

# University of Kentucky—College of Agriculture

EXTENSION DIVISION

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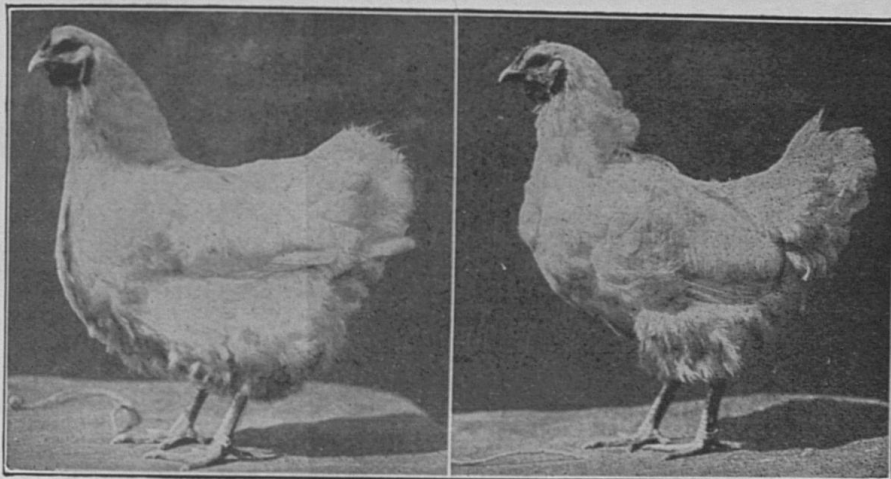
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## When and How to Cull

By J. HOLMES MARTIN and L. W. TAYLOR



226 EGGS IN 1 YEAR  
MOLTED IN NOVEMBER

82 EGGS IN 1 YEAR  
MOLTED IN AUGUST

### How They Looked August 15th

#### LAYER

1. Pin bones (pelvic or lay bones) wide apart.
2. Vent pale and pliable.
3. Large, full, bright red comb and wattles.
4. Pale yellow to white beak and shanks.

#### LOAFER

1. Pin bones close together (one finger's width or less).
2. Vent yellow and puckered.
3. Pale, shriveled comb and wattles.
4. Deep yellow beak and shanks.

Culling, the weeding out of inferior individuals, should be done thruout the year. Hatching eggs should be selected carefully and all small, misshapen, off-color and dirty eggs culled. At hatching time all weak, crippled, stunted or backward chicks should be destroyed. When the cockerels are sold as broilers or fryers they should be culled closely and only the outstanding individuals in growth, bone

and stamina kept as prospective breeders. At this time the pullet chicks should be carefully culled and all undersized, slow feathering pullets low in vitality should be sold as broilers. All thru the growing period the young stock should be carefully watched and any cockerels or pullets which fail to develop as rapidly as the remainder of the flock should be sold or eaten as fryers.

Careful culling of pullets before housing in winter quarters should be practised. All pullets showing disqualifications for the breed and variety as given in the Standard of Perfection should immediately be discarded. Then the pullets should be carefully culled on the basis of vigor. All immature, weak or diseased stock should be culled. Vigor is essential if the hens are to produce many eggs capable of hatching vigorous chicks.

#### High Vitality

1. Broad, deep head.
2. Bright, prominent eye.
3. Long, deep, rectangular body.
4. Strong, parallel legs.
5. Stylish carriage.
6. Active disposition.

#### Low Vitality

1. Long, slim head (crow-head).
2. Dull, sunken eye.
3. Short, shallow, round body.
4. Knock-kneed.
5. Droopy appearance.
6. Lazy, sluggish disposition.

Late maturing pullets seldom make good layers. Careful records in trapnesting at the Kentucky Experiment Station show that Leghorn pullets which commence laying at 5 or 6 months of age and Plymouth Rocks (general-purpose breeds) which start at 6 and 7 months usually lay the largest number of eggs during the year. Pullets which lay extremely early (under 5 months) seldom attain sufficient size and consequently produce small eggs. Pullets which do not come into laying under 8 months seldom mature prior to mid-winter and then defer laying till spring.

