mate to another of his pure line males with long tail and saddle. He usually would repeat this once more, keeping the females and using his old line of

males. This pointed out to me that the male line had something to do with this long tail / saddle breeding. I do not think sex linkage is involved here, but since it is such a sex expressed trait, males with the traits make a better selection. Males with the best saddles and tails may also have two doses (homozygous genes) and inbreeding helps insure these genes get passed along. Henry was inbreeding to his male line, to retain the long tailed genes.

I knew the long saddles and tails had found its way into White Leghorns from Dan Young (Henry Ahlf had Young's' strain), and Dan Young got it from the Phoenix breed. I knew Dan Young had used Phoenix at least twice. I do not know exactly how this was done, but two things I am sure. Dan kept this phoenix bloodline separate until he got specimens with correct white plumage color and yellow leg color, size, type, and wide feathers. He also bred numbers to allow inbreeding while at the same time allowing many combinations of traits to surface. Genes can re-segregate, then some individuals appear that are homozygous.

Conclusions; My methods worked for buff color but not for the heavy tails and saddles. Henry was able to keep heavy feathering by inbreeding and keeping the male line intact. Dan Young got it from the Phoenix breed, bred in numbers and allowed many trait combinations to appear. I decided to get some Phoenix, breed them to learn more on the genes. I also decided to breed Buff Leghorns by picking up pieces of my old line.

After having the Phoenix a while I met Brian Reeder. Brian was very helpful explaining the tail genes, as he knew them and saw them inherited. This was just what I was longing to know. Brian's help on color genes, etc., really was useful in my breeding also am going to include some notes and observations (these might prove a good starting point for further breeding). These are notes and observations thought to be good explanations and guidelines, which can be like sailing in uncharted waters. Future research and testing may prove some right, others wrong. Many of these ideas came from corresponding with Brian Reeder.

The tail has three separate tracts (tail, sickle and saddle) (*which segregate separately and thus appear to be separate genes*). There are also three gene complexes (Gt-growth gene, Mtpf-multiple feathering gene, and Nm-non-molting gene). You can have no dose, one dose, or two (*of each of these genes in each of the three sections*). Growth and multiple feathering are dominant, non-molting is recessive. Leghorns have the main tail suppresser gene. All the main tail feathers should be long in a bird with long tail genes (like Phoenix) and no suppresser, a foot –18 inches or more (*18 " - 2'*). The entire 14-15-16-18 main tail feathers all grow to over a foot (*over two feet*), without the suppressor gene present, not just the top two tail feathers. The long main tail gene and no suppressor gene (homozygous), tails grow 18-36 inches (*24-36"*) without non-molting. One dose (heterozygous) of the long main tail gene, tail grows 12-18 inches (*12 - 24"*). Long main tail gene is dominant. Normal tail with tail suppressor genes grows about six inches; the suppressor gene is dominant. Saddle length is recessive (*saddle length is actually dominant, but if there are*

saddle length suppressors, then it appears to be recessive, but it is actual a dual dominance segregant). Long legs are dominant (*this is the "skeletal extension gene" effecting the entire skeleton not just legs*). Wry tail is recessive. Extra main tail feathers can be from 8-12 on a side, normal number is 7 (*6 in red jungle fowl*) to a side. Extra number of tail feathers is a recessive with modifiers (*this is multiple feathering which is dominant; Mtpf t*). Extra numbers of tail feathers on each side of main tail is dominant and you get intermediates. When bred with modifiers and intensified, there is an interaction with other genes, modifiers, plus selection equals an accumulation. There is a linkage between wide tail, horizontal tail, and long back. (*I think the actual linkage is between whip tail low tail angle and long back; think Malay*) Long back is dominant to short back (*they seem to be co-dominants or dual dominants, with both genes actually dominant, but long back being a touch more dominant than the short back*). Wide spread tail is dominant to whip tail (*wide spread tail is recessive to whip tail which is dominant, but remember a whip tail can carry wide tail genes, so it can appear dominant to whip tail in certain cases*). Horizontal tail is dominant to high tail. Narrow feather is dominant to wide feather. There are tail linkages (growth, multiple feathering, non-molting and all three tail sections; saddle, sickles and main tail) and they may be on the same chromosome allele. (*The main tail and sickles appear to have linkage, but the saddle is not linked to the other sections and is not actually part of the tail, but is part of the back. Thus the saddle section and all the sections of the tail are quite separate*), they act with an accumulation of many modifiers and that leads to mutations.

How to get the tail and saddle genes with buff color? This turned out to be possible from two different methods. First I made a Buff Phoenix using Red Duckwing Phoenix and Buff Leghorns. I have some with both good buff color and good tail and saddle genes. I get mostly white legs, but some of the yellow-legged ones are going back into the Buff Leghorn breedings. This is one source. By chance, I saw a photo of a long saddled Buff Leghorn that Fred Zillich had. I was able to hatch a few chicks from eggs he sent me sired by this male. I got males with the long saddle, and started a male line with saddles. Fred did not like the long saddle and was not breeding for it; it came from White Leghorn blood that he crossed into his Buff Leghorns. The Zillich Buff Leghorn line has the growth gene for saddles and sickles, and multiple feathering. My old line of Buff Leghorns showed multiple feathering and long sickle genes, both lines show main tail suppressors. Fred's Buffs had uneven saddles, either the back half or the front half of the saddles were longer than the other half. The saddle did not have even length the entire width. I have seen this before and wonder if modifiers are a factor or gene dosage? Wide saddle feathers and even growth length are desired in saddles.

The Columbian color factor in Buff Leghorns came from White Leghorns (*most exhibition buffs have Columbian, so this could have come from the buffs Zillich used too*). White Leghorns can carry; silver duckwing, barring, dominant white, blue and Columbian (white leghorns can also be on the birchen

allele). Zillich Buff Leghorn males, when crossed with Phoenix split females, have produced birchen colored chicks, suggesting the Zillich line has birchen. Some of the Zillich Buff Leghorn chicks look dark buff brown in heads and smokey gray in backs, suggesting birchen and Columbian, which we know they can carry hidden in the buff genotype. One dose of Columbian can make broken head markings and faint stripes in chicks. Columbian removes the stripes from the chick down and can look smokey gray. Columbian is associated with lacing and very pale light buff. Db, dark brown, is associated with spangling, *(mottling is not made by Pg/Db recombinant, but is made by mo)*, autosomal barring, and dark buff. Darker, richer buff with pepper in tails and smutty undercolor do not carry Columbian. Light buffs (lemon yellow of a soft pastel shade), has two doses of Columbian. Pale buff chicks that end up with white undercolor as adults are often caused by Columbian *(and /or dominant white (I))*.

Buff color shade in chicks, in general; end up about the same shade as adults. After raising many thousands of buffs, I find those chicks with black or brown spots on head usually have pepper in them as adults. Those with faint gray or black stripes in back have more pepper and often on the back of females, sometimes gray undercolor. Smokey blue backed chicks are often the same, maybe due to Columbian. Dark buff heads may be due to birchen. White head spot or faint white stripes on back often ends up as white in tails and may be due to dominant white. A medium buff chick usually ends up as a nice even medium buff adult with good undercolor and quill color. There are a few exceptions. Some lines carry hidden genes and may behave a bit different, but in general these color trends will be evident given a fair sampling. Buff-laced gold or gold-laced buff, is gold edging on buff and due to mahogany and pattern gene *(Pg/Co/Ml)*. Mahogany gene is needed in buff to even out the red (defuses) *(Actually Cb does this. Mh is there to give strength to shade and keep it from being washed out)*. Buff on duckwing allele would have many different shades in different body sections and would not blend. Buff on the birchen allele is possible and could be even. Buff is commonly on wheaten allele. In a black male x buff female cross, there is a tendency for a darker buff or reddish buff; this is because it carries 2 doses mahogany, *(Mh is autosomal, not sexlinked. The reason the E cross does that is that E suppresses Co and Db)*. Buff male x black female cross does not *(That depends on the s-allele of the black female, but if she is s+ which most are, it is identical to the reciprocal cross. I have done this several times.)*. Buff is better termed pheomelanotic extended wheatons or pheomelanin dilute. It contains, wheaten, columbian, Db /dark brown, champaign blond, gold, dilute *(and Mahogany)*. If the right modifiers and genes are in place, buff can mask several color genes under it. Cream -(ig) is not in most buffs as it can make them too light. Reds are closely related to buffs, reds have dilute and champagne blond removed *(the mahogany is there in both red and buff. It is just absence of di and cb)*. The pattern gene, (pg), dominant white (I), (ig) cream inhibitor of gold and mahogany (mh), may be in buff or covered. (Buff genotype; eWh/eWh s+/s+ Db/Db Cb/Cb Di/Di Mh/Mh). Columbian and pattern gene can be in buff, but it may not be needed. Buff could

simply be dark brown (Db), Di dilute, and Cb champagne blond (the pheomelanin extender) on wheaten allele (*I don't think you can do it without Mh*). Pheomelanin (*pheomelanin extends do this; pheomelanin in and of itself is red pigment*) turns black to red and is in wheaten. Wheaten has no hackle stripe or saddle striping. Db, dark brown is needed for black tailed red, but black tailed red is on wheaten. Light lemon yellow buff has CoCo (columbian) and dominant white, no autosomal pheomelanin (Ap), and no Mh. Buff has Ap/Ap, autosomal pheomelanin. Autosomal pheomelanin used to be called autosomal red. If buff is uneven and they show black peppering, they are impure for Di and Cb (*not sure about that, maybe, but seems more likely that this may actually be recessive melanizers?*). Dilute is a dominant. Two doses show as very light yellow, one dose orange.

