

Managing the Backyard Flock

Maintaining a small flock of poultry can be a rewarding experience and is an excellent venture for a small or part-time farmer. People keep backyard flocks for many reasons – for meat or eggs, as a hobby for adults or children, or perhaps for show and exhibition. Backyard poultry can supplement family food supplies, and small producers may choose to sell their products to several niche markets. These can include brown eggs, free-range meat and eggs, live birds for the increasing number of ethnic markets, and organic meat and eggs. Whatever the reason, if you are considering managing a backyard flock, you must be aware that raising poultry requires time, labor, and money.

Birds need care seven days a week, including weekends and holidays. Before you buy any birds, be sure you are willing and able to give that care. Also, do your homework, starting with research and planning.

Preparing the yard

First, check to see if **zoning restrictions** or property regulations prohibit or restrict raising poultry on your property. You not only want to be legal, but you want to keep peace with your neighbors as well. In some cases, it wouldn't take much noise, dust, feathers, flies, or odors from your chickens to turn your neighbors un-neighborly. Discuss your plans with your neighbors before bringing in the chickens to help prevent future issues.

Do not allow chickens to roam free. Fence in backyard flocks to keep them at home and to protect them. Many predatory animals, including cats, dogs, skunks, opossums, and hawks, roam free even inside city limits. Chickens are generally considered easy prey. Fencing should extend all the way to the ground, and the mesh should be small enough to restrain

young chicks. It is wise to cover the top of the enclosure to protect the flock from flying and climbing predators. Fencing is also a sound biosecurity practice that helps protect against the spread of disease.

Along with fencing, you should arrange for **adequate housing**. Remember to allow for growth of the birds: allot space based on the size of fully-grown birds, not chicks. A good rule of thumb is to provide 3 to 3.5 square feet of floor space for each bird you intend to put into egg production. For example, you may start with 50 straight-run chicks (a mixture of males and females) and plan to put 25 into egg production. This leaves 25 available for meat production and losses along the way. If you allow 3 square feet of floor space per egg layer, that's 75 square feet, making an 8 by 10-foot building adequate. Make sure you can adequately heat the building, especially with young chicks and during colder weather.

It is important to use a good, absorbent **litter material** for bedding in the houses. The litter should be clean and dry, not dusty or moldy. It can be any material that absorbs moisture in the house and can help insulate during colder weather. Excellent litter choices include pine shavings, chopped straw, peanut shells, and ground corncobs. Hardwood shavings should not be used as litter because they sometimes produce a mold that can cause serious infection when inhaled by chicks or humans. Good litter quality is essential in maintaining flock health. Manage drinkers properly to make sure birds do not spill excessive amounts of water. Wet litter encourages pathogen growth and can lead to health issues, such as breast blisters and footpad dermatitis. Periodically remove the caked or crusted litter and manure and top dress with fresh litter as necessary.



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Purchasing your flock

Choosing a breed or breeds is an important next step. You must decide if you want meat chickens, egg chickens, or a combination. A fast-growing strain of Cornish-type broiler is recommended for meat production. If your goal is egg production, then small egg-type strains, such as White Leghorn strains, are recommended for white eggs. However, these birds are lightweight, weighing 3.5 to 4 pounds at maturity, and are not a good choice for meat.

Medium-weight, dual-purpose strains, such as Plymouth Rock, New Hampshire, Rhode Island Red, or first-generation crosses work well for meat and eggs. These breeds lay brown eggs. There are no differences between white and brown eggs in terms of quality or nutrition, but brown eggs usually sell for more than white eggs. Other breeds you may want to consider are Wyandotte and Orpington. These dual-purpose breeds lay fewer eggs than Leghorn birds, but they are large enough to provide more meat.

There are also exhibition-type chickens, such as bantams and exotic breeds, that are recommended for showing or as pets. These birds are bred strictly for beauty and form, not for egg or meat production.

