

March is for Gardening: Backyard Chickens

In the past decade, there's been a resurgence in self-sufficiency and talk of sustainable, local, and seasonal eating. Things that our grandparents used to do to save money and feed their family fell out of popularity for a time, but now hobbies like gardening, canning, and bread making are working their way back into our culture as we search for ways to control



our food and take care of the environment. Enter the backyard chicken flock! Although requiring a bit more knowledge and commitment than installing a garden, adding a flock of laying hens to your yard is an easy way to add to your self-produced food. This guide will take you briefly through the needs of backyard chickens. We encourage you to do your own research before committing.

What kind of living conditions does a backyard flock need?

Chickens need a coop that contains egg laying boxes and a roost area for sleeping. They will naturally prefer to sleep in this type of enclosed setting and need no training from you. The coop should be dry and free of strong drafts but allow venting of fresh air. It should also be secure from predators. You need about 1 nest box for every 3 birds and it should be lined with something soft and dry, such as pine shavings.

There needs to be about 10-12 inches of roost space for each bird so a flock of 5 needs about a 5-foot roosting bar (or 2 shorter bars). We recommend purchasing a coop to be sure it has these elements, but you can also build your own if you are handy. They will usually designate how many chickens the coop can hold. The floor of the coop should be lined with something that can be cleaned easily, such as sand. The droppings can then be scooped out with a litter scoop.



Above: Wooden coop (3-5 chickens) attached to chicken run. Wire fencing will be dug in to prevent predators from entering.

In addition to a coop, chickens need access to the outdoors so they can get fresh air and dig around in the ground. You may build an enclosed area called a "run". A run is simply a space enclosed by wire fencing that attaches to the run. We recommend have a run with a roof so the chickens can use this space even when it is raining or snowing. The food and water should be kept in the run, not in the coop. Some people choose to always keep their chickens in the run as protection from predators (such as hawks). If this will be your setup, be sure that you have a minimum of 10 square feet per chicken. Some chicken owners allow their birds to free range which means they open the door of the run and allow them to wander the yard. It's best if your yard is fenced for safety. If you plan to free-

Below: Nest boxes & roosting bars



range your chickens, you can make your run smaller or opt to not have one. Remember, in times of inclement weather, your chickens still need to come out of the coop.

What happens to the chickens in the winter?

Not much! Chickens don't mind the cold, although they don't love snowy or windy weather and will probably opt to stay where it's dry. If you have a draft-free, well-vented coop, and a covered run for them to get their food and water, they will do fine all winter. They don't need extra heat; in fact, heating the coop is considered a fire hazard. If you live in a particularly cold climate, you can research breeds of chickens that are cold hardy. You can also add greenhouse plastic around the run to protect from wind.



What do chickens eat? You can purchase chicken feed from your local Agway or Tractor Supply. It is pre-mixed to include all the necessary nutrients. Beyond that, chickens can forage for insects or seeds and can have a variety of human snack such as veggie scraps (no potato).

What kind of daily care do they need? You will need to make sure they have access to clean food and water. You will need to collect eggs daily. You will need to clean the droppings out of their coop at least once a week to prevent it from becoming an unhealthy environment. It's a good idea to check on the flock physically once a day to make sure you spot sickness or injury right away. The chickens will need to be locked in a predator proof enclosure every night. You can choose to lock the door by hand every night or invest in solar powered doors. Alternatively, if your chicken run is predator proof, if that door is closed, they will be safe. In general, a backyard flock requires about 15 minutes of care per day and about an hour each week for cleaning/purchasing supplies, etc.

Besides shelter, food, and water, what else do the chickens need to be safe and happy?

Chickens are curious creatures and love nothing more than to scratch in the dirt and nibble on grass and seeds. They love treats and you can offer them vegetable scraps (avoid potato), sunflower seeds, meal worms and even bits of red meat. They will learn quickly to run toward you as the bearer of goodies.



What happens if I go on vacation? There are lots of mechanisms to keep your flock fed and watered for several days without a person checking on them. If you plan to be gone for a week or longer, you will need to arrange for an animal care giver to refresh food and water, collect the eggs, clean the droppings, and make sure everyone is safe and happy.

How old does a chicken need to be to lay an egg? A hen needs to be on average 20 weeks old to begin laying. Depending on the time of year they hatched, it may be as late as 9 months old.

How often does a chicken lay an egg? It takes 25-28 hours for an egg to form inside a hen. Some breeds lay more often than others but in general a hen will lay 3-5 eggs per week. They may lay less, or stop laying altogether, during the short days of winter.

Do you need a rooster to get eggs?

No, a hen will lay eggs with or without a rooster.

Are brown eggs healthier? The color of the eggshell has nothing to do with the health value of the egg or the conditions the chicken is being raised in. Quite simply different breeds of chickens produce different colors of eggs. A buff orpington lays brown egg, a copper maran lays chocolate-colored eggs, a white leghorn produces a typical white egg, and varieties of Easter eggger hens lay blue, green, or pinkish eggs!



Do I need to do anything to the eggs before I eat them? No, nothing special needs to be done to the eggs. You do not need to wash them unless they are particularly dirty.

How many chickens make a good size backyard flock? You need to check with your township zoning codes to find out if there is a minimum or maximum amount of chickens permitted on your property, as well as if you are allowed to have a rooster. Most New Jersey hatcheries will require that you purchase no less than 6 chicks. A good backyard flock size ranges anywhere from 4-12 chickens depending on the size of your yard. Chickens are flock animals and are uncomfortable living alone. A minimum of 4 chickens ensures a flock even if you lose a chicken to illness or predation.

