

So You Want to Produce Your Own Eggs?

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Backyard chicken flocks are becoming popular throughout the country in urban, suburban and rural communities. Preparation is essential for a successful backyard flock.

Factors to Consider

Not everyone is suited for keeping a poultry flock. Ask yourself why you want to keep chickens and whether or not you have the time and money needed to do a good job as an owner of a small flock. If you live in an urban or suburban area, make sure that there are not any ordinances preventing you from raising chickens. Many cities have banned backyard flocks, or have some strict limitations on what you can and cannot do. In addition, some residential subdivisions have their own restrictions. Some ordinances set a minimum amount of land that you have to have available before you can keep a flock. Even if the rules do not specifically say as much, they may have set back restrictions, such as 50 feet from the neighbors, which make it difficult to have a flock without a minimum acreage.

Chickens need to be taken care of every day. They need to be fed, provided clean water, and have their eggs collected daily. It is a good opportunity to teach children responsibility, but make sure they can fit it into their daily routine. If the children make pets of the chickens, it is important to remember it is unlikely that they will live as long as a dog

or cat. Chickens can get sick. Very few veterinarians will deal with chickens. For those that will, the costs can be high. You may have no recourse if your chickens get sick. It is also important to supervise any young children handling chickens. Chickens, as with many livestock species, have salmonella in their digestive tracts. Anyone handling chickens, or the equipment they have used, should take care to wash their hands and keep their hands away from their face until they do so. Chickens should not be brought into the house and equipment they have used should not be washed in a kitchen sink used for handling food.

Chickens make noise. While only roosters crow, hens are not quiet at all times. A hen can make quite a lot of noise letting everyone know when she has laid an egg. Luckily it does not typically happen all the time and can be controlled to some degree by regulating when the lights come on in the morning. In any case, the noise made by a few hens is significantly lower than that of a barking dog.

Chickens eat a lot. It is unlikely that you can produce eggs cheaper than you can purchase them in the grocery store, but you have the satisfaction of knowing where your eggs come from. Hens can make use of about 60 percent of the feed they eat. The rest is excreted as manure. Make sure you have a plan for what you are going to do with the manure your flock produces.

Chickens do not live forever, nor do they produce eggs forever.

To complicate things, their life span is typically longer than their productive life. You have to have a plan for what to do with hens when they are no longer producing eggs. If you are going to keep them, because they are pets, you have to be willing to pay for their food while they are no longer earning their keep.

Chickens can be destructive to your garden. Chickens scratch when they forage. If you are letting your hens run free, you may have to fence off your garden to prevent them from damaging your plants.

Housing Required

There is no one ideal design for a chicken house (Figures 1 and 2). Any chicken house should provide shelter from the weather (hot and cold), have nest boxes for the hens to lay eggs in, provide perches for the hens at night, and be easy to clean out. Protection from predators is always a concern as well. Most also have a run for the hens to get out into the open air. Figures 1 and 2 both have well-built chicken houses with runs. The chicken houses do not have insulation, but the hens will be fine in the winter because there are no drafts. Chickens can tolerate quite low temperatures as long as they are dry and out of the wind and away from drafts.

It is important to keep your chicken house clean and dry. This

will prevent odors and flies, both of which can be annoying to you and your neighbors. It is important to manage your bedding well, to prevent rodents from making your chicken house their home. Manure can be composted to produce a valuable, odor-free fertilizer for your garden.

Equipment Needed

It is difficult to obtain ready-to-lay pullets so you should plan on raising your hens from chicks. Chicks can be purchased online and they are shipped through the mail. Most hatcheries, however, require that you purchase a minimum of 25 chicks to allow for safe shipping. Another source is the local feed or farm supply store. Kentucky state regulations, however, require that you purchase a minimum of six chicks. If you only want three you may need to purchase with a friend. The chicks are typically sold sexed, but sexing errors do occur so it is possible that you will get a cockerel instead of a pullet. You need to have a plan B if this occurs and you are not allowed to keep roosters in your area. You do not need roosters for hens to lay eggs. They are only needed if you want to produce hatching eggs.

If you are raising your hens from chicks, you will need to be able to provide them with heat for the first few weeks. Brooding chicks will require a heat source, typically a heat lamp. It is important to suspend the lamp properly so that it is not likely to fall and start a fire. A lot of houses have been lost because of fires started by heat lamps in a close-by chicken house.

You need to provide your flock with feed and water. This requires you to make or purchase a feeder and waterer. Both should be suited to the size of hens you have. For chicks, small feeders and waterers



Figure 1. This chicken house is ideal for a trio of hens. They have shelter from the weather and a run to go into for fresh air. The chicken house has wood shavings for bedding, a perch, and nest boxes which can be accessed from the outside for easy egg pickup. The window on the side can be opened for easy clean out of the house interior. The feed and water are provided outside, to encourage them to use the run. The run has a sand base which is cleaned out regularly, much like a litter box. The run is completely covered with wire to provide protection from predators. The run could have been a little taller to make cleanout of the run easier, but it is functional as is.



Figure 2. This larger, mixed flock of hens is provided with a larger chicken house and run. Again, wood shavings are used as the bedding. The nest boxes are accessible from the outside for easy egg pickup. While the feed is indoors, the water is outdoors. The perches extend over the nest boxes which can be a problem requiring the tops of the nest boxes to be cleaned on a regular basis to prevent build up and odor problems. Again the run is completely covered to protect the hens from ground and aerial predators.

are need. Chick feeders and waterers will be too small for hens so if you are raising your hens from day old you will need at least two sets of feeders and waterers to accommodate the different ages. You need to provide your hens somewhere to lay their eggs. It is important to have nest boxes with clean bedding so that you do not have to go hunting for the eggs and to keep your eggs as clean as possible. Nest boxes should be about 1 foot wide x 1 foot deep x 1 foot tall.