Misc.; Feather leg gene. Three genes in Cochin, two dominate and one recessive. In Langshan, one dose (*two doses, one gene*) dominant. Brahma, two doses (*two doses each of two dominant genes*) dominate. The recessive one is hard to breed out and gives trouble. (*Not really. It simply requires a testmating to a known carrier of this trait. Remember this gene is not the dreaded stubs. This is a full leg feathering gene, just not as full as the dominant versions.*) Stubs; Feather leg is due to multiple genes and Cochins have at least two of them. So no matter what you cross this male to, at least 3/4 of the chicks will have some type of feather leg because both of the genes are dominant and will be expressed in all progeny that inherit one or the other. There are three separate genes for stubs. One type is the autosomal dominant. The other two genes for stubs are recessive. Feather leg breeds can carry genes for stubs as well. Feather leg genes are separate genes from stubs. (*I know it sounds terribly difficult, but by not having worked with these traits, I fear you have turned them into some terrible thing that they are not. I have found these genes are easily bred out, as even from Cochin x, I get birds with no leg feathering and that do not show it again. Not all Cochins have all three genes and only the really over done (show form) has the recessive form.*)

Good-tempered males are important to get good calm disposition offspring. This mating works better than the reverse mating (*I am not completely sure about that, as the breedings I made of the wilder male on to the really calm Cochin female gave calmer offspring than the male*). Calmness can be bred in all breeds, genes play a key part, remember it is possible to breed up good dispositions. There is a sex linkage bantam/dwarf gene, if you are breeding large fowl don't use the bantam on the male side, females can pass it to her sons but not daughters. The flatten tail gene (*fantail*). *The lobster tail is a recombinant of fantail with the low angle and the curve of the main sickles in the male* is recessive. This tail gene is present in the Satsuma breed, (*it is a requirement in Cubalaya*) and a disqualification in Langshans. The spread or fan tail gene is a simple autosomal recessive. Tight feathering is dominant to loose feathering (*co dominants or dual dominants*). Tight feathering is the wild type feathering. Cochins and Orpingtons have two genes, one for soft feathering/soft quill structure and one for loose feathering/fluffiness. In the f2, when f1

intermediates are bred together you get 1/16 loose feathered. Langshan and Brahmas have one gene for loose feathering.

It seems to be a battle for many Buff Leghorn breeders to maintain or increase size. I will say that raising large numbers helps here. If you have many birds to pick from, you may find some that are a bit larger. The shank (leg) size is a good indication of frame and size, even in immature stock. Selecting the bigger birds will help keep up size. If you find some good Buff Rocks or Buff Orpingtons, you can work these into your Buff Leghorns, (a good way to add the skeletal extension gene) with size selection as part of your goal. You will have to watch loose feathering, tail suppressers, and earlobe color, but there will be lots of combinations and some of them will be helpful as new blood. This is a way to acquire good temperament and other genes, while getting a wider gene pool.

The large beefy comb with thumb-marks, blades that follow the head and long loose folding wattles; have been a problem for years. Granted they are rather low on the list compared to some other needed traits, but still something that needs to be watched. The small comb gene causes a smaller comb when heterozygous and an even smaller comb when homozygous. The smaller comb is neater, shows less defects and less apt to freeze. Smaller combed females often produce males with neat upright combs. Big combed females are prone to produce males with weak, big, lopping over combs and long wattles.

In addition to the wide feathers and even length in the saddle feathers, the tract should be multiple feathered, nearly to the ground. The multiple feathering in the main tail, leaves no gaps and with wide feathers. A well spread fantail without the tail length suppressers makes a large overlapping full tail. When the lesser sickles are multiple feathered and you have a high tail angle, you have a big tail that drags the ground very little, especially if the bird is long legged as well. A bird with a low tail angle and short legs makes a very poor combination for looks and practicality. These areas are so important for type and outline. In the female you want a long neck flowing down over shoulder to a low point near the middle of the back, then have the back cushion (saddle) start filling up the tail, continuing up the tail with lesser coverts, coverts and spread fan tail of a high angle. Wide feathers and multiple feathering are important. Narrow feathers are often twisted and rough in appearance. Being narrow the quills are not hard, these do not wear well or offer much protection from the cold. Being narrow they offer much less surface area for color or sheen.

THE SINGLE COMB BUFF LEGHORN

HAS EXCEPTIONAL QUALITIES AS A PRODUCER OF LARGE WHITE SHELLED EGGS AND AS A BREED FOR SMALL BROILERS. INCREASED INTEREST AND DEMAND FOR HIGH CLASS EXHIBITION STOCK. WONDERFUL IMPROVEMENT IN COLOR, SHAPE AND HEAD POINTS

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR
BY J.C.PUNDERFORD

(January, 1911 American Poultry World)

Does the S. C. Buff Leghorn compare favorably with the S. C. White Leghorn? This is a question I have to answer daily, both by mail and verbally. My answer is yes and well emphasized. Allow me to state a few facts which I think will convince the reader that the Buffs are equal, if not superior to the Whites. Every breeder raising poultry simply for eggs prefers the variety that produces the greatest number with the least amount of food, providing of course the variety bred has the call. Compare one house of two hundred Buff Leghorns with one of Whites, and at the end of six months compare your egg record for both houses and feed bills for each. Your egg record, will in all probability be the same, but you will find a large difference in your feed account and it will all be in favor of the Buffs. They take much less food to produce the same amount of eggs as the Whites. I know for I also breed the latter. I think you will say the Buffs have scored one point here. They lay a white egg, so do the Whites, and one more point for the Buffs, they will dress 50 per cent better than the Whites when sold as broilers, having that rich golden color which white birds lack. And just here let me say that the Buff Leghorn will make the finest broiler and will reach that stage quicker than any variety I know of. I have supplied one of the largest hotels in New York for the past five years with broilers, and my Buffs have been pronounced to be far ahead of my Whites, both having had the same care and attention. They are hardier than any other variety of the Leghorn family, and not so susceptible to the general ailments of poultry. So much for the utility end of the Buff Leghorns. Now for the fancy. They are most popular and many fanciers claim they are the coming birds and will outshine all others in the near future. Look at the Buff classes. In most of our leading shows; they are very large and often outnumber all other Leghorns. High-class specimens, both male and female, command large figures. They breed truer to color than any other Buff variety and when one has that rich golden buff, free from black or white, is there any prettier sight?

It is wonderful, the strides Buff Leghorn breeders have made during the past five years, in improving color, type and head points, the latter being especially defective heretofore. Last season, the country over, fanciers were unable to supply one-half their egg orders, and this year the demand for high-class males and females is tremendous. Pullets are as scarce as hen's teeth, using a slang expression, both fancy and utility. The simple truth is that the demand is far ahead of the supply. Wide awake fanciers are realizing this fact more and more and have been making good in the poultry world by taking up this breed. I could name many new comers who are doing a large and lucrative business in Buff Leghorns today. Whereas a few years ago a flock of two hundred or more Buff Leghorn pullets would present all colors of the rainbow, today we are getting them an even, soft shade of beautiful buff. The many shades of buff with black or white in many sections used to be a great objection in past years to any

utility flock of Buffs, but now that has been done away with by careful and judicious matings.

The Buff Leghorn originated in Denmark and were exhibited for the first time in this country at New Haven, Conn., in 1869, by John C. North and C. P. Nettleton, of Shelton, Conn. In 1871, C. E. Clinton, who was secretary of the Connecticut Poultry Association, exhibited a string of Buff Leghorn, at New Haven. They were smaller than the Buffs of today and of fair color and type. The first Buffs to be shown at Madison Square Garden was in 1891 by August D. Arnold, They were coarse in comb, and long in body. The following year Mr. Arnold exhibited some good specimens, which he bought of Mrs. Lester Kay of England. Since then, breeders have been improving the breed in every section 'till today we are justly proud of the grand results obtained. A word concerning mating might not be amiss. Never mate extremes in color, mealiness will be the result. Try and have your male only a little darker than the female. Avoid coarse combs in both sexes and never breed from a male showing pronounced white in any section, Pepper or a slight shade of black is allowed in the male and females can show a slight trace of white in tail or wings without greatly affecting their breeding qualities, but of course, solid buff is best. Have your male well up on his legs; cull out your short shanked birds. Speaking of culling, don't be afraid to cull closely; a better and higher class of youngsters will be the result in the fall, when you have both male and female with nice long sweep to back and tail and throw out all females showing shafting as this is a very bad fault. The care of old and young stock is greatly neglected during the year by many fanciers. Buffs should have shade and plenty of it or you will have faded youngsters when fall arrives; the same applies to the old stock. If you have no shade, make it. It is easily done by putting up a frame of young trees about three feet from the ground and placing brush and branches on top.

Go over your birds looking for scaly leg. A little care in the fall means much to you when the show season begins. Separate your cockerels as soon as they begin to worry the pullets and if any promising youngsters show up, put them in nice shady runs by themselves and nurse them along. When the breeding season is over take your males from the pens. You will find both males and females will be greatly benefited by it. Condition is half the battle in the show room and the lack of this is strongly demonstrated in every show the country over. I have put in this article facts which have come under my observation during the years I have been breeding the Buff Leghorns. During this time I have had other breeds on my farms, but I must say the Buff Leghorns are the greatest money makers and I am sincere when I say that I firmly believe they have been tested and not found wanting. Without a doubt they are coming to be one of the most popular breeds in the country.

HOW TO BREED FOR COLOR IN BUFF LEGHORNS

By C. M. HERREN, LaJunta, Col.

Producing an Even Shade of the Proper Buff Color in Buff Leghorns is a Most Fascinating Study. —There are so Many Shades to Select From and at the Same Time Type and Undercolor to Consider That This Article By One of Our Foremost Experienced and Successful Breeders is Exceptionally Timely.