How does a baby chicken grow inside an egg? To grow into a baby chicken, an egg needs to be fertilized inside the hen's body. The mother hen then lays 1 fertilized egg per day for several days. The fertilized eggs are called a **clutch**. A hen will stop laying eggs when her clutch reaches about 12 eggs. She will then start to **incubate** the eggs which means she sits on them all day and night to keep them warm. It takes about 21 days for the fertilized eggs to grow into baby chicks. The mother only leaves her nest to get a bit of food and water and then comes right back to her eggs, so they don't get cold. After 21 days, the baby chicks will hatch out from their eggs and peek their head out from under the mama hen! Sometimes all the eggs will hatch but usually there are a few that don't develop and those should be thrown away and not eaten.



Should I buy chicks or grown hens? You can choose to purchase 2-day old chicks from various hatcheries. Keep in mind, they may be super cute but require a lot of work. They need to be kept inside at warm temperatures for about a 5-6 weeks. After that, if it's warm enough, they can start to live in the coop, but they will not lay eggs until they are a minimum of 20 weeks old. You may purchase pullets (female chickens between 4-17 weeks old) or older hens. Chickens will lay their best for the first two years of life and then

production will lessen and, at some point, stop altogether. They can live up to 10 years but are often lost to predation before that time.

Words you might see on egg cartons.

Organic - Look for the USDA Organic label to confirm the farm is organic. A certified organic chicken farm used organic feed and does not medicate their chickens unless they get sick.

All Natural - Means that the eggs were laid by a hen. This does not tell us about any medications the chickens were given or what conditions the chickens were living in.

Fortified - Means that chickens are fed supplements that might make the eggs a bit healthier for human consumption.

Cage free - Means that the chickens are not confined to a cage and live in a large hen house. This does not tell us how many chickens are living together. Depending on farm size, there may be hundreds, or thousands of chickens crammed into a hen house with very little room to move.

Free range - The farmer must demonstrate that the chickens have access to the outdoors and the door is open at least part of every day. It does not tell you how big the outdoor range space is and if the chickens ever use it. It does not tell you anything about the quality of the food or living conditions.

Pastured or pasture raised - Means that the chickens are primarily on pasture (grass) and eat a varied diet of plants and insects in addition to their feed. It does not tell you if the feed is organic.

If you're interested in the chickens that lay your eggs to have the most natural, healthy lifestyle while supplying you with breakfast, the best choice is organic, pasture raised chickens. The 2nd best would be just pasture raised. If you have the option to buy from a local farmer, this is even better! The living conditions of chickens raised without the "pasture raised" stamp range from less than ideal all the way down to horrific.

Additional Resources

- [USDA, Questions and Answers – USDA Shell Egg Grading](#)
- [USDA, Eggstra! Eggstra! Learn All About Them](#)



Activity: Parts of an Egg

Materials:

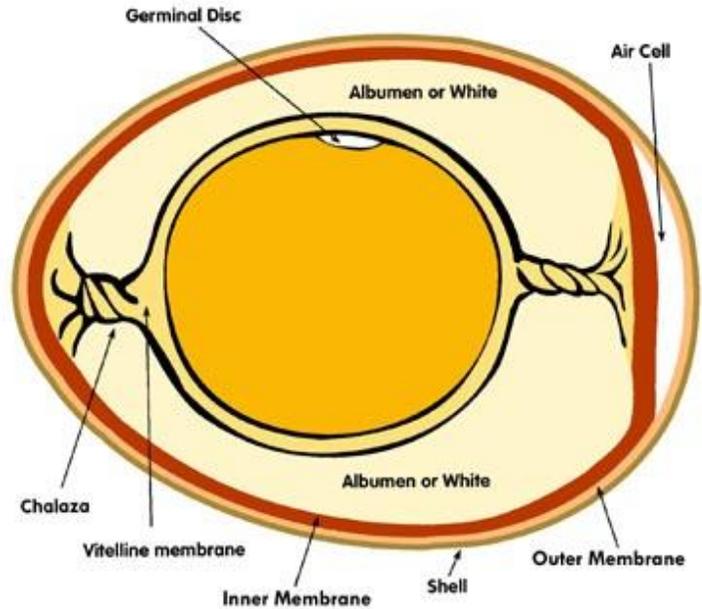
- 1 raw egg
- Bowl

Steps:

1. Crack an egg carefully into the bowl
2. See if you can identify the parts of the egg labeled in this diagram

Questions:

1. What is the function of the yolk?
2. What part of the egg actually grows in the baby chicken?
3. What is the job of the eggshell?



Answers: 1. Food for the embryo 2. Germinal disc 3. Protects the baby chick

Activity: A See-through Egg

Materials:

- 1 raw egg, in the shell
- A container filled with white vinegar (make sure the egg fits into the container)

Steps:

1. Place the egg into the vinegar making sure it's fully covered.
2. Allow it to sit for 48 hours at room temperature.
3. Remove the egg and rinse it. You will be amazed that the shell has dissolved, and you can see right into the egg!
4. You can do further experiment on the see-through egg by soaking them in various solutions such as salt water, corn syrup, or food-dyed water. Record your observations for each different treatment.