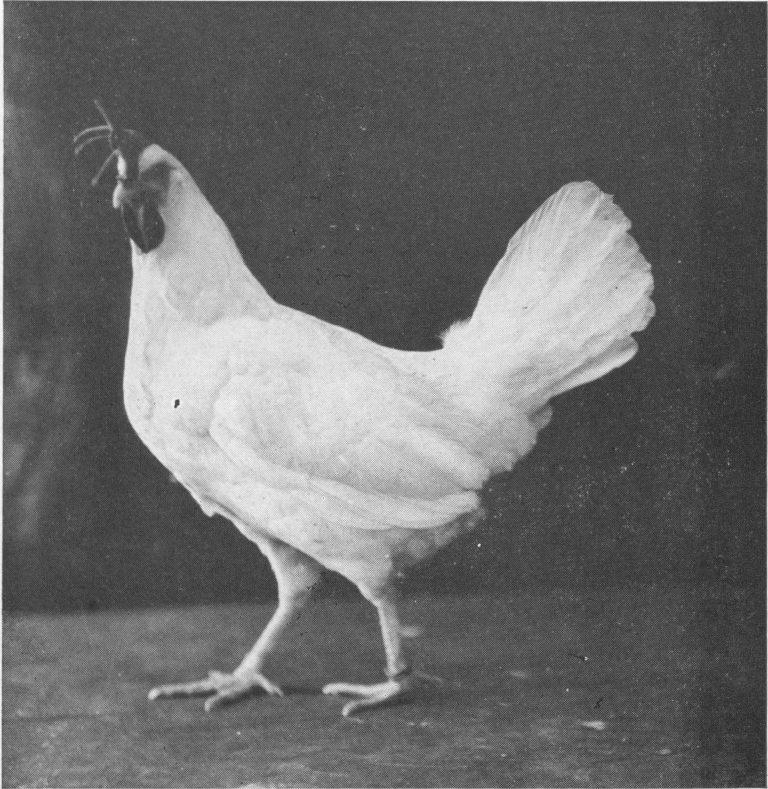


CULLING HENS



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CULLING HENS

Geo. P. McCarthy, Extension Poultryman

Every person engaged in poultry production, regardless of the size of the enterprise, should have a working knowledge of culling. The owner of the flock should cull the flock and not depend upon someone else. It should be borne in mind that profitable egg production depends upon the efficient use of feed by the hen in the manufacture of eggs. It is the object of culling to remove from the flock those hens that do not make efficient use of their feed.

Profits from the average farm poultry flock could be increased if owners would study the birds and learn to tell good layers from poor ones. First the poultryman should become familiar with the things to look for in the good layers, and then the hens should be studied until the layers can be distinguished from the slackers.

Culling should be started with the day-old chicks and be continued throughout the life of the birds. A sickly chick should not be allowed to remain in the brooder house in order to "give it a chance". Such chicks are a menace to the health of the others and should be culled.

Pullets should be carefully culled before housing in winter quarters, with vigor as the basis of selection. All immature, weak or diseased stock should be culled, for health is essential if the hens are to produce eggs on a profitable basis.

Pullets that are late in maturing seldom make good layers. Records show that Leghorn pullets which commence laying between five or six months of age and Plymouth Rocks and other general-purpose breeds which start between six and seven months usually lay the largest number of eggs during the year. Pullets which lay extremely early, or under 5 months, seldom attain much size and therefore lay small eggs. On the other hand, pullets which do not come into laying before eight months seldom mature prior to mid-winter and then defer laying till spring.

Give the Hens a Chance

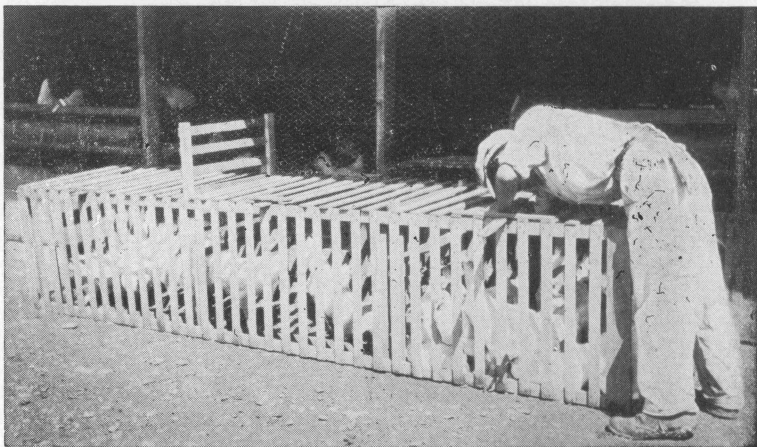
Some hens do not lay because they are not properly fed. Such things as improper feeding, poor housing, mites, lice, intestinal worms, or lack of abundant shade and water may keep good hens from being good producers. The old saying

that "you have to breed eggs into a hen and then feed them out of her" is still true. Before a large number of healthy hens are culled, the management of the flock should be checked carefully. If low production is the owner's fault, the flock should be given a chance by being cared for properly. A sick hen is incapable of production, while a healthy flock is a profitable one. Before culling, give the hens a chance.

