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COLLEGE OF AGRICULTURE

Extension Division

THOMAS P. COOPER, Dean and Director

CIRCULAR NO. 137.

THE FEEDING AND CARE OF LAYING PULLETS.

Poultry Project, Junior Agricultural Clubs.

By

J. R. SMYTH

Lexington, Ky.

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The Feeding and Care of Laying Pullets.

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The object of this project is to demonstrate proper methods in the care of laying hens. This circular teaches the fundamentals of poultry flock management and the information it contains should be of value to the club member in any future poultry work that he or she may undertake.

1. Only members of Junior Agricultural Clubs are eligible for this project.
2. The latest date for enrollment is November 1.
3. Each club member should own at least twelve well-matured standard-bred pullets, which shall be cared for by the club member from November 1 to May 1, when the project closes.
4. Each club member must keep a complete record of all operations involved in the feeding, care and management of the laying flock.
5. All work must be done by the club member and the complete record book turned in at the close of the project.
6. Each club member must agree to study the instructions given in this circular and by the county agent.
7. Basis of award:

	Points
Average egg production	40
Feed cost of producing a dozen eggs	40
Best story on "How I Made My Hens Pay"	20
Total	100

SELECTION OF PULLETS

First decide what breed of poultry you want to raise. If you were in the hatching and raising project you can select your pullets from those that you raised. If you were not in this

project the breed selected should be the popular breed in your community or the breed which you like best. It is not so much the breed you select as it is the strain of that breed and the care they receive. If you are going to buy pullets from a breeder be sure that he has a good laying strain known for high egg production.

Pullets that are to be used in this project should be selected as early in the fall as possible, preferably the early part of October. This will give ample time to watch the development of the pullets and if necessary make a final selection before the project begins. Only pullets hatched before May first should be selected since early hatched pullets lay winter eggs and are more profitable.

Birds of low vitality should never be selected for this project. They may be distinguished by the following physical characteristics: Long and narrow head with sunken eyes, often termed "crow headed" or "snake headed," short and narrow body set high off the ground, legs close together, often knock-kneed, and not set squarely under the body. (Figure 1 shows two cockerels of the same age, the one high in vitality and the other low.)

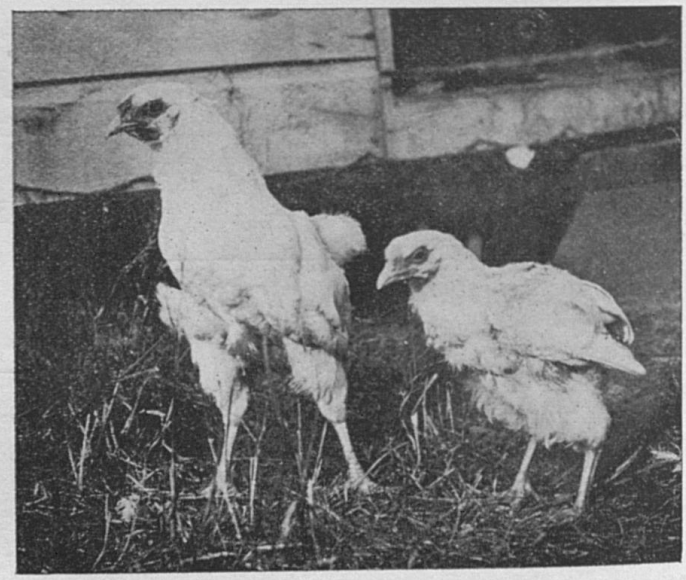

Fig. 1. Cockerels of high and of low vitality, both of the same age.

A pullet or cockerel with high vitality will have a short, blocky head, bright, prominent eyes, long, deep body, and its legs will be straight, wide apart and set firmly under the body.

PREPARING THE HOUSE FOR THE PULLETS

Don't wait until the pullets are selected to get the house ready for them. If a new house is to be built it should be completed before the project starts. If an old one is to be used there will probably be some repairs to make before it will be suitable for the pullets. Remember that this house is to be the home of your pullets and should be as homelike and comfortable as possible. A good poultry house should provide for the following essential requirements: (1) Plenty of room. (2) Dryness. (3) Plenty of sunlight. (4) Ventilation without drafts. (5) Sanitation.

