

CONCERNING POULTRY



Above: Dark Brahma hen moulting - Notice that even the posture of the bird is affected by it. Photos Bobo Athes.

The ultimate meaning of every hobby is to find pleasure and beauty, in one form or the other. The gardener finds beauty in the colourful perfection of his flowers, a pigeon breeder in the smooth flight of his birds. Beauty is in feelings, colours, sounds or shapes, and the only universal criterion in apprehending is the willingness to find it. Yet again, the game of language does not allow us to understand the concept of beauty without its dichotomous partner, ugliness. This is partly the subject of this article, with special reference to the world of poultry hobbyists.

Karl Kraus, the Austrian writer, once said: "A woman who cannot be ugly is not beautiful". Translated into "chicken language", a bird that does not first lose its old feathers, cannot show the full impression of good-looking afterwards. The way chickens do this is through moulting – a phenomenon which could take between 4 weeks and 3 months, depending on the breed, the age of the bird and the overall conditions provided by the breeder (including shelter, food, water, vitamins, and lack of any additional stress).

MOULTING: THE UGLY PATH TO BEAUTY IN THE FEATHERED WORLD

OR: FROM THIS (LEFT) TO THIS (BELOW)

By: Bobo Athes





Moult is not a happy period – not for the breeder, and certainly not for the birds. The effort made by the organism to renew its plumage is often so acute, that birds start to look unhealthy, they become more susceptible to various diseases, combs and wattles lose colour and even shrink, hens stop laying eggs. If not properly fed, or kept in an environment that does not provide enough space for 'exercise', birds can develop behavioural diseases, going as far as excessive pecking or cannibalism. That is why the breeder needs to know about this difficult time for his birds, and always be prepared to make the necessary adjustment.

Left: Moulting Wyandotte bantam hen, with obvious pin feathers on the neck. Photo: Monique de Vrijer.

First of all, before any new breeder starts thinking that moult is some sort of feather – doom on him and his birds, one should clarify the fact that the process itself is eventually beneficial for the birds: the new plumage will do a much better job at keeping its 'owner' warm during the winter, when insulation is of prime importance, especially in the regions where temperature frequently go below zero Celsius degrees.

Left: Marans bantam cock moulting; the feather loss usually begins with the head and neck. Photo: Dirk de Jong.



Chickens usually moult during the last weeks of summer, continuing in autumn, so that they can have new 'garments' when winter comes. The process of moulting normally follows a certain pattern: the feather loss begins with the head and neck, going down to the breast, abdomen and back, then the wings and the tail. In feather-footed breeds, the foot-feathering is usually the first area to renew its plumage. There are cases when a certain bird loses its feathers almost all at once, growing all the feathers back in a period as short as two weeks – but this happens rather seldom.

The moment when the moulting actually begins has to do with the change of seasons, and particularly with the length of the day. Birds are very sensitive to

changes in luminosity and the duration of light each day – fewer hours of light per day gives strong signals about the coming winter, and this triggers a feed-back in the bird's metabolism, igniting the moult.

Right: In the wing, the primary feathers are moulting first, from the axial feather in the middle outwards to the end of the wing. The two broad, dark feather in the middle are 'new' ones. Next the secondaries will drop but not in any set order. Photo: Dirk de Jong.



The connection between moult and sunlight is particularly true in the case of the birds kept outside, with access to natural light. Laying hens, kept in batteries and forced-fed for a higher-than-normal egg production, have artificial light as the 'guidance' for moulting, at the disposal of their breeder. Thus, the moult is 'induced' through the manipulation of light and restricted access to food and water (this usually means near- starvation 'feeding' for almost 2 weeks, this leading to high mortality rates and to birds sometimes losing more than 30% body weight); the breeder needs them to moult

all at one time, and then start laying again when the price of the eggs is the right one for profit. Usually, this whole process adds quite a stress on the already poorly kept birds, and increase the aggressiveness of the birds' behaviour – they begin pecking at each other's 'pin feathers' or featherless parts, causing horrific injuries. Crammed in a cage so small that not even ONE bird can spread its wings, they cannot avoid being constantly pecked by the others; poultry hobbyists, who go to great lengths to provide the best conditions for their birds, would not believe their eyes if they saw how much suffering is included in the life of battery hens, even though the laws against animal cruelty should protect them as well.



Left: Ex battery hen, rescued by Animal Liberation Aotearoa New Zealand from her cage before slaughtering. There are millions of hens like this in the world.

Provided with good food, richer in vitamins, calcium, phosphorus and proteins than usual (feathers contain high amounts of protein), the birds kept by hobbyist encounter no problems in regenerating their plumage in due time for the shows in autumn or winter. Hens are supposed to cease laying while moulting, and most of

them do so, but there are hens that keep on laying even through moulting, especially if in exceptionally good physical shape and properly cared for by the breeder. Adding sunflower seeds or other feeds which contain oils to the regular nutrition programme will help the birds in feathering up more quickly.



Left and right: Faverolles trio moulting - notice that the featherless on the back of the hens might be caused by the rooster. Photo: Mick Bassett.

Under normal circumstances, it takes between 3 and 7 weeks for the replacement of a feather. In males, sickle feathers can take up to 5 months to grow back. Plucking the feathers does NOT speed up the process, and it is highly painful for the bird (there are breeders who do this, in order to have their birds for show – but this tactic of “if you pull a feather out, it will grow back” is not the right method for achieving good results in poultry shows). Nature should be allowed to follow its course, it is safer for the birds and more humane from the breeders’ part.