In breeding for the Buff color in Single Comb Buff Leghorns, one must bear in mind that the buff of this variety is not a dominant characteristic that both the white and black have stronger tendencies than the buff and that a tendency toward either one of these must be Counter-balanced by the other. Breeding for the color in the Buff Leghorns is a more difficult proposition than breeding for buff in the Orpingtons, Wyandottes and Rocks. Breeders of the last named three varieties have been able to go to the Buff Cochins for color without going so far away from type and have been able to remedy the evil results arising from such a cross more readily than breeders of Single Comb Buff Leghorns could do. There has long been a popular idea among Buff Leghorn breeders that mealiness has arisen from mating birds of very dark color to others of light color. I agree with Mr. Boyd of Oklahoma City that this is a fallacy. The mealiness is simply a reversion to the first Buffs that were given the name of Buff Leghorns. I have never read an article on the earlier Buff Leghorns in which color was mentioned that did not speak of the mealiness as being very strongly marked, it has also been a popular notion that to breed good color we must mate females in which the shade of the back corresponded with the shade of the breast of the male to which they were mated. Now this, implies a difference in shade between male and female and even though it be slight why should it not produce a slight mealiness if a great difference in shade produces much mealiness? Let us put it down that mealiness is a reversion to ancestral inheritance and that it will occasionally crop out among the best of strains. All that we can do is to lessen the tendency from generation to generation until it has almost disappeared. In breeding for color, I find five great problems, viz.: shade, freedom from white or black in tail and wings, evenness in shade, good undercolor and good shafting. What constitutes proper shade has not yet been determined by the judges. I find that one judge prefers a decidedly dark shade. A light shaded bird cannot win with some judges. On the other hand, I find some judges that never give an award to darker shaded birds. Let me give an illustration. Quite recently, I exhibited two of my cockerels at two different shows, judged by two different judges, both of national reputation. The shows were within three weeks of each other. Within the three weeks, I could not see that there had been any relative change in the condition of the birds, yet the second judge reversed the decision of the former. The ruling factor in both cases was color. Since this article is not a discussion of what is the proper shade, and insomuch as the judges do not agree. I shall not discuss that topic in this article.

Few of us are so fortunate as to have our Buffs free from the lighter shading in the web of the upper sides of the tail and wing feathers. If they are free from the lighter shading we are apt to find a little smoke or pepper or both.

If anyone is so fortunate as to have birds with wings solid buff, main and secondary' flight & coverts and shafting with tail feathers correspondingly good, the question of mating for color has been materially lessened for him, but even this fortunate one will find many of the offspring from his best matings reproducing the color characteristics of their ancestors of twenty generations ago. He will also find that there is a decided tendency for his young to become off shade, either going to the dark or to the light.

When the breeder has determined the shade he most desires, and he finds that he has neither male nor females of the right to reproduce this desired shade and does not feel like purchasing both sides of the mating he may take stock of the females, choosing those nearest the desired shade, giving due attention to evenness of surface. If his females are a little light, let him choose a male that is a little dark, with great depth of undercolor, superior shafting, and even throughout. If females tend to light in tails, let him select a male that has a chestnut tail or he may choose one with a little smoke. Examine hackle, back and saddle feathers of the male and be certain that there is some color to the shafting of these feathers. Such a mating as has just been described will produce a goodly number of well-colored young. . Regarding the types of such a mating. I shall have a word to say in another article.

Such a male as has been described for the above mating could not be used with females of his own color characteristics with good results, for many of the offspring would be nearly red and many would have smoke and pepper. When the females are too dark in shade, the evil may be remedied by using a male just a little light. However, it is my opinion that such a mating will not be as satisfactory as that of the lighter female and darker male. My rule is, let the darker side of the mating be the male, yet Betsy Buff, with her wonderfully even surface and depth of color was the product of a light male to a dark female.

Each year we are approaching more nearly a buff that will breed true. Another ten years should see the Buff color so well fixed that when we have made a mating based on knowledge of the breed and particularly of the ancestry of each individual of the mating, we may reasonably expect a large percentage of well colored offspring. As a parting shot, let me emphasize "Breed for evenness of color rather than shade".

BUFF PHOENIX

BY DANNE J.HONOUR (Dec.2006)

I wanted to see if it was possible to make a Buff Phoenix. I had many years of breeding Buff color, which I thought would be of help. I figured I would have to make use of Buff Leghorns for the buff color phenotype and Phoenix fowl for saddle and tail genetics. In 2001 I started asking about which Phoenix color I should use, I thought White Phoenix would work, but I was advised against it, because of the silver gene and also recessive white could carry other hidden color genes. Brian Reeder told me that wheaten was allele

most buffs were on and that Wheaten Phoenix would be the best choice. I could not find any Wheaten Phoenix. Brian said that I could use Red Duckwing Phoenix. The f1 would be splits, between duckwing and wheaten alleles. I was to select the wheaten like chicks (creamy downs) and not the duckwing (striped back chick downs), in later generations.

Since I was not dealing with anything sex linked, I made the Red Duckwing/Buff Leghorn cross both ways and had two groups for a wider genetic base. I raised a number of f1 chicks. I found the Buff Leghorns carried dominant white and were heterozygous for champagne blonde and/or columbian. Some females showed black markings, like stippling on backs and tail coverts but clean hackles. These females as well as those showing dominant white markings were selected. About 12 females totaled, all showing neat combs and long /wide tail coverts, and good cushions. A F1 sibling male was selected that looked like a black tailed red (red breast)

I raised a number of chicks from this f1 x f1 mating. At hatch time I separated the wheaten downed chicks and kept them myself to grow out. The striped duckwing down chicks I sold as straight run newly hatched chicks, and later was told they were about 50 percent each sex and colored like Brown Leghorns. From the wheaten like chicks I selected another 12 females mostly buff colored, but showing black or white in tails and wings. These pullets were mated back to a Buff Leghorn male. I got a few real nice buff colored males. Some males still showed a lighter hackle and saddle, which I tribute to the dilute gene segregating. Females were getting slightly better in color but were more uneven, with light whitish undercolor and still white in tails. The leg color had turned to white. I got very few light slate, willow or yellow legs. I know the sex linkage to dermal inhibitor was at work here, plus buff is a diluter color, which lightens slate legs. Luck is also a factor in chance limiting the yellow and willow. The longer tail and long saddle was appearing in this generation of males. Since 2004 I have continued to mate from within this group using the long saddled males with good color and females from the same breeding with the best color. At this time 2006 I finally have females with solid buff tails.

Side notes. A Buff Phoenix male from 2004 was mated back to Buff Leghorn females and produced really sound colored chicks of both sexes. In another mating a Red Birchen Phoenix male was mated to a Buff Phoenix female. The f1 of this combo, when bred together produced some Buff Birchen Phoenix (both sexes) with slate legs and slate undercolor in a rich dark Buff surfacecolor. The birchen allele seems to allow a fairly even buff main tail.

WORKING TOWARD BUFF PHOENIX

BY: BRIAN REEDER April 2004

Danne; Your efforts toward buff phoenix are very encouraging. That male is quite simply stunning. I find it so funny that so many people "try" to make new colors and even then aren't successful with simple stuff like blue gold, crele, etc. But man, you sure haven't "tried", you have "done it". I know the process you have used to do this, but perhaps people would learn something from an article describing how you have gotten to this point in the project. I think they will be surprised by how simple it has actually been. I know that male is only the second-generation (f2) from the initial outcross of buff leghorn and proto-onagadori. That is pretty astounding, but the key of course is in numbers and *knowing the color form you wish to produce intimately*. I see a real buff phoenix in our very near future! I can't wait and I am so encouraged by your work. I am proud to work with you Danne and heartened by the fact that there are still some real breeders left. Thanks. Brian

THE BUFF PHOENIX PROJECT

By DANNE J.HONOUR April 2004

Brian, Thank you for the words of encouragement, as even I need them sometimes. The buff cockerel you mention is an f2, but I have kept him to use some more. This is rare for me, as I would rather wait until a higher percentage, however despite the fact that he needs longer saddle and main tail feathers without the tail suppressors, he has a few nice traits. The bird has a good calm disposition, and his incredible sound buff color. He is even in all sections, with buff undercolor and buff quill color. In other words his color is outstanding even for well-established breeds. I know color ranks farther down the list, but when a super good one comes along you have to make use of them. This bird was outstanding for color even as a 1/2 grown chick and his offspring look to be superior at this early stage. I had him mated with a large group of f2 females of similar breeding, hoping to get some better tails and saddles segregating. Another mating was back to Phoenix for type and higher Phoenix blood percentages. I would like him a bit bigger, but he is not a small bird. I originally bred Red Duckwing proto onagadori, with Buff Leghorns, going both directions. Then I bred the f1 female's back to Buff Leghorns, to make the f2. This year I have bred the f2 together. All the original birds were excellent quality, and I have bred fairly large numbers in the f1 and f2, and will continue. This year I have set the larger sized eggs, rejecting the pee wee and small. I try to practice what I advise. I select the bigger birds with the calmer temperaments, however there is still room for improvement, as often you have to work by degrees. I admit I still get feather picking, but I cull heavier for it, however I resort to beak trimming too, once again working in degrees gradually. Sometimes high light levels, white or light chicks and even wing tags can be factors in picking outbreaks. I am going to experiment with toe punching, for those certain matings you really want to know the parentage. Sniping the hind toe off, is an old method of permanent I D, if you do not show or sell as a show specimen, for

your own breeding. When I get the Buff project a little further along think I will begin to see the long tail and saddle traits resurface and some in homozygous form. The reason no one in the US has bred up good, new colored Phoenix to date is that they won't raise the numbers and breed up to homozygosity. Danne

BUFF OLD ENGLISH GAME BANTAMS

BY DANNE J. HONOUR Nov.2007

In the fall of 2001, I met Tony Bezok at a NY poultry show and a few weeks later at a Mass. Show. The topic was Buff Old English Game Bantams. Tony said "I would like to get your advice on breeding buff. Ever since I walked into a poultry show in York Pa., and saw your entry of Buff Leghorn largefowl, I knew you knew buff color. I cannot forget the wonderful color, bird after bird; consistent and even. You're now Mr. Buff, for Marcus Davidson has been gone for some time now". I said that was really a big compliment. (Note Marcus L. Davidson died Dec.23, 1978 at age 83). I remembered the show, it was in 1985 or 86, and I showed a dozen pullets and 1/2 dozen cockerels and maybe a few old birds all Buff Leghorns. I personally feel the flock got even better in the next following 5 years.