Once you know what you want, there are **two common ways to get chickens**. You can get adult chickens or fertile eggs from other chicken hobbyists in your area. Personal preference will dictate whether you purchase adult birds or hatch chicks in an incubator and raise your own birds. A second popular method is to mail order day-old chicks from a hatchery supplier. Yes, baby chicks are shipped through the U.S. Postal Service and have been for over a century!

When a chick hatches, it has a three- to four-day supply of nutrition from the remaining egg yolk inside its body, which will allow it to survive even without an outside source of food or water. That way, the first chicks that hatch from a whole nest of eggs can survive while the hen waits on the remaining eggs to hatch before leaving the nest with her new brood of chicks for the first time. Should you decide to order chicks through the mail, there are some **points to keep in mind**:

- Make sure the hatchery you select participates in the **National Poultry Improvement Program**. This program helps ensure that birds are healthy and prevents the spread of diseases, such as pullorum and typhoid, that could affect your flock or others in the area. If you search for “hatchery” online, you can find links to dozens of commercial hatcheries that offer mail-order delivery of not just chickens, but turkeys, pheasants, guineas, geese, ducks, and other poultry as well.
- Check shipping options. Many hatcheries offer different shipping options, and while most chicks do fine with normal delivery times, choosing express shipping if it is offered may reduce the time in transit and stress on the chicks by a day or so.

- You may have a choice of straight-runs (the natural mix of males and females at hatch, usually about 50:50), all cockerels (males), or all pullets (females). Sexing is available from many hatcheries but requires an extra step and therefore may be more expensive. In addition, sexing is not always totally accurate. However, if you plan on raising females as egg producers and don't need the males, sexing may be worth it. The females will lay eggs when they reach sexual maturity even without males in the flock. However, these eggs will be infertile and cannot be used to hatch additional chicks.
- Most hatcheries sell different species of poultry and different breeds within the various species and will allow you to mix and match your order. However, there is usually a minimum number that must be ordered. The minimum is set to ensure there are enough birds in the package to generate sufficient body heat to reduce environmental stress until they reach their destination point.

It would be wise to let your local post office know you are expecting an order of live baby chicks. Leave a contact number so you can pick up your chicks from the post office when they arrive. When you pick them up, check inside the package to make sure your chicks have arrived safely before you leave the post office. Typically, shipping containers are simply modified cardboard boxes. Often, hatcheries ship chicks in small cardboard boxes with special air holes on the sides.

Keeping your flock healthy

The **greatest expense of raising chickens is the cost of feed**. However, incomplete or unbalanced rations reduce performance and may result in nutritional disease. Therefore, it is not economical to feed an unbalanced diet. Always provide high quality, commercially prepared feeds to your birds. The type of feed recommended varies with the specific age and use of the bird. The multi-purpose birds discussed in this publication require a starter ration from day one to six weeks of age. Expect to feed at least four pounds of starter feed per bird during this six-week period.

At six weeks, switch to a commercial grower ration and feed this until 18 weeks of age. Many local feed stores sell a combination starter/grower ration that works well for both stages of growth. Birds should be started on a 15 to 18 percent protein layer ration at 18 weeks to prepare them for egg production.

Warning: It is critical that you do not feed layer rations to younger birds or starter/grower rations to egg-producing birds. Many commercial starter/grower rations are medicated to control coccidiosis (a disease caused by a microscopic parasite) that infects the intestinal tract. Keep all medicated feed away from other animals to prevent accidental consumption, which may cause sickness or death.

Layer rations usually do not contain medication. With complete, balanced diets, 100 lightweight mature

layers often eat about 25 pounds of feed per day. An equal number of heavier, meat-type birds would likely eat about 30 pounds daily.

Birds with access to outdoors will supplement their diets with insects and green plants. Although many people also choose to supplement their birds' diet with table scraps and the like to save on feed costs, it's important not to overfeed scraps. Overfeeding scraps may cause the birds not to eat a balanced diet, which could affect performance. Feeds marketed as "complete" poultry feeds are formulated to supply the nutritional needs of the bird for which it is specified if fed according to label recommendations. No additional feed is needed. However, many small flock owners supplement a complete feed with grain mixtures or corn chops. This can also lead to a nutritional imbalance resulting in poor performance. Therefore, make sure you follow instructions on the feed tag or consult your feed supplier if you have questions on what to feed or how to feed it.