After culling the chicks and pullets, those kept as layers should produce enough eggs during the winter and spring to insure a good profit. However, approximately one-third the flock will not lay sufficiently well to warrant keeping a second year. Consequently, the flock should be culled with care during the summer to avoid feeding the poorer hens after they have ceased laying. Accurate culling is only possible in a well-fed flock, kept free from lice and mites thruout the summer months. If improperly fed or not fed at all the entire flock will cease heavy laying during July and August, making it very difficult to distinguish the good from the poor layers.



When a bird stops laying in the summer she usually starts molting. The later a hen lays in the summer or the longer the period over which she lays, the greater will be her production, so that the high producer is the late layer and hence the late moulter, provided she receives milk or tankage thru the summer, to balance the ration. The early molter is not the early winter layer. The high layer usually retains her primary wing feathers until September or October.

The depth of yellow color should be observed by daylight. When a hen starts laying the supply of yellow coloring matter obtained from the food eaten is diverted from the skin, beak and shanks to the yolks of the eggs being formed. The yellow pigment already stored in the skin, beak and shanks gradually fades and the parts become white. The changes occur in the following order:

The color of the VENT changes very quickly with egg production so that a white or pink vent on a yellow-skinned bird generally means that the bird is laying, while a yellow vent means a bird is not laying. It should be recognized that all yellow color changes are dependent on the feed, coarseness of skin and size of bird. A heavy bird fed on an abundance of green feed, yellow corn, or other heavy material that will color the fat deep yellow will not bleach out nearly as quickly as a smaller or paler-colored bird.

The color goes out of the BEAK, beginning at the base and gradually disappearing until it finally leaves the front part of the upper beak. The lower beak bleaches faster than the upper, and should be used where the upper beak is obscured by horn or black. On the average-colored, yellow-skinned bird, a bleached beak means heavy production for at least the past four to six weeks.

The SHANKS are the slowest to bleach out and hence indicate a much longer period of production than the other parts. The yellow goes out from the scales on the front of the shanks first and finally from the scales on the rear. The scales on the back of the shank are the last to bleach out and may generally be used as an index to the natural depth of yellow color of the bird. A bleached-out shank usually indicates fairly heavy production for at least 4 to 6 months.

The yellow COLOR COMES BACK into the vent, ear lobes, beak and shanks in the same order that it went out, only the color returns much more quickly than it goes out.

**Body Changes Due to Laying.** Heavy production is also shown by the quality of the SKIN. Fat goes out from the skin and body with production, so that the heavy producers have a soft, velvety skin that is not underlaid by layers of hard fat. The abdomen, in particular, is soft and pliable.

The character of the head is one of the most valuable factors in culling. The head of a good layer is deep and broad, yet it is not coarse. The skin of the face is smooth and not underlaid with fat. The eye is full, round and prominent, especially when seen from the front. The head should not be small and over-refined.

After the hen lays heavily the feathers lose their sleek and glossy appearance. It is characteristic of a good producer to be in a worn and threadbare condition during the summer.

#### HOW TO TELL WHETHER A HEN IS LAYING

A laying hen has a large, moist VENT, showing a dilated condition and looseness as compared with the hard, puckered vent of a non-laying hen.

The whole ABDOMEN is dilated, as well as the vent, so that the pelvic bones are widespread and the keel or breastbone is forced down, away from the pelvic bones, so as to give large CAPACITY.

Just beside the vent are the two pelvic bones, one on each side, projecting towards the rear. By placing the fingers, flat, between these bones, the width apart can be determined. If the ends of the bones are soft and pliable and the width of two or three ordinary fingers (varying with the size of the hen) can be placed between them, the hen is, in all probability, laying at the time of examination. If the bones are close together and the points hard, the hen is not laying.

The comb, wattles and ear lobes enlarge or contract depending on the condition of laying. If these parts are large and smooth, or hard and waxy, the bird is laying. If the comb is limp the bird is either coming into or going out of lay, or laying but little. When the comb is shrunken and rough, the bird is not laying.