No amount of feed will make a high producer of a hen that is a typical low producer, but lack of feed many times causes hens capable of high production to fall into the unprofitable class. It is an easy matter to weed out the low producers in a flock that has been fed liberally on a well balanced ration but it is almost impossible in a flock that has not been properly fed.

Prepare for the Job

Much time and labor is lost by trying to catch hens with the old style "hen hook" or by trying to corner them in the chicken house and catch them by hand. Trouble can be saved if a catching crate is prepared for the job.



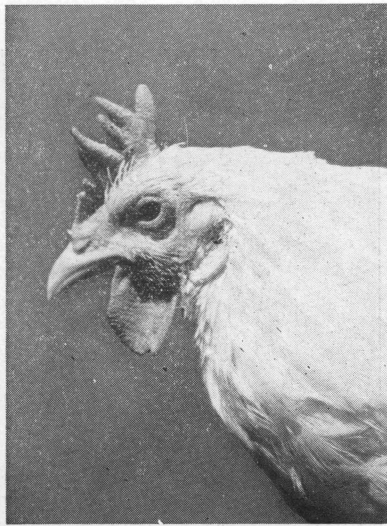
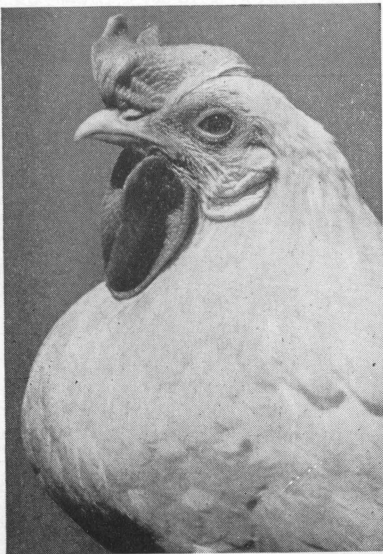
A catching crate can be easily made and saves time and labor.

A catching crate can be made by cutting a hole in an ordinary poultry shipping crate or other crate of like size. Place the crate in front of a small opening in the corner of the chicken house. A few birds can be driven into the crate and the opening closed. The hens can be taken from the crate without unduly exciting the flock and with little loss of time.

Remove the hen from the catching crate with as little disturbance as possible. With the hand held palm upward, take hen with her head under arm, the forefinger between the legs, the thumb and the middle finger grasping the outside of the legs, and the fowl's body resting on the wrist and forearm. In this position, the bird can be easily handled and every part of her body may be seen.

Look for These Things When Culling

The first step in selecting good layers is to be able to tell the hens that are laying from those that are out of production. The close observer will usually be able to make this distinction without handling the birds. The comb and wattles of the laying hen will be bright red, large, full and waxy. The eyes will be



Layer and non-layer.

bright and of a deep color which gives her an alert appearance. These points are easily observed in such breeds as the Leghorns.

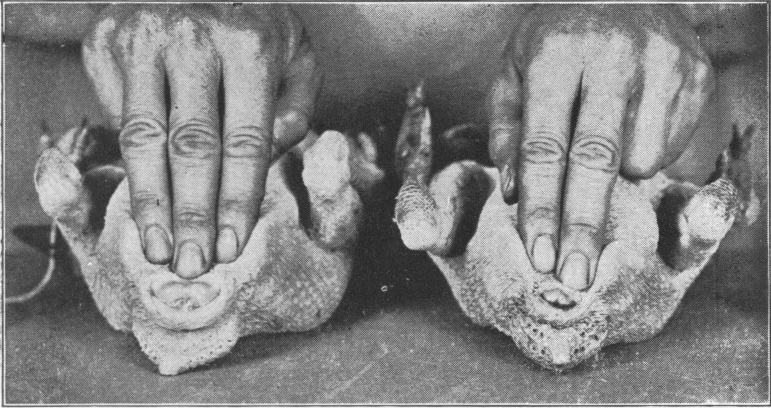
The comb and wattles of the dual purpose breeds such as Plymouth Rocks and Rhode Island Reds will have the same general appearance as the Leghorn but because of the difference in size of the combs, it is not so easy to make this distinction without handling the birds.

