Flock Starter Guide
The Journey From Chicks to Layers

backyardpoultry.iamcountryside.com
www.nutrenaworld.com/poultry-feeds
Index

Top Chicken Breeds for Egg Production................................................................. 4
Matching Chicken Breeds to Egg Color................................................................. 8
A Guide to Getting New Chicks ........................................................................... 12
6 Easy Chick Brooder Ideas .................................................................................. 18
How to Pick the Best Feeders and Waterers ......................................................... 20
Feeding Your Flock ................................................................................................ 22
6 Basics for Chicken Coop Design ....................................................................... 28
A Guide to Sick Chicken Symptoms ..................................................................... 32
Get them started on the good life.

When you welcome your chicks into their new home, do it the right way: with feed that keeps them both healthy and happy. They’ll return the favor too—healthy chicks grow up to lay healthy eggs. So get your whole family started on the good life, with Nutrena® NatureWise® Chick Starter.

Learn more about raising happy chicks at NutrenaWorld.com/Chick-Days

© 2020 Cargill, Incorporated. All rights reserved. *With purchase from participating retailer.
Top Chicken Breeds for Egg Production

Having the Right Chicken Breeds for Eggs Makes All the Difference

**AUSTRALORP**
This breed holds the record for egg-laying capacity. A hen once laid 364 eggs in 365 days!

- **Laying Habits:** 5+ eggs per week
- **Egg Size:** Large
- **Egg Color:** Brown
- **Temperament:** Gentle
- **Color:** Black


**LEGHORN**

- **Laying Habits:** 5+ eggs per week (can vary by color)
- **Egg Size:** Large
- **Egg Color:** White
- **Temperament:** Active. Females are non-sitters.
- **Popular Colors:** White, Light Brown, Exchequer


What criteria lands a breed on the best chickens for eggs list? First, laying habits are crucial. Does your breed have the capacity to lay an egg a day or is it more like two to three eggs a week? From there, egg color and size are must-know pieces of information. After that, breed size and temperament are less crucial but important facts to know. This way you can provide adequate coop/run space and maybe accommodate your kids that may be helping with the eggs chores and wouldn’t appreciate a mean chicken. In this article, you’ll find some great choices.
Sussex. Photo by Pam Freeman.

SUSSEX

Laying Habits: 4-5 eggs per week

Egg Size: Large

Egg Color: Brown

Temperament: Calm

Popular Colors: Speckled, Red, Light

More Online: backyardpoultry.iamcountryside.com/chickens-101/sussex-chicken/

Easter Egger. Photo by Pam Freeman.

AMERAUCANA/EASTER EGGER/OLIVE EGGER

Laying Habits: 3+ eggs per week (Ameraucana)

Egg Size: Large

Egg Color: Blue (Laid by Ameraucana), Blue, Green, or Pinkish/Cream (Laid by Easter Egger), Olive green (Laid by Olive Egger)

Temperament: Docile (Ameraucana), Friendly (Easter Egger), Varies (Olive Egger)

*It’s important to note that Easter Egger and Olive Egger chickens are not a true breed. They are of mixed lineage and are not officially recognized breeds. If you have questions when ordering these birds, make sure to ask the hatchery before you make a purchase. Also, individual Easter Egger chickens will not lay multiple egg colors. For example, if a hen starts out laying green eggs, that will continue through her lifetime.

More Online:
backyardpoultry.iamcountryside.com/chickens-101/easter-egger-chicken/
backyardpoultry.iamcountryside.com/chickens-101/getting-to-know-olive-egger-chickens/

<table>
<thead>
<tr>
<th>Fancy Colored Egg Breeds</th>
<th>Blue Eggs</th>
<th>Green Eggs</th>
<th>Pinkish/Cream Eggs</th>
<th>Docile/Friendly</th>
<th>Variable Temperament</th>
<th>Large Egg Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ameraucana</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Easter Egger</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Olive Egger</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
WYANDOTTE
Laying Habits: 4-5 eggs per week
Egg Size: Large
Egg Color: Brown, tan
Temperament: Calm
Popular Colors: Silver Laced, Golden Laced, Whiter, Black, Patridge, Silver Penciled, Columbian, Blue

