SEXING WELSUMMER CHICKS

By Geoffrey Johnson - Welsummer Club of Great Britain

The Welsummer, in common with other breeds of poultry, derives from the Jungle Fowl. There are only two forms of pigmentation in poultry – black and red. Without these, all feathers would be white. The Welsummer has what is known as ‘wild type’ colouring which is Nature’s way of distributing pigment to make the males attractive to females, and to camouflage the females when they are incubating their eggs.

The Welsummer is one of the breeds where, by experience, we can ascertain the sexes of the day old, pure bred chicks fairly accurately. Over the last twenty five years I have hatched hundreds of chicks and, by marking those that I deem to be cockerels, have found it possible to be 90% accurate.

The ones that are invariably pullets are those having a heavy chocolate coloured stripe from the top of the head down the back, with a rich golden stripe on either side (see fig 4 opposite).

They will also have a dark line running from the eye (see fig 2 opposite).
The **cockerels** are the ones having a less clearly defined stripe, which is usually slightly more ginger on the neck. It is often missing or indistinct. The narrow pale stripes on either side will be more gingery in colour, and less obvious (see fig 3). The line from the eye can also be more blurred or not present at all (see fig 1).

Of the 10% doubtfuls, that do not conform exactly to these descriptions, one has to delay making a decision and wait until new breast feathers appear at about 4 - 5 weeks old. These are black in the cockerels and much paler, salmon coloured, in the pullets, making positive identification then possible.

I appreciate that most people hatch only small numbers and would not want to dispose of any cockerels until they are able to see which are most suitable for retention, but it is always interesting to know how many pullets one has. If hatching larger numbers then an early reduction of surplus males will permit savings on soaring feed bills and allow an increase in floor and trough space.

I would not advocate disposing of supposed cockerel chicks at 24 hours old until having practised on a good number and marking them with either chick rings or wing tabs. If it is possible to rear them separately, that is another option.

Sexing them at this age does make one more inclined to remove small or weak chicks which might otherwise be kept in case they are pullets.

Test yourself on a few batches - you should be surprised at your accuracy!

*Article courtesy of the Welsummer Club of Great Britain.*
*Website* [www.welsummerclub.org](http://www.welsummerclub.org).

**MORE TIPS ON SEXING CHICKS**
*By Greg Davies, Australia.*

Commercial hatcheries use a variety of tricks that allow them to determine the sex of every chick from the moment it hatches. The most common way they do this, involves the cross breeding of birds. Of course, all these methods are completely useless to the serious breeder of pure breeds of chickens. In these cases, it takes a little longer to determine the males from the pullets, particularly with heavy breeds. It is usually a simple matter to pick **light breed** males at about a month old. They sport much larger and brighter head furnishings and are usually far more precocious than their sisters. With **heavy breeds** it is
sometimes easy to determine the pullets by their faster and more even rate of feathering. Males feather more slowly and in a more patchy manner (but this is not always the case with some strains).

The best method therefore, is by observing the chicks' behaviour. Startle the chicks by sailing a hat or similar soft object over their heads and watch their reactions. The cockerels will instinctively stand erect with their heads upright and will emit a peculiar warning chirruping sound. The pullets will tend to crouch down low and remain silent.

The following table shows the most common differences in development between the sexes of heavy breed chicks at 5 week of age.

<table>
<thead>
<tr>
<th>Cockerel</th>
<th>5 Weeks of Age</th>
<th>Pullet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium size, pinkish</td>
<td>Comb</td>
<td>Small, yellowish</td>
</tr>
<tr>
<td>Sturdy, long</td>
<td>Legs</td>
<td>Finer, shorter</td>
</tr>
<tr>
<td>Stumpy, curved</td>
<td>Tail</td>
<td>Longer, straight</td>
</tr>
<tr>
<td>Downy with thin line of stub feathers down centre</td>
<td>Back</td>
<td>More advanced feathering along centre &amp; flanks</td>
</tr>
<tr>
<td>Feathering poorly advanced</td>
<td>Side of neck, crop &amp; flanks</td>
<td>Feathering well advanced</td>
</tr>
<tr>
<td>Bare, showing wing covert quills</td>
<td>Wing bows</td>
<td>Covered with small feathers</td>
</tr>
<tr>
<td>Erect and alert</td>
<td>Carriage</td>
<td>Lower set</td>
</tr>
</tbody>
</table>

**TIPS FROM OTHER SOURCES**

Still it is possible to cross within the same breed and produce sex-linked chicks. Breeders sometimes chose the ‘classic’ combination gold/silver cross in their breeding pen, which gives sex-linked chicks. Mating a gold male to a silver female results in cockerel (male) chicks having whitish grey or pale brown down, whereas the pullets (females) have reddish-brown or buff down. Note: this doesn’t work the other way around!