The poor producer, or cull, usually has a long slender, snake-like head, dull, sunken eyes and coarse, meaty face.

A second test of a hen that is in lay is to study the condition of the pelvic bones, abdomen, and vent. When the hen is laying, her abdomen is enlarged and the skin covering is soft, thin and pliable, with the degree varying according to the length of the laying period and how heavily she has been laying. In a good layer, the pelvic bones are spread wide apart and become soft, thin and pliable. The distance between the pelvic bones and keel bone also increases, due to the increased size and length of the intestines and the enlargement of the reproductive organs. The vent will be large, white and moist.



Measuring the depth of the body. (Courtesy University of Missouri.)



Body capacity of good and medium producers. (Courtesy University of Connecticut.)

Capacity alone, or the space between the two pelvic bones and between the pelvic bones and the keel bones, is not of as much value as the thinness and pliability of these bones. A hen with a hard, unyielding, rubbery abdomen caused by an accumulation of fat should not be mistaken for a good layer, even though she has a good space between the bones.

The culls are those hens that have thick, stiff pelvic bones that are close together; those that have a heavy layer of hard fat over the abdomen; and also those with little space between the pelvic bones and the keel bone. The vent will be small, puckered and dry.

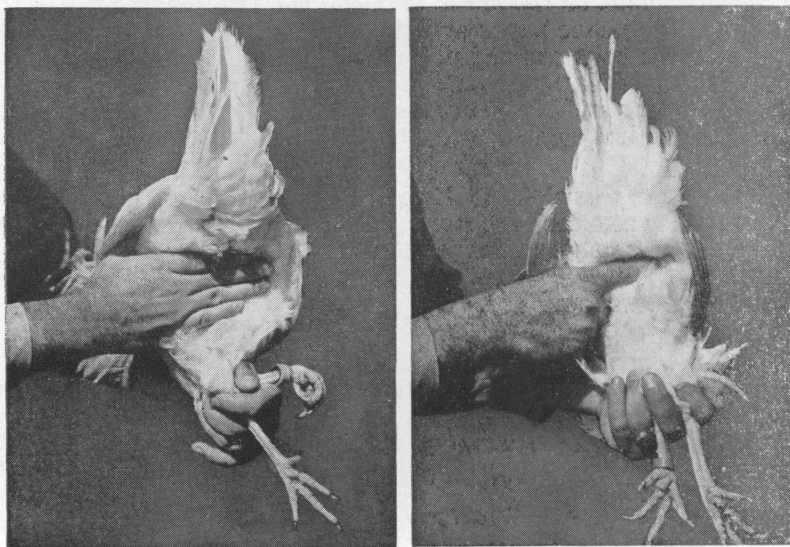
The body of a hen is the factory where the eggs are made. An efficient producer usually has a long broad back of uniform width, and a deep body. This indicates that the hen has the capacity to consume large quantities of feed and to digest it

quickly. She should also have a full breast, with legs set wide apart, and a long keel bone to prevent the abdomen from sagging and breaking down. The relative depth of the body should be determined by measuring from the center of the back to the center of the breast bone. The depth of the body in front is a very important factor in selecting the good producer.

Cull out the hen that is narrow and short of back and shallow in depth of body. Such hens lack the feed capacity and constitution to stand up under heavy production.

How to Tell a Hen That Has Been A Good Layer

It is one thing to be able to pick a hen that is laying, but it is another thing to be able to tell if she has been a good layer. The fact that a hen is in laying condition at the time she is being examined does not imply that she has been a good layer. Many poultry raisers make their selections of hens to



Layer and non-layer.

be sold merely on the basis of present condition without any regard to the age of the hens, the time of year, the length of time she has been in production, or past performance.

There are two ways to judge the past production of a hen. Neither of these will reveal the exact number of eggs that have been laid but both are accurate enough for all practical purposes. There are certain changes that take place in the hen's appearance due to egg production that are easily read and are a fair guide as to the length of time she has been laying. It is well to remember that neither of these tests can be relied on if the birds have not received proper feed and care.

Lack of Yellow Pigment Shows A Layer

The first change indicating past performance is the disappearance of yellow pigment. This can be applied to all yellow skinned varieties. When a yellow skinned pullet starts to lay she has tored up in her body a supply of yellow pigment. This can easily be seen in the beak, the eye ring, the ear lobe, and the shanks and toes.