MARANS
Laying Habits: 3-4 eggs per week
Egg Size: Large
Egg Color: Russet brown
Temperament: Docile, tidy
Colors: Black Cooper, Wheaten, White (Other color varieties are not recognized by the APA)

ORPINGTON
Laying Habits: 3-4 eggs per week
Egg Size: Large to extra large
Egg Color: Light brown to dark brown eggs
Temperament: Generally friendly, easily handled and calm
Popular Colors: Black, Blue, Buff, White

RHODE ISLAND RED
Laying Habits: 5+ eggs per week (can vary by color)
Egg Size: Large to Extra Large
Egg Color: Brown
Temperament: Docile, but can be aggressive
More Online: backyardpoultry.iamcountryside.com/chickens-101/rhode-island-red-chicken/
Give them the good life.
They’ll return the favor.

Happier, healthier chickens lay better eggs. So when you give your flock the good life by feeding them Nutrena® NatureWise® Layer Feed, you can be sure your family is getting better eggs right back.

Learn more about feeding your chickens the best at NutrenaWorld.com/NatureWise

© 2020 Cargill, Incorporated. All rights reserved. *With purchase from participating retailer.
Matching Chicken Breeds to Egg Color

By Lisa Steele

There are more than 60 breeds of chickens recognized by the American Poultry Association and hundreds of other chicken breeds that have been developed worldwide — many of whom lay gorgeous eggs in a rainbow of hues ranging from white to cream, green, pink, blue, and even chocolate brown. While the color of the eggshell doesn’t determine egg nutrient value or taste, if you want to put some color in your egg basket, consider the following breeds. Increasingly, these fairly rare breeds are becoming more widely available.
**Blue Eggs**
Ever since Martha Stewart shared photos a couple of years ago in her magazine of her egg baskets bursting to the brim with beautiful blue eggs laid by her own flock, azure eggs have been coveted by backyard chicken keepers everywhere. Ameraucanas, Araucanas, and Cream Legbars all lay blue eggs.

**Green Eggs**
To add a few green eggs in your basket, consider raising some aptly named Easter Eggers. (In fact, a flock of this mixed breed of chickens can lay a rainbow of egg colors on their own including bluish, green, pinkish, or cream!), Olive Eggers or Favauanas. Several other breeds lay varying shades of green eggs. Olive Egger chickens (half Marans chickens and half Ameraucana chickens) lay olive green eggs, while a breed developed by My Pet Chicken, the Favauana (half Faverolle and half Ameraucana), lays a pale sage green egg. Isbars also lay a range of greenish-colored eggs from mossy to mint green.

---

**EGG COLOR BY BREED**

<table>
<thead>
<tr>
<th>Breeds</th>
<th>White</th>
<th>Blue</th>
<th>Green</th>
<th>Dark Brown</th>
<th>Pinkish/Cream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ameraucana</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Araucana</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cream Legbar</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easter Egger</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Olive Egger</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Favaucana</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sussex</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Java</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Australorp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silkie</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Orpington</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Faverolles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Welsummer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Barnevelder</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Marans</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Penedesenca</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Leghorn</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andalusian</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ancona</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lakenvelder</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polish</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamburg</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cream/Pinkish Eggs
A nice change from ordinary brown or tan eggs, cream or pale pink eggs will add subtle variety to your egg basket. Light Sussex, Mottled Javas, Australorps, Buff Orpingtons, Silkies, and Faverolles all lay a pinkish-cream egg. As noted above, some Easter Eggers will also lay cream or pink eggs, while others will lay green or bluish eggs.

White Eggs
White eggs add a gorgeous contrast to colored eggs. Leghorns are the most common breed of white egg layer, but several other Mediterranean breeds of chickens including Andalusians and Anconas also lay white eggs, as do Lakenvelders, Polish, and Hamburg hens.

Dark Brown Eggs
Brown eggs are pretty common, but gorgeous dark chocolate brown eggs lend a pop of rich color to your egg basket. Try raising some Welsummers, Barnevelders, Penedesencas, or Marans.

