

cutting

THE LAYING FLOCK



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Culling the **LAYING FLOCK**

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Culling is the process of segregating, by external appearance, undesirable and unprofitable birds from the remainder of the flock. It should be a continuous process from the time the birds are hatched. With chicks this is accomplished by the removal of the unthrifty birds. The pullets should be culled from the standpoint of thrift, size, rate of maturity, and true-ness to type and color.

Assuming that the flock is comparatively free from disease, has been properly fed, housed, and managed, one should be able to arrive at a fair estimate of the past performance of the hens, provided he is acquainted with the principles of culling.

WHEN TO CULL

The time for rigid culling of the hens is toward the end of the laying season. This period is generally considered to be



Fig. 1. The proper method of holding a hen for culling observations.

from June 15 to September 15. The entire flock should be handled twice during this time. Accurate culling requires that each hen be handled individually. The June or July culling is for the purpose of removing the hens that have stopped laying and also the early molters, thereby immediately cutting down production costs by conserving feed and labor. The September culling is for the purpose of selecting the best individuals to carry over for another laying season.

Health, vigor, size, trueness to Standard type and color, as well as heavy egg production, are points to consider in late fall culling. Continuous culling should be practiced throughout the remainder of the year by removing birds from the flock that go "out of condition" from a health standpoint, or for other reasons go out of production.

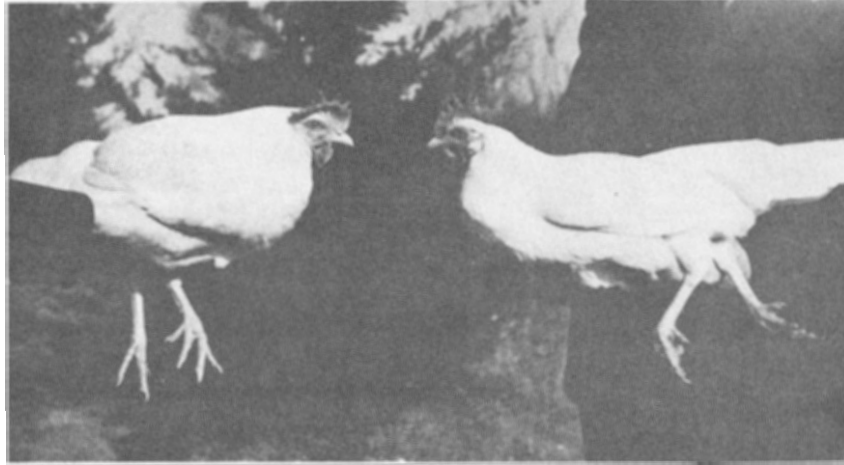


Fig. 2. Showing the comparison of the depth of body, and the depth and fullness of the breast of these two hens.

FACTORS TO BE CONSIDERED

Body Capacity—To be a high producer a hen must have the capacity and ability to utilize relatively large amounts of feed rapidly and efficiently. She must be equipped to lay not only for a long period of time, but also at a rapid rate.



Fig. 3. Another comparison of body depth.



The heavy producer has a long, flat, broad back; a deep, full, well rounded breast; uniform width and depth of body; and a soft, pliable, capacious abdomen. In contrast, we have the poor producer with a narrow, tapering back; a shallow, narrow breast; lacking in uniformity of width and depth of body; and lacking capacity and quality in the abdominal region.



Fig. 4. A comparison of these same two hens showing the long, flat, broad back; as compared to the narrow, tapering back.



Fig. 5. Showing the soft, pliable abdomen of the heavy producer, with a four - finger spread between pelvic and keel bones.



Quality—The quality of the bird is an important factor in determining its condition. The abdomen of a heavy producer is soft and pliable, while that of a poor producer is hard and nonpliable. The spread of the pelvic bones and the distance between the pelvic bones and keel bone is an indication of the quality of the bird. This spread will vary with the laying condition of the bird. The greater the spread and the deeper the abdomen, the better. The good producer will show a four-finger space between pelvic and keel bones, two- to three-finger space between the pelvic bones. The poor producer will show from one- to two-finger space between the keel and pelvic bones, with about one-finger space between the pelvic bones.

The skin of the good producer is thin, fine and velvety; while that of the poor producer is thick and coarse.



Fig. 5-A. The same hen as shown on page four with a three-finger measurement between pelvic bones.