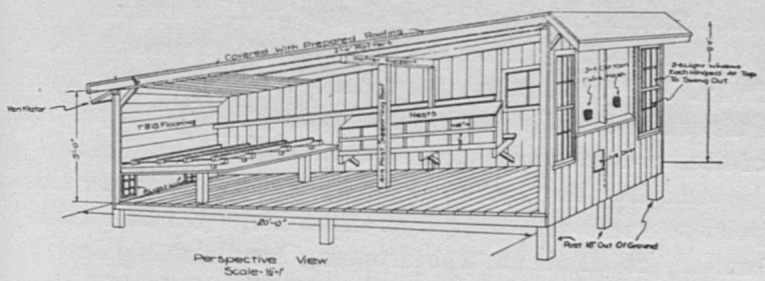

Fig. 2. Shed-roof poultry house.

Plenty of Room: Each bird should be allowed four square feet of floor space. To accommodate twelve birds, the house should be six feet wide and eight feet deep. Depth is measured as the distance from the front to the rear. The back of the house should be built four feet high and the front six feet high.

Dryness: If the poultry house has a dirt floor it must be well drained. This may be done by building up the inside of the house with dirt or preferably gravel, until it is three or four inches higher than the ground outside. If a board floor is used, set the house off the ground about eighteen inches on posts.

Plenty of Sunlight: Having an abundance of sunlight in the house is one of the best means of keeping down disease. This

can be done by having a large glass window in the front of the house and facing the house south.

Ventilation Without Drafts: It is necessary to have the house properly ventilated but care must be taken to avoid any direct drafts coming in contact with the birds. The house should face the south and have an opening in the front that is covered only with wire and muslin. The muslin curtain should be so arranged that it can be lowered or raised as the need may be. The other three sides of the house should be absolutely tight. This curtain allows the air to pass thru on cold or windy days but will not permit drafts. There are very few days in the winter when this muslin need be over the window the entire day. About one square foot of opening should be allowed for every ten square feet of floor space in the house. The glass window should be about the same size as the opening covered by muslin.

Sanitation: The house should always be clean and sanitary. In building the house, plan it so that it will be easy to keep clean. This can be done by putting in dropping boards, the proper kind of floor and allowing sufficient ventilation and sunlight.

The dropping board is a level platform built under the roost poles to catch the droppings. This keeps the floor clean and sanitary at all times. The dropping boards should be two and one-half feet from the floor and the roost poles four inches above the dropping board. (See figure (2) for construction of dropping boards and roost poles.)

If you have an old poultry house, it probably can be made over so that it will have all of these essential characteristics. Many times there is a small shed or corner of the barn which can be used for the laying house. The southeast corner of a tobacco barn can easily be fitted up for this purpose. Usually all that is necessary is to strip the cracks, box up the necessary amount of space and put in the windows on the south side. In this case the door should be on the east side or on the inside of the barn. For further details of construction, see Extension Circular 107, "Housing Farm Poultry."

All of the equipment, such as nests, self-feeders, etc., should be up off the floor. This will allow more floor space where the

birds can scratch in a straw litter and secure exercise during the winter months. Orange or lemon crates turned on the side make excellent nests. A four-inch strip should be nailed along the front of the box to hold the straw in the nest. (See figure 3.)

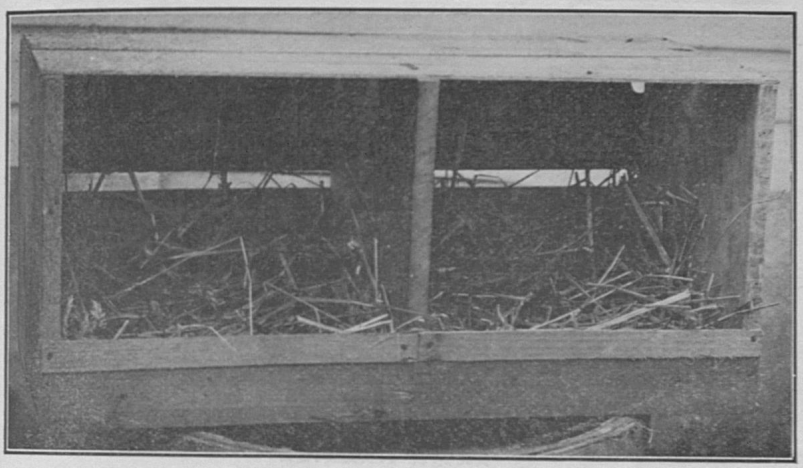

Fig. 3. A cheap, satisfactory nest made from an orange crate.