Adequate light is necessary to maintain consistent egg numbers. Chickens are very sensitive to changes in day length. Laying birds require at least 14 to 16 hours of light each day for maximum year-round production. Less light will stop or slow egg production. Without supplemental light, egg production will drop off in late fall and winter. When the days get short enough in the fall, egg production will cease altogether until spring. You can add supplemental light both before sunrise and after sunset to provide 14 to 16 hours of light during fall and winter to maintain egg numbers. One 25-watt bulb for each 40 square feet of pen space should provide enough light. However, you should still provide several hours of darkness for the birds to roost. An inexpensive timer can turn lights on and off automatically and reduce labor requirements.

Disease prevention and control is vital to any backyard flock. Disease is much easier to prevent than it is to cure. In fact, many diseases can be prevented using sound management practices but cannot be cured once they occur in a flock. Depopulation, disinfection, sanitization, and starting over are the only ways to fight some diseases. Disease most often occurs when birds are under stress from one or more factors at the same time. Numerous stressors can affect a bird's ability to fight off disease, including poor nutrition, an unclean environment, overcrowding, poor air quality, injury, poor management practices and poisons. Like other living creatures, chickens do best in a clean environment. Drinkers should be cleaned every day with diluted chlorine bleach. You can also add low levels of chlorine bleach to clean drinking water to inhibit bacterial growth. It doesn't take much; one to two teaspoons of bleach for twenty gallons of water is plenty.

Watch for signs of disease that may indicate a problem in your flock. Difficulty with breathing,

gasping for breath, coughing, sneezing, watery eyes, reduced viability, decrease in egg production and feed consumption, bloody droppings, and an increase in death losses are all indications of disease. Sick birds will often separate themselves from the rest of the flock, try to hide under something, avoid moving when approached, appear weak, or have ruffled feathers. If possible, separate the sick birds from the healthy ones to limit disease spread. Seek reliable assistance if you suspect a disease problem in your flock. Your local county Extension agent or veterinarian is a good starting point. Poultry specialists at Mississippi State University (or your state's land-grant university) and personnel at your state diagnostic laboratory are also valuable sources of information.

Practicing sound **biosecurity** measures is absolutely critical to disease control and prevention, especially in states that have a commercial poultry industry. Mississippi is one of the leading poultry-producing states in the nation, and it is critical that backyard flock owners take biosecurity just as seriously as commercial growers do. Backyard flocks can transmit disease to commercial poultry and possibly put an entire industry in jeopardy. If you own backyard birds, **DO NOT** visit commercial farms and **NEVER** enter someone else's chicken house. Disease organisms are easily carried on shoes and clothing, and by rodents, birds, insects, and even on the wind.

If you show birds at fairs or exhibitions, quarantine these birds for at least 3 weeks before returning them to the main flock. This will allow time for symptoms to develop from any diseases they may have picked up from birds at the show. Quarantine any new birds you purchase as well. It is wise not to accept birds from friends or neighbors even if they are the same type and age as your birds.

Keeping records is additional work, but it is a good idea to keep them. Records of sales, purchases, shows attended, etc. can help pinpoint events that may be associated with a disease agent. It is impossible to be too careful where disease prevention and biosecurity are concerned.

Raising backyard poultry can be a rewarding experience. As a family project, it offers the opportunity for parents and children to spend quality time together and teaches about other living creatures. It can also provide your family with a source of high-quality food and possibly some added income. However, it carries with it a great deal of responsibility – not only for daily care and safe-keeping of your flock, but also doing your part to keep all other flocks in the area safe as well. Do your homework before you start and understand the commitment you are making. But most of all, have fun and enjoy the experience.

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Publication 2768

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. DR. GARY JACKSON, Director.
(POD 03-13)

