

# Poultry Handbook

## Past Egg Production Judging

In past egg production classes, four live hens are judged and ranked according to the number of eggs they have laid before the contest. They are ranked from the most eggs produced to the least.

This is determined by the following factors of:

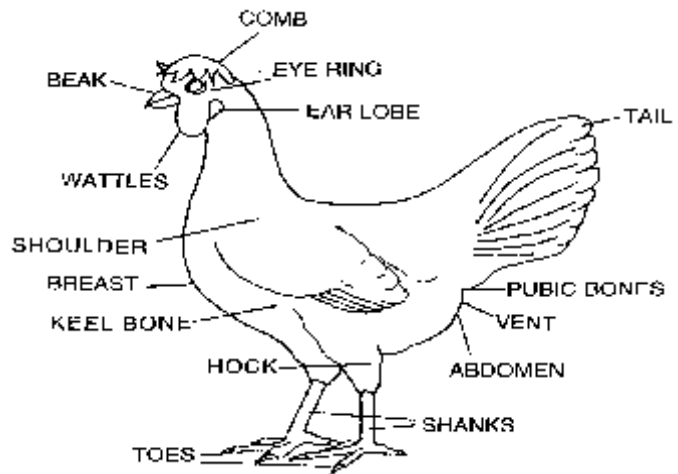
- T** loss of yellow pigment from the body and shanks,
- T** handling quality of the pubic bones, vent and abdominal skin,
- T** abdominal capacity, and
- T** molt or the loss of primary feathers from the wing.

- Pigment loss is the first characteristic that should be used to place the class.
- The hen that has bleached the most should be placed first.
- If two birds have the same pigment loss, use handling quality to split the pair.
- The bird with the better handling quality is above the other.
- Two birds with equal bleaching and handling quality are placed on differences in abdominal capacity.
- The hen with the larger abdomen is the better layer.

This section will teach you how to look at a hen, see each of these factors, use them to place a class of past production hens. You need to know the parts of the bird important for production judging. (shown below) Learn them and you will then be able to examine birds properly.

### Taking Observation Notes

When you examine each bird for bleaching, handling quality, abdominal capacity, and molt it will be necessary to take notes on your observations. To do this you will need to learn the table on TAKING NOTES and you must be able to create it from memory, since a copy of it will not be given to you during the judging event.



Bird	Pigment	Handling Quality	Abdominal Capacity	Molt	Other
1					
2					
3					
4					

Placing: \_\_\_\_\_

Write the bird number as the first, second, third, and fourth placings, like 3-4-2-1 or 2-4-3-1 or 3-2-1-4. The order you write the bird's number depends on how the birds placed and you always write the placing from highest to lowest.

# Judging Past Egg Production Hens

## Pigmentation or Bleaching

Leghorn hens used for egg production have yellow-pigmented skin, beak, shanks, and feet while the bird is a growing pullet. At sexual maturity, which is 16-22 weeks of age, she starts to lay eggs. Pigment loss is the first characteristic that should be used to place the class. The hen that has bleached the most should be placed first. The pigment bleaches from the pigmented areas in a definite order according to the approximate number of eggs she has laid. The terms bleach, bleached, and bleaching mean the loss of yellow pigment. When the yellow skin pigment is bleached or lost the skin color becomes a creamy white.

Pigment loss is the first characteristic that should be used to place the class.

When the yellow skin pigment is bleached or lost the skin color becomes a creamy white. If you learn the order of pigment loss or bleaching, you can easily rank the hens for past egg production.

The order is:

(1) vent, The vent of a good layer should be:

bleached (no yellow pigment)

moist

large

oblong in shape

(2) eye ring, (3) ear lobe, (4) beak, The good layer has no pigment in these areas.

(5) bottom of the foot,

(6 & 7) Entire Shank (front, back, sides),

### EVALUATING PIGMENTATION OF THE SHANKS

Cover the top of the foot with your hand to hide any pigment that may be there.

Some very good layers may never bleach this part of the foot.

Start at the top of the shank and study the loss of pigment down toward the foot.

The good layer has bleached this area of the shank.