Once you have added some colorful egg layers to your flock, you might have friends and egg customers say they think that brown eggs taste better than white eggs. You might also have others look at your blue and green eggs and ask how they taste — if they taste different than white or brown eggs. So if you’re wondering how to respond to the question: Do different chicken egg colors taste different? The short answer is no. All chicken eggs are the same on the inside. Egg taste is dictated by what a hen eats. While a single food won’t change the taste of an egg, a diet high in grasses, seeds, vegetables, and herbs will result in a better tasting egg overall. And of course, the freshness of the egg matters the most. ●
Introducing Plaid Perks™, the new rewards program for all Nutrena® brands. Now, you can earn rewards for every Nutrena product you buy* for horses, hounds, hens, and any animal.

Sign up and redeem points at plaidperks.com.
A Guide to Getting New Chicks

Where and How to Get What You Want

Selecting the Right Chicken Breeds

We wanted fresh eggs for our family but also wanted to sell eggs as a business. This meant we needed to consider chicken breeds that laid consistently. It was important that we could depend on production throughout the year. There are a number of sex-link chicken breeds, which have been bred specifically for the purpose of consistent laying. Another benefit of sex-link breeds is that sexing chicks is easy because of their coloring, which means less chance of getting roosters (males who don’t lay eggs) when we want pullets (female egg-layers). We added a few of these chicken breeds to our list of possibilities.

Since we were planning to sell our eggs, we needed to think about what our customers wanted. For this, we used Survey Monkey to ask friends, colleagues, and neighbors what they would buy. Most people wanted variously colored eggs in their carton, unlike the uniformly brown or white eggs at the grocery. So our flock would need to be a blend of different chicken breeds, perhaps including some heritage breeds for their uniquely colored eggs.

We have three young boys, so we also looked at the best chickens for kids. Our boys are rough and tumble; we needed birds they could handle without issues: calm, gentle, and sturdy. I knew that handling the birds from the start would be important, but the more I read, the clearer it became that breed, too, plays a role in chicken personality.

Climate can be an important factor too. Some breeds do better with cold than others, and the same is true for an extremely warm environment. For example, a larger comb helps a chicken cool off when it is very hot, but also makes it more susceptible to frostbite when the temperatures drop.

Finally, chickens don’t lay eggs forever. That meant eventually they would supplement our diets with not just their
eggs but also their meat. This reality inspired us to look at dual-purpose chicken breeds. These are chicken breeds which can be raised for egg production and meat. We learned over time that all healthy chickens can be consumed, but breeds like Silks don’t give much return on the effort to process them; so it makes sense if you intend to eat your birds to consider dual-purpose chicken breeds.

Chicken Breeds For Us

You’re probably wondering which chicken breeds we finally decided upon. We chose several breeds to provide a variety of colors in our eggs.

• **Rhode Island Reds:** These classic dual-purpose birds are popular for good reason; they are easy-going, curious, friendly, and consistently lay good-sized brown eggs. Our boys carry them around. When I go in the coop, they approach to see what I’m up to.

• **Easter Eggers:** Though we ordered Ameraucanas, they are actually Easter Eggers — the mutt of chickens. They are hearty and resilient. These are some of our favorite birds because they are smart and curious. They bond to us like no other breed we’ve raised. My husband has one we call his “girlfriend” because whenever he comes outside, she follows him around. One broody hen raised a duckling when its mother wouldn’t. Their eggs vary in color from turquoise to pale blue to violet to nearly white. But the trade-off for these interesting colors is their production drops significantly in winter.

• **Welsummers:** We added this heritage breed for dimension in our brown eggs as theirs are a deeper, richer brown. The birds are beautiful. Hens have golden feathers around their necks that look like a burst of sunshine and roosters are straight off the Corn Flakes box. They are a little more standoffish than the other chicken breeds we have and don’t like to be held. They lay eggs most days.