Tony wanted to know what he could do about his Buff OEGame bantams. He had them for close to twenty years and was wondering if he should give up on them. He had problems with them, leg color and lack of spurs in the males. He had used Buff Leghorn bantam and Black Breasted Red (Red Duckwing) OEG bantam to make them. He later found out the BBReds had Golden Sebright blood in their ancestry. He was having blue show up in the legs and beaks and wanted clean white or pinkish white shanks and beaks. I looked the old line over and saw the blue shanks, but noted the color was fairly decent buff and type was good. He was going to start over again using a Pile OEGB or White OEGB and Buff Leghorn bantam. I told him I would use his Buff OEGB females on Wheaten OEGB white-legged male.

Genetically Wheaten is similar to buff, and is on the same allele. He said he would see if he could get some Wheatens, but wanted to try the Pile and White. I talked him out of the Pile. He used a White pair and a Wheaten pair, the following spring. The White pair was disappointing as breeders and he discarded the offspring. The Wheatens were better. The Wheaten male was used over the old line OEGB Buff females.

A buffish f1 cockerel was used on a wheaten hen. Another F1 male back on Buff hens, and an f1 x f1 half brother/half sister mating was made the following year. The color of the f1 varied from nearly Wheaten to buffish birds showing white or pepper in wings tails. Most showing weak quill color, white shafting/mealiness, and white undercolor. I was trying to keep away from blue color coming through the male, knowing the sex linked nature. I had also advised not to use any Blue Wheaten.

The following year a fair number was raised with many of the same color problems. I thought some progress was made and our selections showed a bit better color and good type. Tony was concerned about the lack of spurs on the males and more of the same color defects. He had gotten a Buff OEGame bantam male of his old line back that had spurs and good buff color with white legs. He also got more Wheatens, a male with spurs and a male breeding line and female line. I wanted to see if this old Buff male could help with spurs, while at the same time help with buff color. I however wanted to keep him only in female breeding, to avoid any of the slate/blue leg genes. At this point, another mating was made of these original Buffs, just to keep some good color going, the original birds were getting old and we didn't want to use them anymore. The idea was to get a few good colored females to keep into the female side.

The offspring were much the same, but good numbers were raised and selections could be harder for even buff and red/buff quills and undercolor. The old male produced some good colored birds, but also some big, tall birds. The Wheaten backcrosses produced greater variation in color and black markings. Nice white leg color in these, makes up the male breeders for the white leg line. The birds are still young at this time but spur and spur buttons are part of the selection. A few poorer colored females have been retained that have wonderful type, style, eyes, combs, smallness and tight hard feathers.

It has been a hard task with so many factors to consider. However at each step type and tight feathering have been there, and I feel the foundation is a very good one. It would have been easier had leg color, spurs, and hard feathering, not to have been so important. Going out to other Buff breeds would have been better for buff color, but loose feathering and big size are hard to counteract even in small doses with games. Had white leg color not been so important better buff colored males could have been used instead of the white leg wheaten line males.

Tony is an ABA judge and I often enjoy clerking and going over birds with him at shows. I also like going over his Buff OEGB stock with him. I remember how much I enjoyed E.Lea Marsh going over my breeders each fall with me. I also show Tony my birds and use certain ones to point out traits or show him results. It is enjoyable and educational. I can see it is a slow process and working gradually toward better buff color can seem like you are not gaining. If you look back at your notes or pictures you can see the progress. Many times a poor colored bird is only a bird that lacks one of the needed color genes that make up the buff color geneotype, of which there is a group. Poor colored bird may have only one gene (heterozygous) instead of two genes (homozygous). This points out why breeding large numbers helps; you get a few birds with some of the combined genes. It also allows for some to appear that

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

have all the genes in pure (homozygous) form. It also shows why buff color is often transferred, as you get all the needed color genes at once. Blending in sound buff brings in all the genes to complete buff. Then backcrossing to buff allows for more recombinants to segregate into homozygous gene groups. It runs; eWh (wheaten), black-tailed buff, then solid buff. The process is; regular wheaten eWh, (+) Db (dark brown) and /or Co (columbian) for black tailed buff/red, (+) Cb(Champaign blond) Di (dilute) for buff. This is a series of progressions, from the basic phenotype (Wheaten) to a modified type (Blk.Tailed Buff) to a highly modified type (buff). Buffs are only black tailed buff with Cb Di interaction "diluting" out all the black.

The 2007 season brought out much of the same, good type, good leg color, spurs fair, but color still lacking. A few had white in back and wings and were easy culls; others had tiny white tips in the breast that you had to look for. Tony was a bit discouraged. I told him I felt these were well made and had many good features, but in order to get really good sound buff established he would need to outcross to a good colored tight feathered buff breed. The next plan of action is to introduce sound colored Buff Leghorn bantams to further set the buff color genes. I think there is a factor or color gene still missing and this outcross should again introduce this needed feature in the gene pool. Limited use of these Buff Leghorns or a separate line is planned, letting the established OEGB blood dominate again.

BUFF LEGHORN HISTORY 2006.

BY D.J.HONOUR 2006

Howard Laidlaw of Canada (died about 2000), got his from Louis Holmes. Louis Holmes of Roseville Ont. Canada had Buff Leghorns 50 years by 1978. Peter Krusell, died about 1995, (of Ridgeville, Ont. Canada) had Buffs too that came from Louis Holmes with mixes of Marcus Davidson, Pa. and Archie Steel. My line, Dan Honour (50) was Davidson and George Rex, Pa. I added some of Krusell blood in the 1980's. Most all bloodlines have Davidson's in them. Doug Cauthorn currently has Tommy Stanley's stock. Tommy got them from Howard Laidlaw. Dick Gruebel of Pa. has died just this past summer but had Tommy's stock. Curtis Oakes has had them a long time, started with Davidsons. Many years ago there was some nice ones in the west that came from Ross Sanderson (was living in 1985), Alberta Canada, Ray Lee of Oregon had this line as well as Vern Sorenson.

Some people are very sketchy about bloodlines, but often you can piece them together with bits of information. Troy Laroche, who I think is in Canada, he was working with Buff Leghorns (I do not know whose stock), but had mixed in White Leghorns. Fred Zillich (Mercer, Mo) and I traded stock a few years back. Fred had mixed in White Leghorns too and recently was mixing in Buff Rock. Harold Halbach had Davidson Buff Leghorns and mixed in Buff Rock in the 1980's, I don't know if any of that is around.

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

Dan Boone JR (64), Granville NY, got his stock from me in 1984 and still has them. His father had them of Davidson's breeding. Dan said he used to take his father up to see Peter Krusell and Gerald Donnelly (69); he had Buffs and was secretary of the Canadian National.

Guy Hatten (Middletown Ohio) was still living in 1983. He had good quality buffs. Got them from Len Lanceis (Lantis?) of Cincinnati, Ohio (he was not national known) Guy had good type and added color from Purdy stock. Floyd Prudy had good color and added feathering and type from C.M.Herrin in 1918 with a pullet (she had 8 tail feathers a side); he bought her for \$50. Another local guy Prof.Buck Bush, had good ones, he was Superintendent of Schools in Guthrie Ohio. Rex and Davidson had good ones. F (Frank) S. Smith of Ohio was a known buff leghorn breeder; he farmed his out and put chicks out on shares. He was a traveling salesman, sold pianos before chickens, later milk goats, and still later pottery. The above last paragraph info from personal letters in 1983, from Guy Hatten.

Theo Austinson, Lyle Minn. in his 1932 ad stated he had bred Buff Leghorns for 22 years (since 1910), high egg record of 278, won over 1,400 ribbons. His line was the largest and they had heavy saddles and tails according to judge Bruce Lentz, Pa.

IF YOU WANT NICE BUFF COLOR

BY DANNE J. HONOUR June 2007

In selecting breeders **for buff color keep the shafts of the feather buff** if you want to maintain nice buff color, good undercolor and avoid lighter shafting. Matching up males and females for breeding; match the overall color of the female to the breast color of the male to maintain evenness of color.

The quill color and undercolor is important and a trait lost in some buff flocks. If you don't have these essentials you are fighting a losing battle with Buff .You will get much less of mealiness in the shoulders of the pullets, rich undercolor, and less off color in tails.

I am not a fan of the lemony buffs; you can always count on them having white somewhere or other. Especially the undercolor. I will take some pepper any day. I find the lemon yellow bird with white quills, the hardest to use. Some people like the light buff as it can be even and can win at a few shows. To get anything from them you need to use a medium buff mate to prevent white and mealiness. I like the medium buffs and a few richer dark buffs for use in breeding, if you do not have any dark buffs, the medium buffs with some pepper in tails will work; to help retain color. I cull those with the most black unless otherwise real good. Sometimes slight pepper will nearly grow out by the last chick molt at maturity. I had a pullet I was going to cull as she had pepper in tail and wings and grayish undercolor . I didn't get to it right away and found she got better as she matured, less pepper in tail and wings and a good rich undercolor.