Right: Sickle feathers, at the worst moment of moulting. Photo: Dirk de Jong.

The explanations above hold true especially for the main moult, in autumn. Usually, birds change their feathers all the time, but the process is much more pronounced in autumn. On the second place as far as breeder’s capacity to notice the phenomenon is the quick moult in the spring, when the birds ‘drop off’ some of the

feathers that kept them warm during the winter, thus preparing themselves for the warmth of the summer.



The breeders' attitude towards the moulting period of their birds oscillates between panic (for the inexperienced ones, who witness with fright how their beautiful birds are transformed into mere caricatures of themselves) and mild amusement (for the 'old' breeders, who know it is all a passing transition towards renewed beauty). Yet, I have personally encountered a young breeder who was worried about his hens moulting all the time, only on their back (saddle).

Left: Buff Cochin hen, moulting while with a rooster - double damage. Below: The same Buff Cochin hen, after having almost finished moulting. Photos: Bobo Athes.



The true cause for this "prolonged" moult was actually the rooster, kept with his hens all the time. If the males is constantly breaking the hens' feathers when mating, those feathers don't have enough time to grow back,



and the former "saddle" becomes a barren spot for the hens, easily bruised or even severely injured by the male, without the protection offered by the plumage.

Left: A good example for the rooster - caused moulting. Photo: Bobo Athes.

While hens usually stop laying during moult, the behaviour of most roosters is not influenced by



moulting, even though their metabolism undergoes certain changes in order to support the effort of the organism. In healthy males, moulting does not interfere with fertility, but if they lose too much weight (more than one quarter of body weight) fertility is gradually lower. The process can go as far as temporary infertility, if the breeder does not take the adequate measures.

Left: Usually, even while moulting, cocks continue to pose and behave normally, without knowing their true looks - surely, a mirror could cause severe psychological damage in this one. Photo: Bobo Athes.

Below: Growing new feathers. Photo: Monique de Vrijer.

Another cause for 'strange' moulting is stress. Chickens are more susceptible to stress-related disorders than people tend to believe. The sources of stress are numerous: frights, mishandling, aggression from other birds, excessive heat, cold or humidity, transportation for too long a distance, sudden changes in their environment, wrong feeding programme, prolonged broodiness, parasites – to name just a few. Depending on their severity, these elements can cause a bird to start moulting even its physiological condition would not have allowed it otherwise. Overcrowding is another factor which may lead to sudden moult or behaviour disorders. Severe cases of parasites can cause feather loss, but this should not be mistaken for the real moult.

There is one exception to all the explanations above: independently of stress related disorders, inadequate food or shelter, the coming of winter or the age of the bird, there are birds that moult suddenly, in the worst moments possible, even if they had already moulted at the time they should have. If I had to speak about my personal experience, the first example which comes to mind would be a Black Brahma hen; she used to moult together with all the other ones, in about 2 ½ months being with the full plumage back, and then in the middle of December she would moult again, losing ALL her feathers in just a few days, and growing them back in less than 2 weeks. I must add the fact the she was exceptionally healthy, good layer



and broody, and that she wouldn't lose her vigour while moulting. Of course, during those 2 weeks she was kept inside a heated chicken-house, with permanent light, so that she could eat more and get over with it sooner (in December, temperatures can easily reach 24 Celsius degrees below zero in my home region). What was more interesting was the fact that this bizarre moult was somehow genetically inherited, as her 3 daughters also began losing all their feathers at once, in the middle of the winter. As they were completely against the little "clothes" we tried to make for them, they shared the heated chicken-house with their mother...

Complete (and rather sudden moult) can also occur in frizzled varieties, especially if the birds come from a line of Frizzle X Frizzle crossings longer than two generations.



At the other extreme are birds that moult in such a manner, that the process is practically 'invisible', even for experienced breeders. They never look like they lose more than a couple of feathers a day, totally contradicting any scientific research on the 'moulting pattern', but rather seem to be in top shape all the time. Again, these are exceptions. Pictured above is such a 'miracle' hen.

Right: Moulting Faverolles bantam hen. Photo: Mick Bassett.

During moult, there are birds that otherwise have a perfect shape and colour according to the standard, but throughout this period seem to have the most various faults, beginning with colour, head points or split wings. One should first wait and see what the bird looks like in full



'feather – equipment' before making any hasty judgements. Then again, the same bird can moult differently in consecutive years, depending on its metabolism, age and the care provided by the breeder.

Like a conclusion to all the facts about moulting, there is one major element to remember - the breeder's job, that of providing the birds the necessary 'ingredients' for their new winter coat: good feed, proper climate and, last but not least, lack of stress.



"Everything has its beauty, but not everyone sees it" (Confucius)

I am sure that poultry breeders will find it hard to apply this axiom of wisdom to their birds, especially during the period when they look like a strange combination between E.T. with a beak and a hedgehog.

But remember, this uncomfortable period is the necessary step towards a complete (and useful) renewal of the birds' plumage, and a new opportunity for them to 'shine' in the show cages, after getting rid of the old, worn-out feathers.



As from the bird in the photo above, to the bird in the photo right.

Photos: Mick Bassett.

It is beauty through ugliness, if you want. In the feathered version.

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