• **Golden Comets:** These sex-link hybrid birds round out our flock and add consistency to our brown egg production. They love people and actually follow our five-year-old like he’s mother hen.
Chicken Breeds for You

I shared how we decided which chicken breeds were right for us. These may not necessarily be the breeds that will be best suited for you. Carefully reflect on your goals for raising chickens, then research which chicken breeds will serve you best.

Where to Buy Baby Chicks

There are three main options for where to get your chicks: a local hatchery, a mail-order hatchery, or a local feed store. Let’s look at the pros and cons of each of these options.

A Nearby Hatchery

If you happen to have a hatchery nearby, you may have the option to directly pick up baby chicks. This is the case for us in Cincinnati. Mt. Healthy Hatchery is our local source for where to buy baby chicks, ducklings, and game birds. Hatcheries such as Mt. Healthy accept the bulk of their orders online so expect limited delivery dates for rarer breeds. We found if we place orders on the phone, they offer a wider choice of delivery dates. Orders are usually placed on a first-come, first-served basis. So place your order sooner rather than later.

Because we are raising egg-layers, we only want pullets. Many hatcheries give you the option to order pullets, cockerels, or “as hatched” (unsexed). If you don’t know how to tell the sex of baby chicks, it’s nice to have the hatchery do this for you – whether you pick them up locally or mail order. Not all hatcheries or breeders offer this service, but in our case Mt. Healthy does, and they also guarantee 90 percent accuracy in sexing. On one order we received too many cockerels so they applied a credit toward our next order.

When you order from a local hatchery, they will give you a pick-up date. We pick up our chicks the morning they are hatched, take them immediately home and place them into the brooder. That means that they go from the hatchery and into the brooder in less than two hours.

We have had fantastic luck with maintaining good health in our chicks with this quick turnaround time from birth to the brooder. We have only had one chick in more than 200 raised that exhibited sick chick symptoms. It turned out that she had Wry Neck, which is a vitamin deficiency thought to be inherited from parent chickens, not an illness. We have never had any cases of pasty butt, another common chick illness.

A downside for ordering from a local hatchery may be selection. Mt. Healthy offers 23 varieties of chicks with a focus on the most popular chicken breeds. If you want an unusual breed or a more pedigreed lineage, you may need to seek out a specific hatchery or breeder that raises what you want. Chances are this won’t be local and will require mail-ordering your chicks.

Mail Order

A second option for buying chicks is mail order. If you live in a remote area this may be your only option. Once you have determined the chicken breeds you want, do some research into hatcheries that offer that breed. Do they sex chicks? What’s the minimum order size? What shipping options and customer service guarantees are offered? What’s the cost? Look for reviews online from previous customers, which could sway your decision. Pay particular attention to any comments about the health of chicks and customer service provided if issues arise.

One of the reasons why we chose Mt. Healthy Hatchery is that they voluntarily participate in the National Poultry Improvement Plan (NPIP), which means they meet a recognized standard for health and quality of their chickens. In choosing a hatchery, you may want to ask what they are doing to combat the spread of illness in their facility. Because birds are flock animals, illness can spread quickly and devastate your flock in short order.

Depending on your purposes, you may be looking for birds bred to meet specific criteria or that come from a prize-winning line. For example, if you want breeding stock or chickens to show, you may want a long-established and proven hatchery that raises purebred poultry. Check into their history and ask for some references from previous customers.

You will either order online or call them directly. There will be a minimum order size to ensure the baby chicks maintain warmth in their travels. For most hatcheries, the minimum is 10 chicks. Some may offer a mix-and-match option so you can choose different breeds to make up your order.

Once you’ve placed your order, your chicks will usually be shipped...
next-day mail on the day they hatch. The hatchery will notify you when the chicks have shipped. The chicks will be sent to the closest post office and held there for you to pick up. Notify the post office to expect chicks and ask them to let you know immediately when the chicks arrive so you can retrieve them and get them into the brooder.