Sometimes these will retain some gray undercolor and end up penciled in tail coverts or back. I generally cull them out in females and would not chance it in the male unless he was really outstanding, and I had good sound colored females to put him on. Even then, I would expect lots of color cull offspring and perhaps into the next few generations. As a rule I would advise against it.

I think it makes sense that light quills and shafts with leak into the surface and cause shafty surface color, usually goes with very light undercolor also. I might add it is about as light as you want to go or else white appears in several sections, the only plus to this light color is it can produce very even males, even all over but a light shade of buff; this is employed in double mating. The only feathers that are the same on the male, structure-wise to the female is his breast feathers, so it is logical they should match and correspond. I had for years some beautiful glittering gold buff in males, really brilliant top color, yet even medium shade, the natural female mates had the brilliant sheen in the neck hackle and also a golden brilliant lace or edging on the rest of the body feathers. I really liked it, as it was attractive and glittered. To me it is not a fault, but the standard does call for minor point cuts. The gold lace feather I am told is just the mahogany gene, which may help extend and diffuse buff color pigment. Soft feathers have more fluff and will show more pigment tone in undercolor compared to a harder/tighter feather, I think it is natural for tight feathered Buffs (Minorcas, Leghorns, OEGames, Phoenix, etc.) to have a shade lighter undercolor. However I want as much quill color and undercolor as I can get in all Buffs. I would not worry too much about a few dark birds provided they have quill and undercolor, type and size.

I like a wide feather as it give shape, add protection and provide more surface area for color. The wide feather tends to be a bit loose with a bit more fluff, this being relative. I think the yellow straw (brassy) color, found in hackles, wingbows and saddles are the dilute gene. It can make the middle neck feathers pale yellow, almost creamy. Very pale even buffs can have columbian or dominant white genes. One or two doses of these genes can give different appearances. Dark buffs can start showing red in wingbows or sickles, sometimes chestnut brown and black in sickles. These dark males can often give you very nice medium toned, rich undercolor hens. I think white in the tails of females can be reduced gradually or better yet by using a sound solid buff tailed male mate. Black has to be dealt with in a similar manner but yields more slowly to buff than does white. I still try to avoid using birds with white in wings or wing coverts, unless of exceptional type.

If you mate together light shades of lemon yellow buffs, white will be showing up in many sections of the offspring, in a generation or two. I can live with a mealy tail or slight pepper, but a female with a black tail is one I generally would not use, but if she has other good traits I might, but it would take more than one generation to reduce the black in the offspring.

I have long advised to single mate buff and **balance each mating by examining the main tails carefully for either salt or pepper, then use a mate that is solid buff in tail.** If no solid buff tails are available, use a mate that

shows a reduced amount of off color, thus gradually reducing off color and getting closer by degrees to a solid buff.

I find you can almost do some color culling at hatch and breeders with chick orders to fill, might have done some of this type of culling. The medium chicks usually have good color, the very pale ones are too light and sometimes have white in tails, the ones with a black head spot have pepper, those with several black or brown head spots more pepper, and those with faint white or black back stripes lots of off-color tail, wings and sometimes backs when mature. (The first one is best, the next two are useable, and the last two not as good.)

If you take the time with a large flock of buffs (and it will take many years of strict selection), you can produce a non-fading strain. This is done by only using hens that have retained through several molts, a rich and even shade of medium buff that has not faded from the good pullet color. By breeding exclusively from such non -fading hens, you will set this trait. It also helps if the male is a non-fading cock that has retained his cockerel color and all the better if his dam was a non-fading hen. This type of buff usually has a rich surface and undercolored as a young bird. These are sometimes called "stay-buff" buffs. I would say these are the very best that can be attained in the buff variety and the soundest of buff color.

ENVIRONMENT

My pens were on the East Side and only got the morning sun, plus a tree on each side (north and south). I was down at Marcus Davidson's in the non-growing season when birds were inside and nothing was green. However I understood from many other reports that there were lots of trees and weeds around for shade, bugs and green feeds . Davidson's Buffs basically ran in a jungle environment.

I have always heard that when buff birds get wet and then are out in strong direct sunlight, they fade and bleach and the old feathers become brittle. My birds are inside for the most part. However I have used shaded runs with tree cover as well as shade plants, morning glory, climbing beans, etc. Grapevines are good for strong permanent places. Some indirect sun is fine as well as the exercise and greens, earth and insects.

DISPOSITIONS

The Mediterranean breeds need to be culled harder for dispositions. They do not have to be crazy; not all are like that. I know Leghorns are not always tame or calm, but one can always hope! I can live with faults, but do prefer small combs and calmer birds. I cull lots of my own for big combs and bad temperaments. It is a shame when they come on otherwise good birds. Sometimes Leghorns are so bad they about killed themselves every time you go near them, or when handled will scream. I know they are not the tamest breed,

but you have to draw the line somewhere on the crazy wild ones. I select for calmness whenever possible, it often decides the faith of borderline birds for other traits when you have lots to pick from. Granted they are active, but can have good temperaments too. I never use a bird that is nervous, that scream and holler when you catch them. These get their necks wrung quickly. I find they all calm down when you get rid of the real bad ones, hopefully they are not all bad. I like the hens that sing as you pick them up. Crazy wild ones will be hard to train and show, plus no one will want them. Not even you.

MISC.

It is the females I would rather use for new blood, that way I can keep my male line intact.

The big females help keep up size. Tall or high stationed birds I select for and cull against short legged or squatty birds. Looking over old photos of my birds, short legs do so much to lessen style, more than anything does. Poor combs and head (lobes-wattles) detract. Low tails will change the concave back line and thus type is negatively noted.

I am not against crossing if you have a good reason and a plan. You have to follow through. With dedication you will succeed many times. With most people it ends in disaster. There are often times more than one way to do things and with different strains, results can vary greatly. The important thing to remember in crossing is it takes time, numbers and room. Some good records, (written and photo) helps you and provides an account record. The first crosses are similar and you can get by with smaller numbers, but not the f2 & f3 (you need numbers). In the 1st cross (and also 2&3), you may have the genes there, but (phenotype) appearance, may not indicate it. Even old timers would say stick with a cross 3 or 4 generations. Often you need several genes to combine to make the right variety; other times you are looking for a few, that are missing one or two of the genes. However these projects take time and numbers, in order to get the right combinations to appear, or individuals with all the genes and in pure form (homozygous). In any crossing, the wasters and culls are very many, so be prepared to make a lot of soup.

SHOWING BUFF MINORCAS

BY DANNE J. HONOUR (1982)

In making an entry, try to show several birds per class. This way you are making competition, even if it is among your own birds. Then you can try sending in two separate entries at a 3 or 4 day time span, in hope of getting two separate entry numbers. One can be in your own name, another in a farm name or perhaps another family member's name. The judge might look over the classes better if he thinks there is competition.

It is up to the exhibitor to see that the MINORCAS are judged right. If you notice a good Minorca judge is among those hired by the show, ask for someone in charge of the judges to consider giving the Minorca classes to that judge if possible. Some shows match breeds and Judges at the last minute and welcome a good tip if put nicely. Not all judges are good with Minorcas but most can do a fair job with them. Some will go over every bird and every section and make both good and bad comments on cards. Some judges go over the classes well, but do not make any remarks on cards because they feel it takes too long. In such cases the exhibitor should ask the judge after he is completely done judging, to explain why he judged the classes a certain way, if the exhibitor does not understand something.

This may sound simple to some, but the new breeders and those trying to learn the finer points of quality need this counseling. Some judges do an excellent job teaching in this manner. I also feel that, the judge should be polite and not make rude-harsh remarks; often the exhibitor is listening nearby and hates to hear things like "Those birds are junk". Such remarks makes one switch to another breed; as he goes home to cut the birds heads off .Had the judge remarked instead "These two pullets have nice type with fine heads, but are far too small and lack depth"; maybe this exhibitor might have purchased a real large male and mated them up at home, hence staying with the variety. I have seen and heard of cases where there was bad Minorca judging. These instances; the judge rather than the birds were in a way being examined. Where bad judging of Minorcas has taken place, it is the duty of the Minorca breeders to point out the judging mistakes to new breeders; so no permanent harm is done to the breed or the breeder's ideas of quality.

The exhibitors should talk things over with other breeders present, as often more can be learned here than from the judge; who perhaps has little interest or enthusiasm in Minorcas. Judges should pick and mark both BEST OF VARIETY and BEST OF BREED, when quality is good enough to warrant this. If quality is so poor in a class, the judge should start out with 3rd or 4th place and not give any 1st or 2nd. If classes are large and of good quality the judge should place to 5th or even 10th place. In varieties, which are being rebuilt, the judging is very important, and a first place or best of variety can mean a great deal. It is only after much progress and improvement can the awards for best of breed, best Mediterranean or best large bird, can even be expected. A breeder might have mediocre over-all quality in his stock, but still possess one outstanding trait that other strains may lack As long as this line or strain remains superior in some trait it is of value to the variety, and breeders should try an extract the trait and work it into their stock by using the stock.

In showing, condition is as important as type and color. Minorcas need plenty of room and several months of conditioning even unfriendly specimens

BUFF COLORATION IN POULTRY 2007 BY D.J.HONOUR

can be tamed down and made calm, and most will end up tame and showy. Lightweight birds when confined by themselves can be feed heavy on favorite foods (milk soaked bread, hotdogs, seeds soaked in cod liver oil) often put on enough weight to come close to Standard weight without being fat. This takes several months and will also put a nice sheen to feathers.

