

# Backyard Chicken Basics

By Betsy Wieland, Extension Educator  
Nora Nolden, Intern

As people are becoming more and more interested in knowing where their food comes from, the trend of raising backyard chickens is growing. Raising backyard chickens can be a rewarding experience and a great way to teach kids about nature, agriculture, and responsibility of caring for animals. Since most backyard chickens are raised for laying and not for meat, this factsheet will focus on layers.



**Figure 1.** *New Hampshire Red and Buff Orpington hens*

## BREEDS

There is a wide a variety of chicken breeds, developed for egg production, meat production, and/or good looks. While many breeds are adaptable to a backyard setting, certain breeds are better than others for backyard conditions. Medium to large breeds are good for cold winters. A mellow temperament and good egg laying are also pluses. If you see reference to a bantam bird,

that is a small version of any particular breed. It will look the same, but be smaller. Here are a few examples of great, mellow breeds for the backyard.

**Table 1. Popular Backyard Chicken Breeds**

<p><b>Rhode Island Red</b></p> <ul style="list-style-type: none"> <li>• Hens weigh about 6.5 lbs</li> <li>• Lay brown eggs</li> <li>• Dark red feathers</li> <li>• Dual purpose breed, but most often used for laying</li> <li>• Hardy breed that does well in small flocks</li> </ul>	<p><b>Ameraucana</b></p> <ul style="list-style-type: none"> <li>• Many different color varieties</li> <li>• Lay green eggs</li> <li>• Great long-term egg production</li> <li>• Dual purpose breed</li> <li>• Tolerant to all climates</li> <li>• Easy to handle</li> </ul>
<p><b>Wyandotte</b></p> <ul style="list-style-type: none"> <li>• Hens weigh about 6.5 lbs</li> <li>• Lay brown eggs</li> <li>• Dual purpose breed</li> <li>• Great for small flocks and rugged conditions</li> <li>• “Curvy” shape, good disposition</li> <li>• Many color varieties</li> </ul>	<p><b>Orpington</b></p> <ul style="list-style-type: none"> <li>• Hens weigh about 8 lbs</li> <li>• A larger dual purpose breed</li> <li>• Lay brown eggs</li> <li>• Many color varieties</li> <li>• Heavy size is ideal for cold weather</li> </ul>

## DIET

Chickens are omnivores. They eat grains, fruits, and vegetables as well as insects. Chickens should typically be fed a prepared feed that is balanced for vitamins, minerals, and protein. A healthy laying hen diet

should also contain crushed oystershell for egg production, and grit for digestion. A six pound hen will eat roughly 3 pounds of feed each week. They love fruit and vegetable scraps from the kitchen and garden, as well as bread. Scratch - cracked corn and oats are a nice treat for the chickens that does not supply all their nutritional needs, but is fine in moderation.

Feed consumption may increase in the winter when burning more calories, and decrease in the heat of the summer. A critical part of a chicken's diet is continual access to clean, fresh water. This is especially true in the summer as they cool themselves by panting.

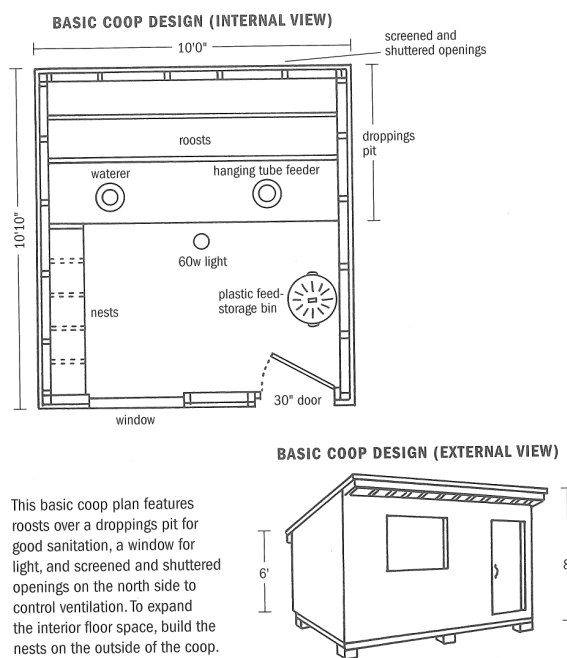


**Figure 2.** Quality feed and clean water will help keep birds healthy and productive.

## HOUSING

A quality coop is essential to backyard chicken production. Layers need nest boxes - one per 4-5 birds. Chickens are descended from jungle birds, which means they like to be up high, so a place for them to roost is important. Coops must provide protection from the weather and predators. There should be a well-insulated area with a light bulb or heat lamp for the winter months as well as ventilation for fresh air. Be sure to have a minimum 3-5 square feet per bird, including outdoor space.

Their main predators are raccoons, rats, owls, hawks, and cats. An enclosed space for them to stay at night is essential to their protection. Ensure that the coop is free of small holes for predators to sneak in. There is an endless variety of coop designs with just as much range in cost. Find a design that provides easy access and otherwise suits your situation. There are many books and websites with coop designs. See Figure 3 for a simple chicken coop schematic. The space should be free of unnecessary objects like woodpiles or equipment, as they attract predators.



**Figure 3.** Simple coop design for up to 16 hens from Storey's Guide to Raising Chickens

## DAILY CARE

Chickens need to be fed and water changed daily. They need to be let out of the coop each morning and put into the coop at dusk each night to protect them from predators. Eggs should be picked up twice a day. The coop and pen should be cleaned out weekly to maintain sanitation and odor control.