Just before a chick hatches from its egg, it takes in all the remaining nutrients that were sustaining it as it grew. This is what makes it possible to ship chicks. It is generally accepted that chicks can survive three days after hatch without food or water. That said, you want to get your chicks into the brooder with water as soon as possible. I mentioned we have never had a case of pasty butt; this can be a problem with chicks who have gone without water for several days. To avoid pasty butt, be sure to give chicks just water for their first couple hours at home. Let their bodies rehydrate before you provide food.

In summary, mail ordering chicks can give you access to a wider selection of chicken breeds. If you live in a remote area it may be your only option for buying chicks. It may be a better choice for finding chicks from a pedigreed line or with a specific trait. Prices may be slightly higher for mail-ordering, especially if you have to meet a minimum order and pay for quick shipping. Because your chicks have gone longer without food and water, you must pay closer attention to health issues when they arrive.

Ask where the chicks came from. They may be ordering from a local hatchery. If this is the case, you might save money by going directly to the hatchery yourself. For many feed stores, chicks are simply a way to bring in customers and the markup is negligible. If so, you may save time and gas by going to the closer feed store rather than traveling to the hatchery.

Check with your local store early to see when their chicks will arrive and what kinds they will carry. Also, ask if they will have sexed pullets if that’s important to you, and do they have any recourse if the sexing is incorrect. Chances are you will have more customer service guarantees directly from the hatchery.

If you are looking for something specific or for large quantities, you may need to go directly to a hatchery. One consideration is that breeds are sometimes mixed in a large brooder once they arrive at a feed store; be sure to find someone knowledgeable to pick out the chicks for you so you end up with what you asked for.

Brooder Ideas

Once you’ve selected your chicken breeds and figured out where to buy baby chicks, you need to set up your brooder. The brooder will be the baby chicks’ home for their first month or so. Setting up the brooder is one of the most important factors in learning how to raise baby chicks successfully.

Your Local Feed Store

A third option for where to buy baby chicks is a local feed store. This will, of course, depend on if you have a feed store nearby. We have a locally owned store and a Tractor Supply within five miles of us; both carry baby chicks every spring.

Your feed store is probably close to home and easy to reach. You save money by not having to pay for shipping. You can buy as many chicks as you like, and mix and match breeds. You can even watch the chicks and pick out the individuals you want, which will not be the case at most hatcheries. When you get your chicks, you can pick up supplies to get them started such as heat lamps, feed, feeders, and maybe even a pre-made brooder or coop. Finally, the employees may be a source of good information if you are new to raising chicks.

Brooder Ideas

Once you’ve selected your chicken breeds and figured out where to buy baby chicks, you need to set up your brooder. The brooder will be the baby chicks’ home for their first month or so. Setting up the brooder is one of the most important factors in learning how to raise baby chicks successfully.

Your Local Feed Store

A third option for where to buy baby chicks is a local feed store. This will, of course, depend on if you have a feed store nearby. We have a locally owned store and a Tractor Supply within five miles of us; both carry baby chicks every spring.

Your feed store is probably close to home and easy to reach. You save money by not having to pay for shipping. You can buy as many chicks as you like, and mix and match breeds. You can even watch the chicks and pick out the individuals you want, which will not be the case at most hatcheries. When you get your chicks, you can pick up supplies to get them started such as heat lamps, feed, feeders, and maybe even a pre-made brooder or coop. Finally, the employees may be a source of good information if you are new to raising chicks.

Essentials for Setup

One of the most important parts of a brooder is heat. We have always used a simple metal heat lamp that can clamp to the side of the brooder or hang from a bar above it. We purchase bulbs that
give off heat but not light so they can be on all the time without disrupting sleep. You can also buy heating plates — panels that produce heat on the underside. They are adjustable to raise as the chicks grow. This method is supposed to more closely simulate nestling under a mother hen.

Whichever heat source you choose, start it off just over the heads of your chicks. Watch them closely. If they are panting or avoiding the heat area, raise it up. If they huddle together all the time under the lamp, lower it. The other feature of a mother hen which you must provide is protection. Before you worry about getting birds or anything else, secure your coop. The same is true of your brooder, perhaps even more so since baby chicks are particularly vulnerable. We have always kept our brooder inside a locked building. This ensures predators will not harm them.