(8) Hock and top of toes

*To begin stand back and look at the class as a whole. Look for the best producers first. Their beaks and shanks should be well bleached.*

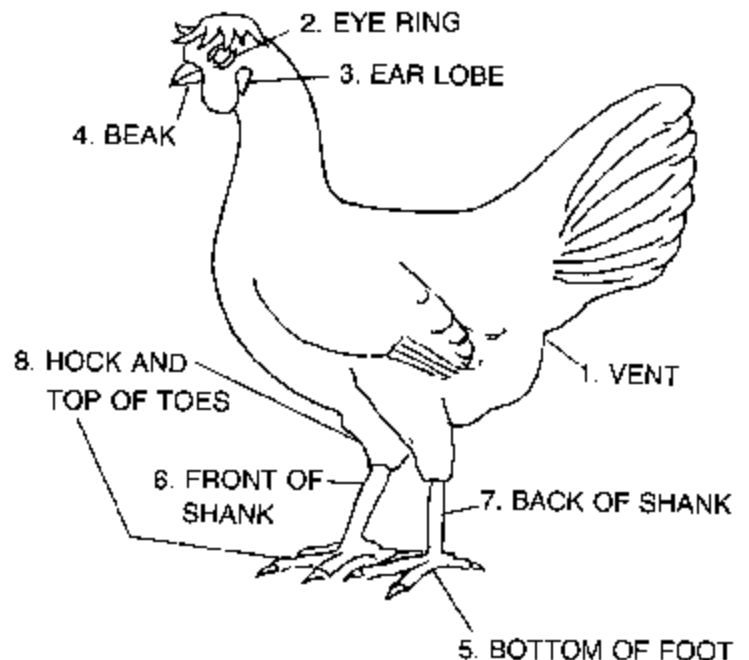
Hens regain their pigment when they stop production, as in a molt.

The pigment returns to the skin in the same order it is bleached: vent, eye ring, ear lobe, beak, bottom of the foot, entire shank, hock and tops of the toes.

Hens that show signs of re-pigmentation are poor producers.

So don't forget to look at the face and vent for pigmentation - not just the shanks.

Yellow face and white shanks equals poor production (molt) and the hen would be ranked lower.



# Judging Past Egg Production Hens

## Handling Qualities

Production hens should be judged for handling qualities and abdominal capacity if they cannot be placed by pigmentation. To do this you must gently catch, hold and examine the hens.

Handling Qualities refers to the condition of the pubic bones and abdomen.

**T** Good: Thin and pliable pubic bones, lean skin and soft abdomen

**T** Poor: Thick pubic bones, thick skin, hard abdomen (means fat in the abdomen)

Handling Qualities is the second characteristic that should be used to place the class.

### Catching & Handling the Hen

After seeing the class as a whole, remove each bird from her cage and make notes of your observations. To remove the bird from the cage and examine her, follow these steps:

1. Place your hand above the hen and gently pin her to the floor of the coop. Steady the bird with your free hand and hold one wing at the shoulder. Turn her head to the door.
2. With both hands, hold the wings next to the body; lift the bird off the floor and take her from the cage head first.
3. Slide one hand under the bird so the breast sets in the palm of your hand. Steady her with your free hand. Hold the legs gently above the hocks. Put your index finger between the hocks, your thumb around one leg and your remaining fingers around the other leg. Carry the weight of the bird with the breast in the palm of your hand.
4. To examine the bird, hold her back against your stomach, head down. From this position you can see the vent and check handling quality, abdominal capacity, bleaching of the feet and shanks and molt.

### Handling Quality

- < Keep the bird in the same position and gently feel the pubic bones for sharpness and flexibility.
- < Take a pinch of skin just below the pubic bone. Roll it gently between the thumb and finger to feel its thinness. Feel the softness or hardness of the abdomen.
  - < Softness means a lack of fat.
  - < Hardness means fat in the abdomen.
- < A lean, trim condition of the pubic bones, skin, abdomen and shanks means good handling quality. Record this in your notes.

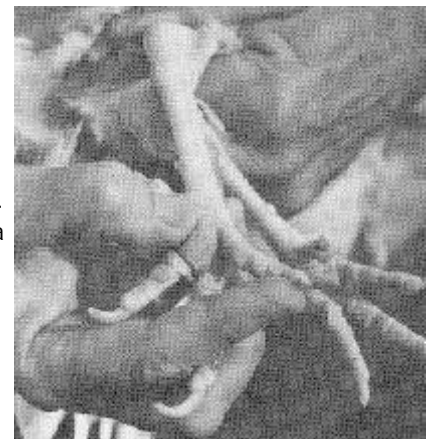
### Bleaching of Vent



Use your free hand to spread the feathers and look at the vent. It should be bleached, moist, large and oblong in shape. Record your observations about the vent in your notes.