PUTTING THE PULLETS INTO THE HOUSE

The pullets should be put into the house at least a week before the project starts. The floor of the house should be covered with straw a foot deep and all nests, feed hoppers, etc., arranged as they are going to be left during the year. Care should be taken not to frighten or excite the pullets any more than absolutely necessary while catching and transferring them to the house. It is a good plan to use a catching hook when handling them. It can be made from a piece of No. 9 wire.

Before the pullets are put into the house each one should be dusted with sodium fluoride which can be bought at any drug store. It may be used either by dusting from a can with small holes in the lid or by the pinch method. The latter method consists in taking a small pinch of powder between the thumb and fingers and rubbing it thoroly under the feathers just below the vent, under each wing, at the base of the neck and at the base of the tail. As a dip use one-half pound to five gallons of luke

warm water. Five gallons will treat about 75 birds but it is hard to dip in a less amount. Dip only on a warm sunny day in the morning.

Blue ointment containing 33 per cent mercury is also excellent for killing body lice. On the end of a finger place a piece the size of a pea and rub this well into the skin of the fowl just below the vent.

FEEDING FOR EGG PRODUCTION

The best pullets will not lay a large number of eggs unless given the proper kinds of feed. The feeds which they receive should be governed to a limited extent by the feeds available. Either tankage, meat scrap, or milk is necessary to balance the ration and give the pullets protein which makes up a large proportion of the white of the egg.

The following sample rations have proved satisfactory to many who use them:

GRAIN MIXTURE

Cracked or shelled corn	7 pounds
Oats (heavy grade) or wheat	3 pounds
Total	10 pounds

This grain mixture should be fed 1-3 in the morning and 2-3 in the evening in eight to twelve inches of straw litter on the floor of the house. Thru the fall and winter feed about 1½ pounds of grain a day to your twelve pullets, ½ pound in the morning and 1 pound in the evening.

DRY MASH MIXTURE

No. 1

Shipstuff (mill-run feed)	5 pounds or 7.5 quarts
Corn meal	3 pounds or 2.7 quarts
Tankage or meat scrap	2 pounds or 1.1 quarts
Total	10 pounds

No. 2

Shipstuff	8 pounds or 12 quarts
Tankage	2 pounds or 1.1 quarts
Total	10 pounds

The dry mash mixture (either No. 1 or No. 2) should be fed in a self-feeder or hopper. (See figure 4.) It should be kept before the pullets at all times. In using tankage, care should be taken to get a high grade tankage that contains 60 per cent protein. If sour skim milk or buttermilk is available, it should be fed instead of a dry mash. Twelve pullets will drink about ½ gallon of milk a day and it should be kept before the pullets at all times in place of drinking water. Do not change from sour milk to sweet milk as diarrhea may result.

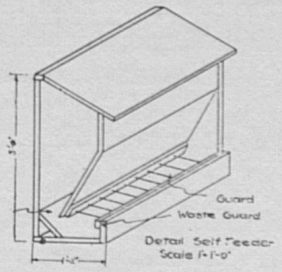

Fig. 4. Self-feeder for dry mash.

Beside the grain and dry mash or milk the pullets should have grit and oyster shell or ground limestone kept before them at all times. The grit is used in place of the teeth by the hen, and should be hard and rough in order to grind the feed well. Gravel or coarse sand can be used as grit. The oyster shell or ground limestone is readily taken up by the system and is used for making egg shells. Without this egg shell material the body of the hen soon becomes depleted in shell-forming materials which results in lower egg production.

GENERAL CARE OF THE FLOCK

The flock must be well taken care of if it is expected to produce a large number of eggs. The following general program should be followed during the entire year:

1. Clean the dropping boards at least once a week.
2. Clean out the straw and put in fresh, clean straw whenever the house becomes damp or dirty.
3. Feed regularly, giving the same amount of feed at the same time each day.
4. Give the house a thoro cleaning each spring and fall and spray the interior and all nests, feed hoppers, etc., with a five per cent solution of some good stock dip. One pint of the dip to 2½ gallons water will make a five per cent solution. This spray will control the mites and help in keeping down disease.
5. Examine the pullets carefully at least once a month for body lice. If lice are present treat them as outlined on page 8. In the winter or on cold, rainy days use the sodium fluoride as a powder, but if it is a clear, warm day it is all right to use it as a dip.
6. If one of the pullets gets sick, remove her at once and put one-tenth ounce copper sulphate into each gallon of the drinking water of the flock. Continue this precaution for six days and then stop unless more cases of the disease appear. If the bird shows running at the nose force kerosene up the nostrils with an eye dropper, oil can or feather.