Heavy production causes this pigment to be used up. The amount of pigment in a bird is influenced greatly by the feed consumed. Birds running on green pasture and consuming large quantities of yellow corn and alfalfa leaf meal have an abundance of yellow coloring and will therefore bleach out more slowly. In the yellow skin varieties, the yellow pigment fades out as the hen continues laying. The color fades out of the vent first, then the eye rings bleach out, next the beak fades. It usually takes four to six weeks of heavy production to bleach out the beak. The color fades out of the beak from back to tip and returns in the same order on birds going out of production.

If a hen laying long enough to bleach the beak only part of the way and then stops laying the color will reappear again at the base. If production is resumed the color will again fade resulting in a yellow band. If the majority of the hens in a flock show yellow rings on the beak it is an indication of mismanagement.

The shanks are the last to fade. The color first disappears from the front scales of the shanks, while the back of the shanks and the top of the toes are the last to bleach. It usually takes 15 to 20 weeks of heavy production to bleach the shanks entirely. This is one of the most reliable and important factors to consider, as it indicates length of the production period. It is also a point that can be very quickly and easily observed. The birds that retain the yellow color in beak and shanks three or four months after the flock starts to lay should be culled.

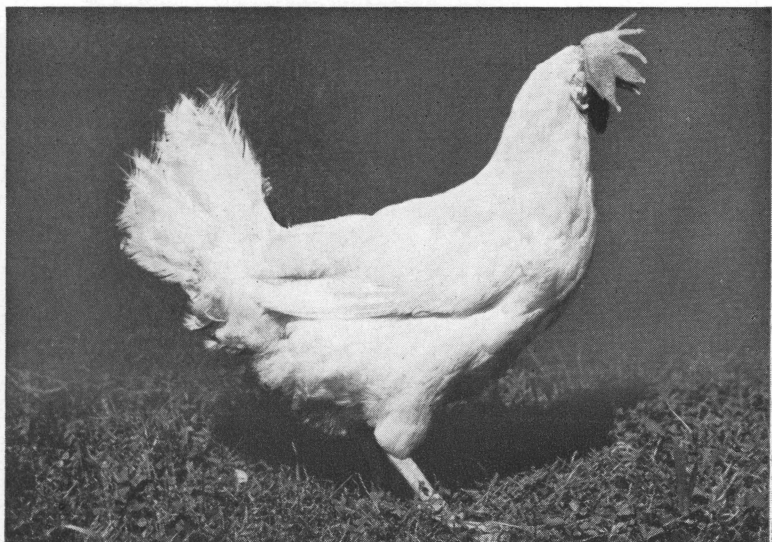
Molt is Reliable Index of Production

The second change in appearance indicating past performance is the molt. It is natural for hens to drop their old feathers once a year, but the time of molt is most important, for this usually indicates the time she ceases laying. A hen that molts early would have a shorter time in which to make a good egg record. The order of molt is usually the same in all breeds. The feathers are dropped in the following order—head, neck, breast, abdomen, fluff, back, wing, tail.

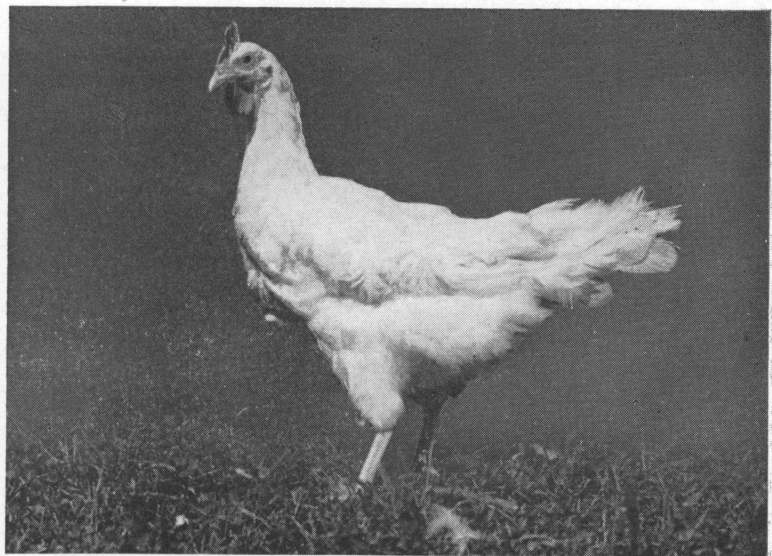
As long as a hen is laying she usually maintains her feathers, but when she stops laying in the summer she nearly always begins to molt. Some hens are quick molters and take but four or six weeks, while others molt very slowly, taking four or five months. A high production hen molts late and finishes quickly. The early molters and those that molt slowly are the hens to cull out. An early molt is sometimes induced by improper feeding.