### Bleaching of Shanks

Look at the feet and shanks. They should be bleached through the hocks. Also, they should be thin and have a groove down the side.



# Judging Past Egg Production Hens

## Abdominal Capacity

Hens should be judged for handling qualities and abdominal capacity if they cannot be placed by pigmentation.

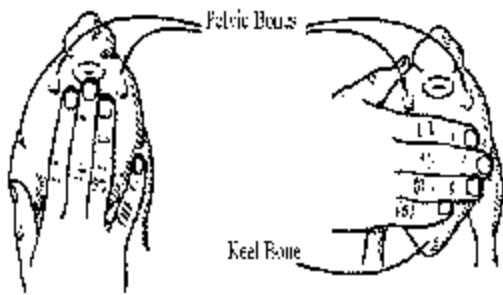
### Measuring Abdominal Capacity

Place as many fingers as you can between the bottom of the pubic bones and the rear tip of the keel bone. Count the number of fingers to find the abdominal depth. Turn the bird sideways, breast toward you, with the head under your elbow. Count the number of fingers that fit between the pubic bones to determine the abdominal width.

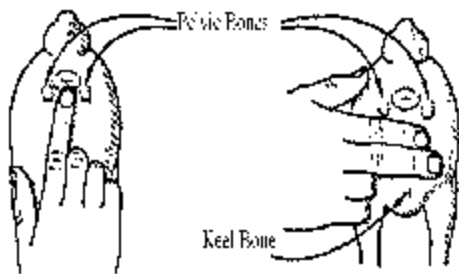
Abdominal Capacity is the third characteristic that should be used to place the class.

### Measuring Abdominal Capacity

(Feathers Removed for Illustration Purposes)



A 3 fingers' width x 4 fingers' width indicates excellent abdominal capacity



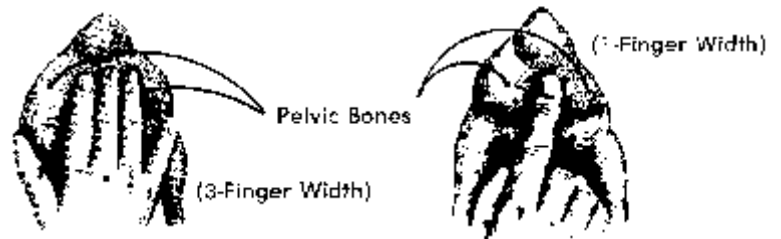
A 1 fingers' width x 2 fingers' width indicates poor abdominal capacity

The distance is expressed in finger's width, such 1 by 2, 3 by 4, and so forth. A hen with a 3 x 4 abdominal capacity is three fingers wide between the pelvic bones and 4 fingers wide between the pelvic bones and the keel bones.

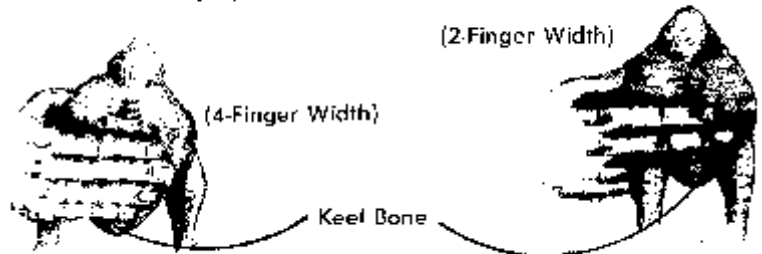
The 3 x 4 has more pelvic and keel space than the 1 x 2 and is therefore a better production hen. More spacing indicates a larger more spacious abdomen and a better egg producer.

### MEASURING ABDOMINAL CAPACITIES OF PRODUCTION HENS

(Feathers Removed for Illustration Purposes)



The Distance Between the Ends of the Pelvic or Pubic Bones in a Laying Hen (left); in a Non-Laying Hen (right)



The Distance Between the Ends of the Pelvic Bones and the Keel Bones in a Laying Hen (left); in a Non-Laying Hen (right)

# Judging Past Egg Production Hens

## Molt and Plumage Condition

Two factors are considered in appraising the plumage condition of hens.

The first consideration is the overall condition of the plumage.