## BIRD HEALTH

Healthy birds will be active and alert with bright eyes. They will be moving around – pecking, scratching, and dusting – except on hot days when they will find shade. Chickens that are healthy and active will also talk and sing quietly throughout the day.

As far as laying and eating habits, each chicken is different, so monitor each chicken to get a feel for her normal production and consumption. Healthy droppings will be firm and grayish brown, with white urine salts. Roughly every tenth dropping is somewhat foamy, smellier than usual, and light brown.

Chickens raised in backyard settings generally stay healthy and are not easily susceptible to diseases. The easiest way to find disease in chickens is to know what a healthy bird looks like. When a chicken isn't acting normal, for instance if she doesn't run to the food as usual or she wheezes or sneezes, start investigating. Table 2 lists some possible causes of illness to chickens.

Table 2. Causes of Disease	
INFECTIOUS (INVASION BY ANOTHER ORGANISM)	NONINFECTIOUS (NONBIOLOGICAL IN ORIGIN)
BACTERIA	CHEMICAL POISONING
MOLD AND FUNGI	HEREDITARY DEFECTS
PARASITES	NUTRITIONAL DEFICIENCIES
VIRUSES	UNKNOWN CAUSES

Credit: *Storey's Guide to Raising Chickens* by Gail Damerow

## SANITATION

An important element to bird health is sanitation. In order to maintain a clean, healthy environment, the coop and outdoor area should be cleaned out weekly or as needed to control manure and odor build up. Feeders and waterers should be regularly cleaned and disinfected. Dust baths should be available, as they help control mites. It is

important that at least once a year, usually in the spring, a thorough cleaning is done on the coop and yard. Also cleaning before introducing new birds to the area will limit the spread of disease. A fall cleaning is also helpful with mite control over winter.

During this cleaning, safety precautions must be taken in dealing with dust. Wear a dust mask and mist the walls surrounding the area to control dust movement. Inhalation of dried chicken manure can be harmful to humans. Rake and clean out the yard. All feeders should be removed and bedding completely cleared out. It is important to remove dust and cobwebs from corners of the coop. The inside of the coop needs to be disinfected – including troughs, perches and nests. To disinfect, use one-tablespoon chlorine bleach to one gallon boiling water.

## MANURE MANAGEMENT

Chicken manure is made up of feed residue, intestinal bacteria, digestive juices, mineral by-products from metabolic processes, and water. In fact, 85% of chicken droppings, by weight, is water. This leads to issues with humidity and odor. So what are the options for managing manure?

One option is to complete thorough cleanings of the coop more than once a year. This will control the odor and fly populations.

Another option is to pasture the chickens. Moveable shelters are a valuable tool for pasturing chickens and reducing cleaning time. Simply move the location of the house when manure begins to build up. It offers new space for chickens to graze and peck, and free fertilizer for the lawn!

A third option is composting. Composting can be done right in the chickens' bedding. To start this process, lay down about 4 inches of bedding. Regularly stir up the

bedding to prevent clumping, and add fresh bedding until it is 10 inches deep by winter.

Continue this process until the bedding gets 12 to 15 inches deep. At this depth, composting actively begins and after 6 months can kill harmful bacteria. This composting releases heat, which keeps chickens warm in cooler months and attracts natural fly predators. To maintain the compost, it must be stirred regularly to prevent crusting. The same process can be done outside of the coop in a separate bin.

## EGG PRODUCTION

Hens begin laying at around six months of age and can continue for 5-10 years, with peak production occurring in the first 2 years. They will lay roughly 6 eggs each week. Egg production drops each year when the hens molt (replace their feathers in the early fall) and as daylight hours are lost. Hens need at least 12- 14 hours of light each day to continue laying eggs. A regular lightbulb is sufficient to supply this light.

## REGULATIONS

There are several regulations that you may encounter with chicken ownership. Raising chickens in the backyard may require a permit from your city, and each has different requirements and restrictions. It is not legal in some cities to keep poultry. Some cities may also limit the number of animals you can keep.

If you begin selling eggs or meat, you will encounter additional regulations. The Minnesota Department of Agriculture Dairy and Food Inspection Division manages and enforces these. Contact them for

information regarding these rules at 651-201-6027.

## PURCHASING BIRDS

There are several places to purchase chickens. Table 4 lists major chicken hatcheries and their websites. There are also many individuals breeding and selling poultry. Local farm supply stores may also order them for you.

**Table 4. Major Chicken Hatcheries**

HATCHERY	WEBSITE
MURRAY MCMURRAY'S	WWW.MCMURRAYHATCHERY.COM
STROMBERG'S	WWW.STROMBERGSHICKENS.COM
HOOVER'S HATCHERY	WWW.HOOVERSHATCHERY.COM

## ADDITIONAL INFORMATION

### Online resources:

<http://www.extension.umn.edu/smallfarms>

<http://www.ansci.umn.edu/poultry/index.html>

[www.backyardchickens.com](http://www.backyardchickens.com)

[www.ansi.okstate.edu/poultry](http://www.ansi.okstate.edu/poultry)

[http://www.aragriculture.org/poultry/small\\_flock\\_information.htm](http://www.aragriculture.org/poultry/small_flock_information.htm)

### Publications:

*Storey's Guide to Raising Chickens* by Gail Damerow

*American Standard of Perfection* by American Poultry Association

## QUESTIONS OR COMMENTS?

Contact Betsy Wieland at: [eliza003@umn.edu](mailto:eliza003@umn.edu) or 612-596-1175