



Texas Agricultural Extension Service

The Texas A&M University System

# The Small Laying Flock

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Many families are interested in maintaining a small laying flock to produce their own eggs for home consumption. It may cost more to produce eggs at home than to buy them at the supermarket, but the recreation and satisfaction derived offset the slightly higher cost. In addition, manure from the enterprise can be used to fertilize the family garden and flower beds.

White or brown leghorn strain birds lay at a much higher rate and are more feed efficient than other breeds. These birds begin to lay at about 5 months of age and will lay at an acceptable rate for 14 to 16 months if properly fed and managed. Some individuals prefer to purchase day-old pullets and raise them. Others purchase 16- to 18-week-old ready-to-lay pullets.

Flock health is important. Pullets should be vaccinated for Marek's disease at the hatchery. Other necessary vaccinations are fowl pox, infectious bronchitis, and Newcastle at 8 to 10 weeks of age.

## Brooding and Rearing Pullets

Pullet brooding does not require expensive, elaborate housing and equipment. However a clean, dry

structure that can be well ventilated and that protects birds from predators, cold and rain is required. Feeding and watering equipment and a brooder or infrared heat lamps to warm chicks are also needed.

Clean the brooder house and equipment at least 2 weeks before chicks arrive. Sweep, then wash the house down with soap and water. Spray with a commercial disinfectant labeled for use in poultry

houses. Disinfect equipment with a chlorine solution.

Chicks should have 1 square foot of floor space per bird. Put at least 4 inches of litter on the floor of the cleaned, disinfected pen or house. Never place chicks on a slick surface such as cardboard, plastic or newspaper. Wood shavings, cane fiber, ground corn cobs, peanut hulls or rice hulls make good litter. Hay makes very poor litter and should not be used. Stir the litter weekly with a hoe to prevent packing.



A good quality Leghorn type hen in early production.

Infrared heat lamps are a good heat source for brooding chicks. Two 125-watt bulbs per 50 chicks are recommended. Make certain lamps are secured so they can not fall to the litter and create a fire hazard. The lamps should hang so that the bottoms are 18 inches from the litter. Raise them 2 inches per week to a maximum height of 24 inches.

If a gas or electric hover-type brooder is used, it should operate at a temperature of 88 to 92 degrees F at the thermostat or at the location of the manufacturer's thermometer. Gradually reduce the thermostat temperature 5 degrees each week until the pullets are 3 to 4 weeks old or until the outside temperature reaches 70 degrees F. Allow at least 10 square inches of brooding space per chick under the hover.

Various materials (cardboard, building paper, etc.) can be used to make a brooder guard to circle the brooding area. The brooder guard should be approximately 18 inches high and 5 to 7 feet in diameter. It is used to keep young chicks near the heat source. When chicks are 7 days old, remove the guard and allow them the full freedom of the pen.

When pullets are 3 to 4 weeks of age and fully feathered, heat seldom is required. After the brooding period, do not expose pullets to artificial light until 18 weeks of age. At 8 weeks of age, pullets should be given 2 square feet of floor space or allowed to range outside the pullet house during the day. Pullets and hens usually can be kept out of gardens and other fenced areas by clipping the flight feathers on one wing. Check birds monthly for mites and lice. Treat them with an approved insecticide if needed.

## Feeding Pullets

Optimum pullet performance is dependent on proper nutrition. It is essential that chicks be fed a high quality 18 percent protein pullet starter containing a coccidiostat for the first 8 weeks. They can then be maintained on a 16 percent protein pullet developer until the first egg is laid.

Clean, potable water and feed must always be available. Add poultry vitamins, at the recommended level, to the drinking water the first week to ensure that birds have sufficient vitamins and to prevent leg problems.



**Good health is dependent on clean, potable water.**

All chicks should be able to eat at the same time. One pie pan for feed and one chick waterer per 30 chicks are needed the first 7 days. Afterward, one tube-type feeder and one 2-gallon waterer are needed. Waterers should be rinsed daily and scrubbed twice weekly. Keep feeders and waterers adjusted so that the trough position is level with the back height of the birds.

## Layer Housing

Small laying flocks are generally floor housed or allowed to range rather than kept in cages. Fly control can be a problem where layers are caged. Housing requirements for floor and free-range layers are simple and easy to arrange on most small family farms. Provide hens with 3 square feet of floor space per bird. Protect them from adverse weather conditions and predators. The structure must also protect feeders and be suitable for nests and a roost. Tube feeders and an automatic waterer are recommended for floor layers.



**A conventional poultry house for a small flock of pullets or laying hens.**

There should be one nest per four layers. Nests should be 24 inches above the litter. Roost width requirement is 8 inches per bird. Poles should be 14 inches apart and 18 to 36 inches above the litter.

The dropping pit beneath the roost should be screened to keep the layers out and minimize internal parasite problems. The manure must be kept dry to prevent fly problems.

The house, including nests, must be thoroughly cleaned and disinfected between flocks. The disinfectant must be one labeled for use in poultry housing. An approved insecticide should be applied to the interior to eliminate external parasites. Cover the clean floor with 4 inches of fresh litter before a new flock is housed.



**Typical nests for the small laying flock.**

## **Layer Management & Nutrition**

Increasing day length stimulates maturing pullets to lay. At about 18 weeks of age, pullets should be placed on a 14-hour day length. At 50 percent production the birds should be given 16 hours of light and be maintained on this day length the remainder of their productive lives. A time clock and one 60-watt bulb per 200 square feet of floor space will provide the necessary supplemental light.

At the first egg, the birds should be full fed a 16 to 18 percent protein laying ration containing 3.5 percent calcium. Other feeds, including corn or milo, should not be fed.

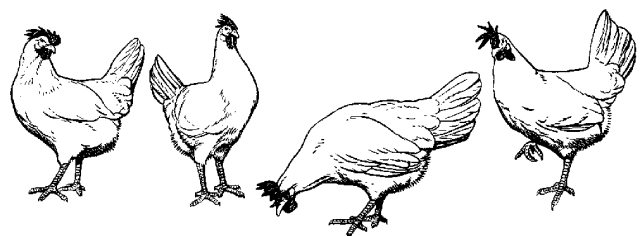
Only healthy pullets should be housed. Remove unhealthy hens from the flock. Cannibalism, should it occur, can usually be stopped by applying a commercially available anti-peck preparation. Check layers monthly for mites and lice, and treat them with an approved insecticide when necessary.

## **Eggs**

Nesting material such as shavings or hay should be placed in the nests and replaced frequently to keep eggs clean. Collect eggs twice daily and cool them rapidly to preserve egg quality. Store eggs small end down.

### **Production Pointers**

1. Keep backyard poultry away from the pullet and laying flock.
2. Prevent water leaks and keep litter in good condition and manure dry at all times.
3. Keep birds comfortable and protect them against adverse environmental conditions.
4. Feed only recommended, good quality, "all-in-one" manufactured feeds. Do not feed a layer feed to pullets less than 16 weeks of age.
5. Clean and sanitize waterers weekly.
6. Observe birds carefully and contact your county Extension agent or hatchery if they appear sick.
7. Wild birds and rodents can carry diseases and parasites. Keep them away from pullets and layers.
8. For best results, the laying hen flock should be replaced with new pullets after 14 to 16 months of lay.
9. Treat birds for worms with an approved wormer if they appear unthrifty.



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