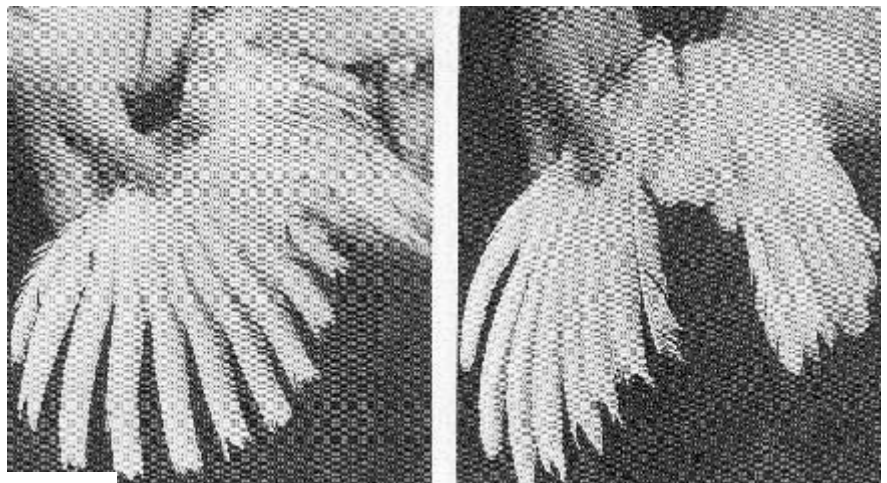
- T** The feathers of a high producing hen will be dirty, frayed, ragged, and have a dull appearance. A hen of this type spends her time performing the functions associated with high production.
- T** In contrast, the feathers of a non-layer will be smooth, show no wear, and possess a great deal of sheen (shiny appearance).

The second consideration is the rate of molting. The molting rate is based on the rate hens shed their feathers, rather than on the rate they grow new feathers.

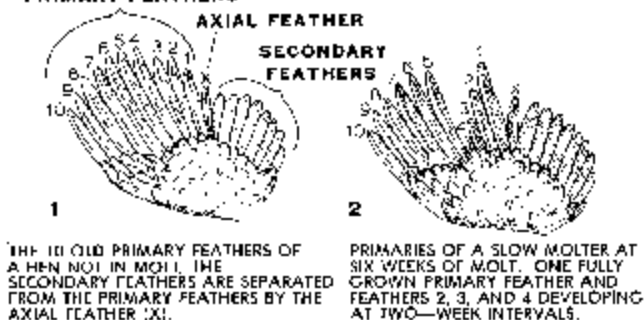
In judging hens, the rate of molt is determined by observing the primaries (the outer wing feathers). The primary feathers are dropped from the axial feather (x) outward in order from number 1 to number 10.

Molt and Plumage is the fourth characteristic that should be used to place the class.

With the hen tucked under your arm, hold the wing open like a fan. The short feather in the middle is the axial feather. There are ten primary feathers on the outside of the axial toward the wing tip. These are the feathers we will study. They molt from the axial to the tip. Old feathers that have not been molted will be worn on the ends and may be broken or dirty. New or molted feathers will have neat, smooth ends and appear clean. They also may show different lengths if the bird is molting now.



### PRIMARY FEATHERS



THE 10 OLD PRIMARY FEATHERS OF A HEN NOT IN MOLT. THE SECONDARY FEATHERS ARE SEPARATED FROM THE PRIMARY FEATHERS BY THE AXIAL FEATHER (X).



PRIMARIES OF A SLOW MOLTER AT SIX WEEKS OF MOLT. ONE FULLY GROWN PRIMARY FEATHER AND FEATHERS 2, 3, AND 4 DEVELOPING AT TWO—WEEK INTERVALS.



A FAST MOLTER HAS ALL NEW PRIMARIES. FEATHERS 1 TO 3 WERE DROPPED FIRST, FEATHERS 4 TO 7 DROPPED NEXT, AND FEATHERS 8 TO 10 WERE DROPPED LAST.



TWO WEEKS LATER FEATHERS 1 TO 7 ARE FULLY GROWN. THE FAST MOLT TAKES 10 WEEKS AS COMPARED TO 24 WEEKS FOR THE SLOW MOLTER.

- i** The good producer shows all old, worn feathers, indicating she has not molted.
- i** Our poor producer has some short new feathers just outside the axial, showing she is now in a molt.
- i** Some birds will continue to lay while molting, but usually at a reduced rate. This means they will have laid fewer eggs than those that have not molted.