What else does your brooder need to provide a safe and warm home for your birds? We make ours from a sheet of plywood formed into a 4’ square (for up to 60 birds). On the bottom, we staple a sheet of heavy plastic to keep the bedding in and off the cement floor in our workshop. We fill this space with medium wood chips.

We like simple plastic feeders and waterers made to accommodate a chick’s smaller size. Because the trough is narrower, there is less possibility that the babies can drown or walk in them contaminating the food and water. As the chicks begin to grow, we put scraps of wood under the feeders to raise them up. That way, they are always at a height where the birds must raise their heads up slightly to reach in. That helps keep the feeders clean.

Your chicks will eat a special starter feed that’s higher in protein to help them grow. Chick feed is commonly medicated to combat common illnesses. If you want medicine-free chicks, ask your feed store if they carry a non-medicated food. If not, we have used a high-protein crumble feed for babies in the past and it worked just fine.

After the first week, I usually add a small perch into the brooder. Ours is made from small branches screwed into scrap wood to make a ladder, which leans against the side. As the birds grow and test out their wings, you may need to add a mesh cover to your brooder to keep them from flying out. This usually happens here at about three weeks. Also, if it is particularly cold you may wish to use sheets of insulating foam to cover your brooder at night. We only do this if we are raising babies in the dead of winter in Ohio.

Make sure to keep the bedding clean by adding fresh bedding every few days. Cleanliness in the brooder will go a long way to keeping your birds healthy.

Have a plan for what to do if a chick is getting picked on. The pecking order is real and begins to get established immediately. We always keep an extra heat lamp and feeder/waterer so we can make a small brooder for a chick that needs to be separated. A large plastic storage container works well.

Also, plan next steps as your babies grow. They can move from the brooder when they are fully feathered, usually at four to six weeks depending on the breed. Your plan will be different if these are your first chicks or if you are integrating new chicks into an established flock. We have a section of the coop where we move our chicks after the brooder so they can see and hear the rest of the flock before they mix. They spend a month or more in this area until they are closer in size to the adults. This minimizes pecking when they do finally integrate with the flock.
Without NatureWise®, your flock is missing out on something important.

It’s the only poultry feed on the market with one-of-a-kind FlockShield™ healthy flock support, to keep your feathered friends’ immune systems strong. Choose from any of our high-quality, natural* options like Layer Feed, soy-free Hearty Hen, and Egg Producer for free-range birds. Because nothing but total nutrition will do to keep your laying hens looking and feeling their best.

Find well-rounded feeds for your flock at NUTRENAPOULTRYFEED.COM.

*As defined by the AAFCO (American Association of Feed Control Officials). **With purchase from participating retailer.

© 2020 Cargill, Incorporated. All rights reserved.
6 Easy Chick Brooder Ideas

Raising Baby Chicks is Easier with These Inexpensive Brooders

By Janet Garman

Need some quick and easy brooder ideas? Most of these cost very little and some may be made from items you already have around the house. Using a chicken brooder that is the appropriate size for the number of chicks and changing it once or twice as they grow, will keep the chicks warm enough during development. It will also make it easy for you to clean up after them and keep them safe from any curious household pets.
Large Dog Crate Wrapped In Chicken Wire
I have modified a large dog crate and used it as a brooder for chicks. I needed to add some chicken wire around the outside to keep the chicks from squeezing through the bars in the crate, but it worked just fine for many weeks.

Use a Large Plastic Tote
You can’t get much easier than a plain plastic tote when it comes to chick brooder ideas. These are easily found in hardware and home stores. The totes come in various sizes and the size you need will depend on how many chicks you are going to raise. I often start with a smaller tote for the first weeks and then move them into a large, long storage tote as they grow and begin to eat more and run around more. This year, I also added a wire fence around the tote to give it more height. The chicks are able to fly up and out of the bin after three weeks and this keeps them contained a bit longer!

Large Cooler With Lid Removed
If you have a large ice chest cooler, this would work as a brooder but I would remove the lid to prevent it from accidentally closing and reducing the air supply to the chicks. Like the toddler swimming pool, the cooler will be easy to clean out. A drawback would be that it is not transparent so you would not have as much light getting into the chicks.