These are General Points of a Good Hen

The high producer is nearly always active and vigorous, first off the roost in the morning, and the last on the roost at night. She is easy to handle. The poor layer is flighty, nervous, and is usually found loafing in darkened, out-of-the-way places. Cull the hens that are persistently broody.



Keep only good layers for profitable production.



Can or sell the culls.

CULLING CHART

Judging For Present Production

Character	Laying Hen	Non-Laying Hen
Vent	Large, dilated, oblong moist	Small, contracted, round, dry
Pubic bones	Flexible and wide apart	Rigid, close together
Comb	Large, red, full, glossy	Small, pale, scaly
Wattles and lobes	Prominent, soft, smooth	Inconspicuous, rough and dry

Judging Past Production

Character	Long Laying Period	Short Laying Period
Vent	Bluish white	Flesh colored
Eyelids	Thin, edges white	Thick, yellow tinted
Eye	Prominent, keen, sparkling	Listless, sunken
Earlobes	Enamel white	Yellow tinted
Beak	Pearly white	Yellow tinted
Face	Clean cut, sunken	Full, well fleshed
Shanks	White, flat, thin, creased	Yellow, round, smooth
Plumage	Worn, soiled, lifeless, close-feathered	Signs of molting, loose-feathered

Judging Rate of Production

Character	High Rate	Low Rate
Keel	Slopes downward	Slopes upward
Pubic bones	Tips thin, point straight out	Tips thin, curve in
Capacity	Four to five fingers	Two fingers
Abdomen	Soft, pliable, dilated	Fatty, hard, contracted
Rump	Broad, width, carried back	Narrow, cramped
Lateral processes	Prominent, pointed outward	Hard to find, pointed inward
Skin	Soft, thin, loose silky	Thick, dry, underlaid with fat

Use System in Culling

While culling should be a continuous process, add system to the method by a general culling four times per year. Leg band the layers with a different color leg band each time and find the valuable all season producers. The average job of culling only gets rid of the loafers, it does not separate the extra good from the fairly good hens. Of course, trap nesting is the only completely accurate way to check production, but the four-band culling system will give much of the efficiency of trap nesting.

Band all the layers with a band of a color for each season; leave unbanded those not laying. At the end of the year the one band, and most of the two band hens are gone. Three band and four band hens are held over for another year's laying. Non-layers are not banded though they may have a band from a previous culling. Using different colored bands for the different seasons provides a way of telling at a glance how the hens stood at previous cullings.

Band all birds that go broody with a black celluloid band. Any bird going broody more than twice should be removed and by all means should not be used in a breeding pen.

Then hens with four bands have shown that they have the ability to lay throughout the entire year. The breeding hens for the next year should be selected from the four band hens. Select healthy, vigorous hens, of good size, type and color. These hens should be mated to a pedigreed male bird from a known high production strain. The chicks that result from this mating should be very profitable.

If the pullets that result from the above mating come up to your expectations then the same male and same hens as above should be mated again for the following season. It is recommended that the pedigreed male bird be used for three years.

When	Why	What
October or November	Not to discard the non-layers especially, but to locate and band the fall layers so you will know them later.	<ol style="list-style-type: none"> 1. Leg band the layers and early maturing pullets with red band. 2. Remove and sell birds obviously of no value as layers. 3. Leave unbanded birds good enough to save but not yet laying.
January	Not to discard the non-layers but to locate and credit with a leg band the winter layers.	<ol style="list-style-type: none"> 1. Leg band the layers with white. 2. Remove and sell birds obviously of little value, as weakly, small, generally unthrifty hens. 3. Leave unbanded the birds kept that at the present time are not laying.
May	Cull the flock to band the layers and sell the culls.	<ol style="list-style-type: none"> 1. Band the layers with blue. 2. Cull the non-layers; broody, excessively fat hens, carrying no bands from previous culling; and generally unthrifty hens.
July or August	Cull the flock to band the layers and sell the culls to make room for the pullets.	<ol style="list-style-type: none"> 1. Leg band layers with green. 2. Cull non-layers; early, slow molters; short season layers; excessively fat hens and generally unthrifty hens.

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