Minorcas look best when washed, and nothing puts on the bright color, and fine texture to the comb as a good washing with soap and warm water. Washing the shanks by scrubbing the scales with a toothbrush makes them clean and more colorful. Ointments help the legs and can be put on daily the last few days before a show, but wipe off any extra so it does not get on the feathers. Washing adds life to the surface color and a slight degree of fluffiness to underfluff. The soap film must be washed off completely. A little vinegar in the rinse as well as another clean water rinse will do the trick of soap film removal, conditioning takes time and effort and it is best not to show so many. Do a good job with each bird. Washing should be done only a few days before the show and precaution should be taken to keep the birds spotless.

NOTES ON BUFF POULTRY

(APJ Nov 1939 Allentown Pa. show)

BY FRANK L. PLATT

Entries were 5,765 birds. Some breeders are raising quite a lot of birds. Mr.Marcus Davidson (Davidson Poultry Farm, Bath Pa.), who breeds Buff Plymouth Rocks, Buff Wyandottes, Buff Orpingtons and Buff Leghorns; grows around 1,400 head of young stock each year. His first prize Buff Rock cockerel was a big chicken with a beautiful sheet of lustrous buff plumage.

NOTE ON MARCUS DAVIDSON

BY D.J.HONOUR March 2007

I found an old letter of Marcus Davidson saying he sold Buff Leghorns to William Mousky and J.Bedel, and he knew C.M.Herren. Marcus had 1st pullet at Chicago Coliseum in 1924 and at national meet, MSG won 8 years running Best Display, 1-5 cock, 1-4 hen, 1-2-3 ckls, 1-2-3 pullets 1st young, 1st old trios, big classes and specials on shape and color, also Champ Mediterranean on Buff Leghorn pullet over the big classes of Whites and browns. I also found Davidson Farm 1929 mating list with 9 pens mated of Buff Leghorns, eggs by the 100 and chicks by the 50, and eggs \$6 per 15, chicks 75 cents.

WINNERS OF THE BLUE AT THE WORLDS FAIR

(St.Louis Oct.24-Nov.8, 1904)

BY ROBERT H. ESSEX

The (recently introduced) Buff Leghorns:

Single Comb Buff Leghorns; **First Cock-** (E.G.Wyckoff) The only case in this class where a light bird is given the preference, but a hasty look over the class suggests that the judge could adopt no other course than award the prize as he did. The bird is in splendid condition, even throughout back, body, breast and wing, but too light for a golden buff. Tail pure. A good Leghorn in both style and size. The comb follows the neck and in full, rather coarse, possessing six points, the top of one point being absent. Lobes are rough and contain about 25% red scattered over the surface. **First Hen-** (J.Dundas) A big one with a straight back and oblong body. The five-point comb has been frozen and is therefore irregularly carried. The color of the bird is an even golden buff throughout, the kind that wears; it is slightly darker than the first pullet. Tail solid and of the right shade. A bird that should make a good breeder as well as show bird-a happy combination. **First Cockerel-** (K.K.Cornwall) A Leghorn type, alert and of superior build. The comb is thoroughly Leghorn in size and shape and possesses five points; it is broken behind and has a slight thumbmark in front. The tail is well out and solid buff, though slightly darker than body. Aside from that, not a shade different in the color of the body, back, wing and breast. If ever there was an even colored buff bird this is one. Lobes are magnificent in texture and shape and of a creamy tinge. **First Pullet-** (A.D.Arnold) A nice even golden buff of the stay-buff kind, a color that all judges will do well to reward. A six-point comb correctly put on and of a medium size. A bird that reflects credit on the exhibitor in both size and shape. The tail is of a good color, but close and carried lower than I want to see it in a Leghorn. **First Pen-** (E.G.Wyckoff). Headed by a fairly even male. The hackle and saddle match in color as the surface of the wing does with the tail, the latter being only slightly darker than the former. A medium colored bird with solid tail; the carriage of which might be a little more in line with the body, otherwise it is perfect. A seven point comb, rather coarse comb, lobes of good size and of an attractive style. The females are well molted and are of an even shade of buff, near golden, barely a shade lighter. The combs are on the large side, with one exception. The tails are practically solid in color bar one. These have correct spread of tail, the other whipped.

Rose Comb Buff Leghorns; **First Cock-**The best colored bird in this class, which is not saying much. The comb is the worst yet seen lobes big and coarse. Little or no competition. **First Hen** (Edgar A.Weimer) One of the lemon colored

kind, but even. Good Leghorn shape, including tail. The comb is rather deep. A nice buff hen with only slight penciling in the tail. **First Cockerel-** (Geo.Hacker). A bird fair in color, though too dark. Tail partly bronze. Comb smooth and follows neck. **First Pullet-** (Geo. Hacker) On the dark side, otherwise good all around. **First Pen-** (Geo.Hacker) A coop containing some merit and many defects. Much too dark in plumage. It shades into a mealy white in the wings. Tails and combs not bad.

REVIEWING THE SINGLE COMB BUFF ORPINGTON

BY LOUIS A.STAHMER (February 1923 Poultry Tribune)

Buff Orpingtons are without any question, the most popular Buff breed. They are indeed a very beautiful variety of fowl. A flock of Buff Orpingtons with their bright red combs on a velvety green lawn form a color combination that is most pleasing.

What is Buff color? No one seems to know the exact shade it represents, and if we were to go to several painters and tell them to mix some buff color, we are liable to get any shade from a pale orange red to a light lemon yellow. Someone has said that true buff color is best represented or can be found in a bright new twenty-dollar gold piece. In fact we have seen judges at shows trying to use this for a comparison.

Buff color is one of the most difficult to breed to perfection. This will be admitted by the majority of people who attempt to breed it. If we bear in mind that black and red pigment of the original jungle fowl, lies dormant in nearly every breed of poultry and will persistently crop out, unless checked by selective breeding methods, we can readily understand why nature's laws interfere so much with the buff breeders work. Buff is really modified red pigment, diffused so to say through the entire plumage. Red pigment in our fowls occupies only certain sections of the body, in the male it is the neck, back and wings, and in the female, the breast and neck; where it has a fixed position. It stands to reason therefore, that these sections can be bred easier in red or buff fowls to the color we wish, than any other section. Red in the breast of the male is foreign, because black is the original color there. This is probably the reason why we very seldom find the breast of the male of the same quality of color as that of its neck or back. In mating the Buff Orpington the breast color of the male should be watched very closely as it has a tendency to run out light.

The true ideal for a Buff breed is an even shade of color for every feather on the body of the bird and the more even the surface and stronger pigment the undercolor is in the breast, hackle and saddle, the better chance we will have of keeping down the black pigment. For breeding high-class stock, the male bird is of the greatest importance.

Buff color, as poultry fanciers interpret, is to this day, one, which many judges disagree. Some judges favor dark birds while others place the ribbons on

the lighter colored specimens. At some poultry shows we have seen exhibitors show practically two strings of birds because of unfamiliarity with the judge's preference as to the correct shade of buff.

Buff color is peculiar in that it photographs considerably darker than it appears to the eye, especially the hackle, back and saddle of brilliantly colored males will always come darker in comparison with the breast color than it really is. There is a certain brilliancy and sheen in these sections which seem to deepen the color, although its ground color may be exactly that of the breast. The Standard of Perfection calls for a match in color in both sexes and this brilliancy would have to be shown as a whitish reflection.

BUFF COCHINS

BY A.W. RUDY (1905)

Buff Cochins came to this country years ago, long-legged, gawky, and scantily feathered. When Cochins are given free range and compelled to hunt and hustle for their living from chick to maturity, they lose that bulky, blocky, and massive appearance and become long, lean, and lank. They get that scavenger look about the head that never leaves them. When our effort relax, nature steps in and begins to fit them to a form that will make them more active and less hampered with points which, outside of size; only adds oddity to their make-up and appearance.

BUFF COCHINS OF TWENTY YEARS AGO

By FRANKLANE L. SEWELL (1912)

ARTIST SEWELL CONTRIBUTES A NEW CHAPTER TO THE HISTORY OF THE BUFF COCHIN IN AMERICA AND PRESENTS SOME PICTURES OF OLD WINNERS THAT WILL BE A WELCOME ADDITION TO THEIR PICTORIAL HISTORY—FOR MORE THAN HALF A CENTURY BUFF COCHINS HAVE BEEN BRED IN ENGLAND AND THEY PLAYED AN IMPORTANT PART THERE IN EXCITING INTEREST IN POULTRY SHOWS AND THOROUGHbred POULTRY—THE SENSATIONAL EXHIBITION OF FULL-FEATHERED ENGLISH BUFF COCHINS AT MADISON SQUARE GARDEN TWENTY YEARS AGO—THERE USED TO BE CLASSES FOR “AMERICAN” AND “FULL-FEATHERED” BUFFS—THEIR EXTREME SHORTNESS OF LEGS IS DUE TO BREEDING TO AMERICAN IDEALS—WHY NOT BREED A HAPPY MEDIUM TYPE—HOW TO YARD, HOUSE AND COOP SHOW SPECIMENS TO PRESERVE THEIR TOE AND LEG FEATHERING—CHANGES IN STYLE—AN IMPORTANT IMPORTATION