The shanks of the good producer are lean, flat and fine scaled; as compared to the fat, round and coarse scaled shanks of the poor producer. (See picture next page.)

In the good producers the pelvic bones are thin and flexible, while with the poor producers they are thick and stiff. It should be remembered; however, that the thickness of these bones varies considerably depending upon whether or not the hen is in laying condition.

The vent of a high producer is large, open and moist; while the vent of the nonproducer is small, dry, and puckered.



Fig. 6. Comparing the flat, lean, fine scaled shanks, above; to the fat, round, coarse scaled shanks of the poor producer, below.

Head—The head reflects quite accurately the internal mechanism of production. Heavy producers are keen, active, and curious. They have a bright, red comb; clear, bright, wide-open eyes; soft, waxy, red comb; clear-cut, lean face, free from fat. They usually have a short, stubby beak that is free from pigmentation.

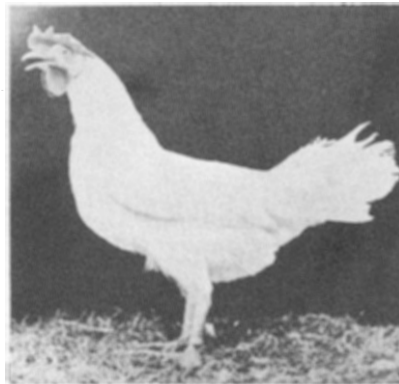


Fig. 7. Note the comparisons of the head and body of the poor producer on the left, with those of the good producer on the right.

The poor producer usually lacks in thrift, is out of condition, and her comb is shriveled, ashy in color, and small. The beak will show yellow pigmentation, if of a yellow skin variety, and in general she is lacking in alertness and thrift. She is shy, retiring, unfriendly, and will show uneasiness when handled.

Molting—Molting, in itself, is not an accurate way of determining the total annual production, because of the variation in laying cycles, but an estimate of the duration of production can be made. When a hen stops laying she usually goes into a molt. A partial molt may occur at any season of the year, but the body molt usually occurs in the summer or fall. Late, rapid molters are usually heavy producers; while early, slow molters are poor producers. The early molter takes more vacation time than the late molter and naturally is less profitable.



Fig. 8. Showing the poor producer, above, that molts early and drops one or two primaries at a time; as compared to the late, rapid molter, below, which holds her primary feathers until a later date and drops more feathers at one time.



The molting of the primary wing feathers can be used in detecting vacation periods. The primary wing feathers are separated from the secondary feathers by an axial feather. When a hen stops laying she will usually drop the inner primary feather next to the axial feather first. If she remains out of production for two or more weeks, the second primary feather will be dropped and so on until the entire wing is molted.

The poor producer usually drops one primary feather at a time and takes a long time to complete the molt. A good producer may drop a few, then replace them and start laying again, keeping some of the old primary feathers another season. In some cases she may drop as many as four primaries at a time. It requires approximately six weeks to grow a new primary feather.

Pigmentation—The presence or absence of the yellow color in the different portions of the bird's body is a characteristic which assists the poultrymen in determining the stage of production of the individual. Yellow-skinned birds, before they start laying, will show yellow color in the beak, skin, and shanks. The yellow coloring material is furnished by the feed, primarily yellow corn and the leafy parts of green feed. When the hen starts producing egg yolks, the yellow coloring material from her feed is automatically diverted to the ovary where it is deposited in the egg yolks. In a nonproducing hen this yellow pigment is expelled through the surface of the skin, beak and shanks. When the supply of pigment to the skin is cut off, that already present will work its way to the surface and gradually disappear. This process is called Fading or Bleaching and the extent to which it has occurred depends upon how long the supply to the skin has been cut off.

Usually the skin around the vent will lose its yellowish color during the first week of production. The eye-rings and the earlobes lose color a little slower than the vent.

The beak ordinarily loses its color in from four to eight weeks. The color fades from the corners of the mouth or base of the beak first, then fades gradually from the base to the tip. The shanks are the last part of the skin to lose their color, fading first in front and retaining color longest just below the feathers at the back of the hock joint. From three to six months usually is necessary to completely bleach the shanks.

When a hen stops laying, the yellow color reappears in each of the above regions in the same order in which it disappeared. Pigmentation usually returns much faster than it disappears, but this will depend somewhat on the type of ration fed and the breed, age, and vitality of the bird. One may get a fair idea of how long a hen has been out of production by checking the extent of the pigment that has been restored.