*Below: Gold and Silver Sebright chicks. Photo: Elio Corti.*
This crossing is done for all sorts of reasons, mainly to improve their lines or when lacking a proper sire. And having sex-linked chicks might just come handy. Although the male chicks start out with ‘silver’ feathers, they will not be pure silver coloured when grown (and also not in their genetic make-up!) The gold pullets however are homozygote gold.

Crossing buff and white Orpingtons is based on the same genetics as the above gold/silver cross and will also create sex-linked chicks. Buff cockerel x white hen results in buff pullets and white cockerels. Again white cockerel x buff hen will give only all white progeny. In fact this holds for all the gold and silver related varieties, such as Gold and Silver laced, Columbia and Buff Columbia, Gold and Silver Penciled.

![Wyandotte chicks in gold and silver black laced. This is not a crossing of gold x silver, but just to show you the difference in gold and silver down colour. Photo: Elio Corti.](image)

Another colour variety with which you can tell the difference in sex straight from hatching is the cuckoo or barred variety. Although the male chicks will only be slightly different from the female chicks, you have to look for a white mark on the very top of the (blackish) head, the 'occipital spot'. In some chicks this is very small, or not there at all - they are definitely female. When the spot is larger, they are the males.

The following photos were granted to us by the American Dominique Club:

![This is a group of male chicks. Notice the wide assortment of head spots, most of which could be described as scattered. The second chick from the left might fool the novice, however notice the white frosting that is on the back of the head, think of this as part of the spot.](image)
These are a group of female chicks. Notice the white spots are small and concentrated. The one of the far right would probably be the most difficult to be sure of, however, due to the relatively small size of the spot and the color on the beak and legs, it was determined to be a pullet.

Of course there are always in-between chicks, maybe 20%. With the males, as you watch the chicks growing older, the spot slowly becomes a generally light area and you can see this beginning to spread all the way across the bird as the barring begins to take effect. And when you have the mature male, he will always be lighter coloured than the female. (If your sire was NOT lighter coloured – thus heterozygote for the barred gene – the trick doesn’t work!)

This is also true for the black-red colour varieties that carry the barring factor (crele), such as the Bielefelder and (Cream) Legbar.

Right: Crele Bielefelder chicks. Apart from the head spot, the male chicks are also visible paler while the females are striped. Photo courtesy Alois Sedlak, a Czech poultry and pigeon breeder. See his website http://www.chovsedlak.estranky.cz/

Left: Silver crele Bielefelder chicks. Both crele and silver crele are true auto-sexing colours. Photo: Alois Sedlack.

Unfortunately there will always be chicks that do not conform exactly to these descriptions. It also differs with different breeding lines.
Finally we will give you this one, which is always clear and easy: Salmon coloured chicks are something you cannot misinterpret, as long as you give it a few weeks time. For instance, Salmon Faverolles chicks are easy to sex as soon as they start growing feathers. As newly hatched chicks they are all rather alike and yellow, but within two weeks you can usually see a difference in the colours on the wings. It will be very clear: the dark feathered chicks are cockerels and the light ones are pullets.

![Salmon Faverolles chicks, one week old. You can see even at this very early age the dark wing feathers on the cockerel chicks, giving some early indication of male or female.](image)

![About 4 weeks old, of course it is very clear now. Photos: Mick Bassett.](image)

**To end with**

When you are looking for sex differences, do not compare chicks of different breeds, since it is likely that they will not develop the same way or at the same rate. Even the various strains of the same breed may have a high degree of variability. Also bantam breeds are often more difficult to tell apart than pure lines of large fowl.

Sex-linked chicks may give you the opportunity to dispose very early of the surplus cockerels, but don’t forget, the longer you keep your cockerels, the better you will be able to see which are most suitable for the show or the breeding pen. And the best selection can only be done when they have fully matured.

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