The magnificent race of Buff Cochins has always attracted popular admiration, ever since the ‘hen fever days’ of more than half a century ago, when her majesty, Queen Victoria, took a genuine interest and pride in them at her own aviaries. About that time they did more to encourage interest in poultry exhibitions in England than did any other race of domestic fowl, and what were then considered fabulous prices were paid for them. At the beginning of the ‘90’s, when the new Madison Square Garden opened its arena to America’s greatest poultry exhibition, the Cochins enjoyed another boom. The full-feathered Buff Cochins of England being attractively exhibited created a genuine sensation and became the popular aristocrats of the show for several succeeding seasons. Some of the older fanciers will recall what big prices were paid to English breeders to tempt them to part with their finest show birds and how garlands of roses and carnations festooned the winners that captured the leading prize ribbons. An interesting era in Cochin history In America is recalled when turning over old numbers of New York show catalogues. In 1892, all Buff Cochins competed simply as “Buff Cochins”. The incoming of numerous full-feathered Cochins from England the following winter prompted Madison Square Garden show managers to arrange two divisions for Buff Cochins; one for “American” and another for “Full feathered”. At that show, February 1893, there were 52 Buff Cochins in the American single classes and 48 in the full-feathered single classes. Exhibition pens competed together. This rule of staging the Buff Cochins in two divisions was continued until 1896. Since then all Buff Cochins have been staged in one division. In 1892 the greatest collection of full-feathered Buff Cochins that had ever left England were purchased at an expense of \$1,625.00. The collection consisted of three cockerels at \$200 each, five pullets at \$125 each; two cocks at \$75 each and five hens at \$50 each. The old birds had been sold by the expert, who bred them for sums similar to those paid for the young birds, to a well-to-do amateur, who valued them at \$500 each, but on going abroad he parted with them at the more moderate prices. The cock bird, “Wonder”, was one of these cockerels that won second as cockerel and first as cock at New York. This collection included the most magnificent specimens that England ever produced and were all of one blood line that came from a yard that produced the purest colored birds of the truest, most imposing Cochin type. This superb team won all but one first prize in the winter of 1893, and in February, 1894. The young birds produced from matings of the fowls from this collection won all firsts and all seconds competed for, assuring our American fanciers that nothing finer could be obtained. They were, in fact, the grandest full-feathered Buff Cochins of that period. This team was personally selected for the yards of Adams, Perdue and Young; on account of the special fancy and enterprise of Thomas Young, a wholesale florist of New York.

At this time many fine full-feathered Buff Cochins were also imported by Sharp Brothers, of Massachusetts, and by Dr. J. J. Hare, of Canada. These importations of England’s best made further importation's unnecessary, but American breeders have bent their energies toward selecting and modifying

these wonderful Cochins to American ideals. The best American Buff Cochins up to 1890 were much inferior in exhibition qualities to the best full-feathered birds Imported from England. Since then the principal change that can be noticed, effected to please the American conception of a Cochin, is the shortening of the legs. American fanciers have always had the idea that sufficient length of legs to give height to the bird detracts from their ideal of a globular form. This in a large degree is true. However, it must be remembered that without sufficient length of thigh and surface of leg muscles, the greatest length of side fluff with leg and toe feathering can hardly be attained. The two imported English males, had feathering extending from the feet 8 inches in length. They were not the progenitors of handy barn-yard scratchers, but were a show themselves that would bring joy to the heart of any proud fancier who loves to see such a display of golden magnificence stride across his lawn or pose majestically before admiring visitors of poultry exhibitions.

CHANGES IN COCHIN STYLE

For several years, following the importations of full-feathered English Buff Cochins from 1890 to 1893, the ruling fashion was for “full feather”. Some of those first profusely feathered birds were immense in appearance. As we noted elsewhere, the very largest quantity and length of thigh, fluff and leg and toe feather seemed to demand a type of Cochin with considerable length of leg, and while the fashion for extreme length of feather prevailed, the ideal of roundness in the Cochin type was somewhat distorted. The cock imported by Sharp Brothers and shown at Boston in 1898 well illustrates the extraordinary quantity of plumage that was developed on this section of the bird, provided the bird had it in his blood and had sufficient surface upon which it could grow. We showed two hens, exhibited at New York and Boston, 1903 and 1904; also a cock and hen exhibited about 1904.

In 1907, at Boston, they exhibited another cock (also imported), that showed a change toward the present fashion of roundness with the plumage more equally distributed throughout the sections. The bird was broader in proportion to its height and the legs were no longer than necessary to move himself about handily and with a degree of dignity in his pose. A comparison of these two cocks quite clearly illustrates the change of type affected from the beginning of the ‘90’s to 1907.

Long legs in the Cochin, even to gain the extreme length of leg and toe feather, never seem to rule long in Cochin fashion. As some fanciers of the breed express it, “They do not like to see much daylight underneath the Cochin.” The extreme in shortness has also been developed, and while as a show room curiosity its appearance excites comment and occasionally may even win ribbons, such extremes do not remain popular long. Such specimens do not move about freely—often they become very lazy and inactive. There is a happy medium for the ideal type of Cochin, one that will not be too coarse and slow to mature or indisposed to forage, but one that will preserve all the vitality of the ancient Asiatic and prove, as they have with some fanciers who study their

proper management, to be productive and profitable as well as exceedingly showy. Those who have watched the development of several of the popular, large Buff varieties that the past twenty years have brought forth, realize what a large degree of success in attaining the new Buff varieties must be credited to that ancient prepotent blood of this very old Oriental race with its stamina and vigor of constitution and its tendency to clear buff color.

CARE OF SHOW SPECIMENS

It may interest those now rearing full-feathered Cochins to recall a few things we observed at the successful yards we visited in Heiston, England, in the autumn and again in the winter of 1892 while selecting the team of Cochins for Thomas Young, Jr. Many fanciers who have bred in their yards the full-feathered Cochins with the ambition of exhibiting them at the winter shows, have discovered to their disappointment, that a large part of the great wealth of feathering that grows outward from the feet and toes of the most excessively plumaged specimens and that would, if all turned out well, make the most sensational show birds, is broken off. The best show Cochins seldom reach the show pens in full possession of all the feathers that developed on them, simply because they were allowed to be lost. Why pay the price for stock that will develop sensational show points and select and breed and feed to increase this stock and its show qualities after it is obtained, and then house and yard these magnificent fowls in such a manner that their fine feathers will be crushed and broken and lost? A simple device that proved effective at the Heiston yards to keep birds from crushing the fluff and toe feathering against the walls and fences and against the sides of the houses. It is a light bracket fastened to the fence or wall, that extends out about six inches, and it supports a round, slender, hard-wood rod at about the height of the middle of a full-grown fowl's wing. This prevents the birds from crushing the long fluff and foot feathers against walls and fences. Another place where Cochins crush their plumage is when roosting on the perches at night against the wall, if the roosts extend there for support. Often they crush their long fluff against each other when several are allowed to use the same perch. Besides this we have seen cases where mice had crawled up on the perch where show specimens were roosting and bitten from the birds and carried away quantities of fluff with which to build their nests.

On account of these experiences Mr. Harris had made individual perches for his best show Cochins. These were simply flat boards about six inches wide and one foot long fastened to stakes that were driven into the earthen floor and which extended about one foot high. He did not bed his exhibition birds on straw or any litter of that sort and he called attention to the fact that scratching would rapidly break and wear away the plumage from the legs and feet. His object was to produce and protect every feather that nature allowed. He put emphasis on the constant necessity of protection of fancy points when they were so valuable to show room competition. In these yards the Cochins spent the several weeks of their final development and conditioning inside cool, airy houses. Each of his best birds had a separate partitioned pen of four by six or

seven feet floor space. The light was modified by whitewashing the moderate sized windows. This care was taken so that direct sunrays should not fade out the richness of color. The floor of these individual pens was earth, loosely pulverized and perfectly dry to a depth of six or more inches. This earth I noticed was very light in weight. It was a dark grayish sand and dry as if finely ground peat had been worked into it. When I first saw the place, some of the best birds were wallowing in it, enjoying a genuine dust bath. I inquired if it did not injure the feathers or the color of the plumage and my attention was called to the lightness and dryness of it. Mr. Harris said that that kind of "earth" did not injure them. Apparently their condition was improving while kept upon it. These birds, it must be borne in mind, were being expressly kept and conditioned for exhibition. They were reared in yards about one-half shaded by trees for the restful comfort of the birds and to prevent fading of the plumage. The yards were mostly covered with short-cut green turf. No rubbish or anything of like nature was allowed about that in any way could break or injure the plumage. No one ever passed or entered the pens that would frighten or induce the fowls to run. I asked if it was considered beneficial to the strength and vitality of the stock to rear the young birds for the first few months of their lives on a more free open range where they would be tempted to run and take more vigorous exercise than in the rather restricted quarter acre. He assured me that they never wanted to see birds in plumage go faster than a brisk walk, His birds were very large and he wanted their full, excessive plumage to impress the beholder with their immense size. His constant aim was to develop the birds' plumage so as to increase that impression. He wished to have every feather grow outward to allow the fluffy undercoat to expand and increase the "roundness."

"Fowls that hold their plumage close from whatever cause never appear so large as those that develop fluffy outstanding feathers, even when they are little, newly-hatched chicks," he went on to explain. "When it becomes necessary to catch them, we avoid placing the hands around them closely, from the upper side, but lift them from underneath only steadying them from the top. We take the greatest of care never to cause fright in a little chick any more than in an older one. We fear that if a bird gets in the habit of contracting its plumage that it will cause it to grow 'tighter' in feather. Loose, open, straight-out fluff we must have from start to finish if our Cochins are to fill the coop and appear the biggest possible. "When we take them up to the Palace show we get them into their pens the night before judging day so they will have plenty of time to settle down, spread out and feel perfectly at ease. A scared Cochin becomes a tight-feathered Cochin. We stay with our birds and see that no one touches them with a 'judging stick.' A tap of the judging stick makes a Cochin draw in its plumage and look an inch or more smaller, and believe me, I do everything possible to develop them and keep them as big as I can, for that goes a long way toward success in showing Cochins." When this team of Cochins were sent to the Cunard Steamship "Etruna," on which I returned with them, Mr. Harris had special hampers made of good, strong willow, upon the inner sides of which were additional bent frames of light, springy willow that kept the birds several

inches away from the sides and allowed the long foot feathering to extend so that very little of that immense growth was broken. This unstinted care was expensive, but it went a long way toward preserving these beautiful, full-feathered Cochins in all their magnificent plumage for their truly sensational appearance in New York when full-feathered English Buff Cochins were the leading attraction at Madison Square Garden twenty years ago.