The hens should have perches to sleep on (Figure 3). Perches also provide the hens with a way to get away from one another in cases

of feather pecking problems. The hens will sleep on the perches at night so much of their manure will be deposited in one location to make for easier cleanout.

It is important to provide your flock with bedding. This will absorb moisture from the manure and keep the chicken house clean. Wood shavings are the best bedding material. Straw and shredded paper make the worst.

Feeding Your Flock

A hen will eat about a quarter pound of feed every day. For a trio of hens, that is 5¼ pounds of feed a week. A flock of three hens



Figure 3. Examples of perches (a) for a small poultry flock and nest boxes (b) for a small laying flock.

Ranking of different litter types:

Best

Pine shaving

Good

Peanut hulls

Rice hulls

Chopped corn cobs

Kiln dried sawdust

Fair

Fresh sawdust

Dried leaves

Sawdust

Chopped straw

Poor

Long straw

Shredded paper
(especially computer paper)

would go through almost a whole 50-pound bag of feed every two months.

Chickens should be fed the right poultry diet—a chick grower diet for the pullets (young female chicken) and a layer diet for the hens. The diets are formulated to meet the specific needs of the age of the chicken. Feeding a chick grower diet to a layer will adversely affect egg production because it is too low in calcium. Similarly, feeding a layer diet to a pullet will result in health problems because it is too high in calcium. A chicken will eat about quarter pound of feed every day. The diets are formulated to meet all the nutrition needs of the chicken within that amount. Diluting the diets with scratch grains or cracked corn can lead to nutrient deficiency which can result in poor egg production, or even a decline in hen health.

Egg Production

It takes a hen about 26 hours to assemble an egg from the time it ovulates (releases the yolk from the ovary) until it lays an egg. The next yolk is ovulated 30 minutes after the previous egg is laid. The most a hen can lay, therefore, is one egg per day. They will lay for a few days and then take a break. Depending on the number of hours of light per day, hens typically come into production around 20 weeks of age. They come into production with increasing day lengths (i.e., the hours of sunshine per day are increasing) as is common in the spring and go out of production with decreasing day lengths (as is common in the fall). Once a flock starts laying, they typically increase in production quickly, maintain egg production for several weeks, and then slowly decrease in egg production (Figure 4).

To keep your hens producing throughout the winter supplemental light will be needed. The number of hours of light per day should be at least 14 hours per day but not more than 16. A timer can be used to help you regulate when the lights come on and go off. A light sensor can be used on the bulb socket so that the light only comes on when it is dark out, saving bulb life and electricity costs.

The color of the egg shell varies depending on the breed of the hen (Figure 5). The hens of some breeds lay white-shelled eggs, others brown. There are even breeds that lay light blue, green, or pink shades of egg shell. With a diverse flock of hens you can end up with your own Easter egg collection of eggs every day.

The color of the shell has no effect on the quality of the egg. The

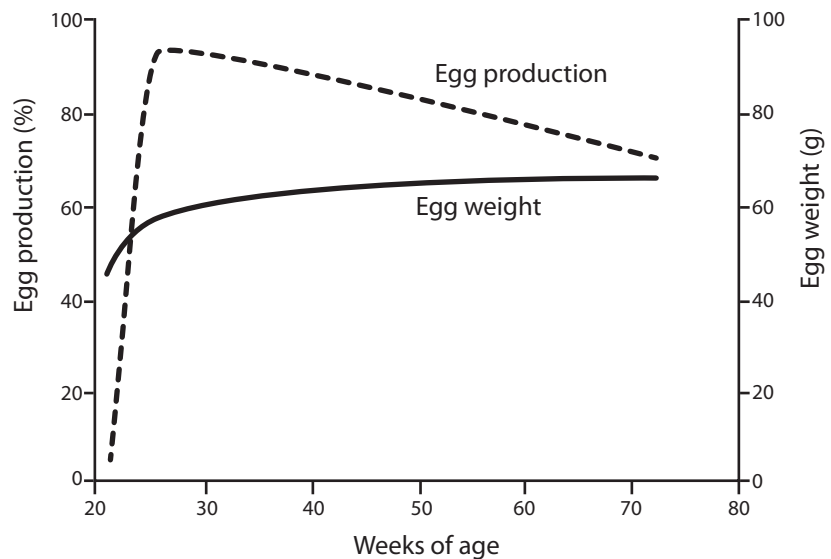


Figure 4. Typical production curve for flocks of laying hens.



Figure 5. A dozen of eggs from a flock with a mixture of chicken breeds.

nutrient content is a reflection of what the hens eat, with dark egg yolks resulting from the consumption of grass or other pigmented materials.

It is important to pick up your eggs at least once a day. Store clean eggs in the refrigerator. Do not use any badly soiled eggs because they are a food-safety risk.

Terminology

Bedding: Material placed on the floor of the chicken house to absorb moisture, insulate the birds from the floor, and control odors

Chick: Baby chicken of either gender

Cock (or rooster): Adult male chicken

Cockerel: Young male chicken

Hen: Adult female chicken

Poultry: Domesticated birds raised for food, fiber, or entertainment

Pullet: Young female chicken