THE ASIATIC BUFF COCHINS

BY JOHN H. ROBINSON (1924)

Buff Cochin; the kinkee or golden flower variety, of which the Buff Cochin is a refinement, is most highly esteemed in parts of China where fowls of this breed are kept. No one knows the antiquity of the breed. It appears to have been largely developed in retreats that correspond to European monasteries. The immortality of all forms of life and a special religious significance attached to large size probably had a bearing on the development. It was about 1893, that extremely long feathered English Buff Cochins were imported. Some of these were disqualified because of long stiff hock feathering (vulture hocks). Nevertheless the full feathered type exerted an influence on the American stock. The Cochin gradually began to lose its utility qualities. For a number of years flocks of utility Cochins were to be found, but at last they ran out.

Black Langshans, when introduced, was decried as a leggy, long tailed, inferior Cochin. The Langshan has been steadily bred to its original type, with bare middle toes and moderate feathered shanks, while the Black Cochin was bred for fullness of leg and toe feathering. The result that the two breeds became widely separated in type. The splendid utility of the Langshan has been retained. The Langshan is indeed a thoroughbred and in no way has it seemed to deteriorate since its transplantation from the orient.

COMMON DEFECTS OF POPULAR BUFF BREEDS

BY H.H.STEUP (1922)

By looking over your birds with these faults in mind, it should be an easy matter to choose those birds that have not only the fewest defects, but also the defects of least importance. Defects are serious handicaps to the worth of the specimens as show birds and are even greater detriment if allowed to appear on birds in the breeding pens. By breeding from defective stock, slowly but surely the flock will regress from standard quality if not culled.

The judge is an important factor of all shows. It is well to obtain the services of a licensed American Poultry Association judge if possible. Sometimes the agriculture college is in a position to send out someone

(unlicensed but knowledgeable) to judge. A trained judge will bring the most value to the show. The judge should know the standard, be fair minded and nonpartisan. Ribbons on unworthy or disqualified specimens always leads to trouble later when such birds are judged again by one who understands and judges correctly. An inefficient judge creates a false standard of excellence and lowers the value of the show.

Common defects and disqualifications of Plymouth Rocks in general:

- 1 Tendency towards under weight.
- 2 Tendency towards knock-knees.
- 3 Males often have flat breasts.
- 4 Combs too large with more than five points, females often over fat.
- 5 Combs with thumb marks, double points, wrinkles, and side sprigs.
- 6 pale or whitish color in lobes.
- 7 Tendency toward split tails in males.
- 8 Twisted wing feathers (main flight feathers).
- 9 Green peppering and dark spots on shanks.
- 10 Stilty or too long legged.
- 11 Bodies low set, approaching Orpington type.
- 12 Tail carried at improper angle.
- 13 Narrow back at base of tail.
- 14 Stubs and down on shanks and toes.

Common defects of Buff Plymouth Rocks:

- 1 White or black in main tail and wing feathers.
- 2 Lacing and mealiness in females.
- 3 Unevenness of surface color.
- 4 Shafting (shaft of feather lighter or darker than web).
- 5 White undercolor or too light shade of buff.

Common defects and disqualifications of Leghorns in general:

- 1 Double points, thumb marks, and too many points on single comb.
- 2 Large, beefy single combs blades too heavy and turned to one side.
- 3 White in face, too light colored eyes.
- 4 Tails carried too high, pinched tails, wry tails.
- 5 Lack of breast, back slanting downward too much from shoulders.
- 6 Wings carried too low, legs not in center of body.

Common defects of single or rose comb Buff Leghorns;

- 1 White, black or peppering of either in wing flights or main tail feathers.
- 2 White edging to sickles of males.

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- 3 Shafting, mealiness and patchiness in females.
- 4 Uneven color of hackle, back, wing bows and saddle of males.
- 5 Light colored shanks.
- 6 White in undercolor, undercolor too light.
- 7 Feathers tending to be laced.
- 8 Absence of spikes on rose combs.
- 9 Rose comb showing hollows in sides, top, or center.

Common defects and disqualifications of Orpingtons in general;

- 1 Birds too large or too small body lacking depth.
- 2 Short back; deficient breast; narrow back and body.
- 3 Shanks too long, body too low set.
- 4 Twisted and lopped combs thumb marks, side sprigs.
- 5 Heads too long and narrow, off colored eyes-often too light.
- 6 Stubs and down; white in earlobes.
- 7 Males with split tails, feathers too long or too loose.
- 8 Knock knees in males.

Common defects of Buff Orpingtons.

- 1 uneven surface color, males too dark over shoulders and back.
- 2 Black peppering, solid black or white in wings or tail.
- 3 Undercolor too light, approaching white or being white.
- 4 Too dark or light buff surface color.
- 5 Mealiness in females.

THOUGHT ON BUFF COLOR DEFECTS AND GENES

BY D.J.HONOUR NOV.2006

The reason why buff color is transferred is because those good colored buff breeds have all the needed genes to make a desired even shade throughout. Especially the diffusing and extension genes for red /mahogany and Champaign blond and dilute for evenness. The black, white, red sections, and mealiness, shaftiness defects are just birds lacking a few genes for the complete package. Columbian is in some buffs because it removes black from the males' breast (black breasted red/wheatons). Wheaten restricts black in hackles of both sexes and black markings in female backs. Dominant white is in some buffs because it replaces black with white or dun in tail and wings. With black out of its wild type areas, modifier genes like dilute, Champaign blond, and mahogany; can make solid even shade of buff in all sections.

Natural tendency for a balanced mating where each sex contributes the same genes for shade to produce even sound birds (is a male only one shade darker than females, both sexes being even sound buff throughout.

Black is a strong foreign color pigment. Chestnut brown is red mixed with black. White is no pigment or lack of pigment. Mixing extreme shades brings out small amounts of white, mealiness. White can be overcome by keeping it on only one side, using solid buff mates. Reduce it by degrees over several generations.

Remember Buff Cochins took many, many, decades to perfect by selection and combining all the needed genes.

BUFF AMERAUCANAS

By JOHN W. BLEHM (Sept. 2005)

The Large fowl Buff Ameraucanas have a way to go in development. McKinney got their buffs from Paul Smith and I think Paul got his from (the late) Arne Schmidt, from MN.

I do recall that Arne got buffs from me to use in his development of his strain, once or twice. He used Buff Orpingtons to get the buff color as I did originally. I also used Buff Laced Polish to get the blue legs, thanks to a suggestion from Earl Jones. Jay Horn of CA bought LF buffs from both Arne and me as I recall, at Columbus a few years ago. Others that may still have one or more LF buffs include, Rob Sando, Larry Clionsky, Michael Muenks, Louis Sandersfeld and Greg Buckler.

If McKinney Hatchery is getting out of the Buff Ameraucana chick business it would be a good time for someone to try to buy their breeders.

Some of my LF buffs also don't have buff under color or fluff (if that is what it is called), but white. They look buff, but when you move the feathers around you will see that the part that isn't exposed is white. The LF buff variety is improving, but isn't developed to the same degree as the Blacks and Whites. Good buff color, combs, leg color and egg color can be found, but very rarely on the same bird. The ones you have may not be show quality, but sound like valuable breeders when mated to the right birds. I'm big on compensation mating. I originally used 5 Buff Orpington pullets (hatchery stock) and a medium sized White Ameraucana cock (from Jerry Segler) to develop LF buffs. After I had some LF whites (using that same cock over 5 White Orpingtons), Mike and I developed bantam buffs, I put a LF white male over buff bantam females. Those strains were breed together and over the years have also used a bantam buff male and Buff Laced Polish male for various reasons. The Polish gave me the slate legs and made them less "fluffy". I believe Arne Schmidt used LF Whites and Buff Orpingtons to develop his strain. Jay Horn said he has crossed LF whites into his buffs to try to get slate legs. I think he bought his buffs from me before I made the Polish cross.

BUFF AMERAUCANAS

By MIKE GILBERT (Sept. 2005)

If you have any well colored buff females with decent type that have white shanks, I would keep them as breeders. Just make sure the male you use with them has slate legs. All the females from such a mating will have slate legs and all the males will have white legs, but will carry the gene for slate. That is because the gene that causes dermal melanin pigment is carried on the sex-link chromosome. In birds the males have the extra gene bearing chromosome, just the opposite of humans.

You can't tell if a white legged male has one gene for slate legs or none by looking at him. I'm quite sure John would have used slate legs on one side of any mating he made, so I'm betting your white legged males do have the one gene for slate legs. If so, half the pullets from him will have dark legs, the other half white legs (regardless of the leg color of the females used). If he is mated with slate legged females, same ratio in the male offspring, half and half. If he is mated with white legged females, all the male offspring will have white legs.

Either the gene for production of dermal melanin is there or it isn't. So all females have either got it or they don't. They can only have the one gene for this trait. In males, however, they can have one of each (two genes, same locus). The dark pigment gene is recessive, so the mere presence of the gene for NO dark pigment prevents the dermal melanin from even forming. The sex link gene for barring also prevents dermal melanin from forming - even if two genes for dermal melanin is present. That is why we will never see barred birds with slate legs - in any breed - unless some other offsetting mutation were to occur.

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