Plastic Children’s Swimming Pool
My favorite of these easy chick brooder ideas works great for raising ducklings — a toddler swimming pool. These come in various sizes and the only problem is that they take up a good bit of floor space in your home. Ducklings can go outside earlier than chicks, but while they are still covered in down, they need to be kept warm and dry. This is not easy with the mess they create. Ducklings can make a soggy mess out of a small amount of water! Using the swimming pool allows you to wipe it out easily, keeping the brooder cleaner. There are poles that can be purchased to hang the heat lamp over the swimming pool brooder.

Water or Feed Trough
One of my personal favorites, and an idea that many feed stores use for brooders, is a metal water trough. These are usually a more expensive option when it comes to chick brooder ideas, but they work extremely well. If you have an older one that leaks and can’t be used in the field any longer, you could re-purpose it as a chick brooder.

Brooder Corrals
Brooder corrals are another good option in this list of easy chick brooder ideas. These are often found at larger farm retail stores. The corral consists of many panels that are connected together to form a round pen that sits on the floor. The space requirement is similar to using the child’s swimming pool, although you can adjust it to a more oval shape or take some panels out to make it smaller. The floor still needs to be covered with a tarp or drop cloth and covered with shavings or newspaper. I have used a system like this for a grow out pen to give the chicks more space as they grow and before they have enough feathers to move to the coop. It’s not a bad system but the cleanup is a little harder and more intensive.

As your chicks grow and the wing feathers develop, you will need to add some sort of cover. If you don’t, you are likely to come home to the chicks having a party all over your house! I use some re-purposed items from around my homestead, such as a piece of chicken wire, some window screening, a large piece of cardboard, anything that allows air to flow and keeps the chicks in, should solve the problem.
How to Pick the Best Feeders and Waterers

Make Raising a Flock Easier

Feeding backyard chickens should hypothetically be a simple thing to do. You know what chickens eat, but when the chicken feeders and waterers we buy fail to live up to expectations, it complicates things. There are many different styles of chicken feeders and waterers available today; some perform well, some fail quickly, and more still just don’t deliver the value we think they will. Over the years, I’ve used all sorts of off-the-shelf, commercial-grade and even some home brew systems, all with mixed results. Hopefully, my years of expensive trial and error can help you pick the right feeders and waterers.

Plastics Make it Possible

I’ve noticed a trend in the poultry equipment retail market; it lags the commercial sector by about 10 years. I remember a time when all you could find on the local feed store shelves was metal equipment, with exception to those terrible little screw base water founts. The commercial poultry sector had long since scrapped their metal feeder and water equipment in favor of non-porous, non-rusting, chemical-resistant plastics, but the retail world of poultry supplies took awhile to catch up.

Plastics have become the new standard for poultry equipment, both in the commercial sector and retail stores, but for different reasons. Professional farmers adopted plastic and stainless steel devices because of their non-porous characteristics, which deny bacteria and viruses a place to hide and entrench themselves. In addition, with the advent of modern disinfectants, the new acidic cleaning agents proved to be far too corrosive for old galvanized sheet metal. Plastic offers a cost-effective material that resists caustic solutions, can be as durable as their sheet metal predecessors and offers a better longevity since they never rust.

The retail poultry sector finally changed over to plastic construction simply because it’s cheap. It’s far cheaper to produce thousands of injection-molded feeders and much cheaper to ship plastic feeders that weigh a fraction of the old sheet steel designs. Cheaper products offer better profit margins, and cheap prices make consumers buy more, one way or another. The problems we as consumers see more often now is that these cheap fixtures are not as durable because, well, they’re cheap in every sense of the word. From a hygiene point of view, they’re still better than our old rusty feeders, but most plastics used in retail products are of a lesser quality and thickness compared to commercial equipment.

Buying Steel

Retail locations will sell you anything you want, for the most part. Even if your local shop still sells steel feeders for backyard chickens, I don’t suggest them. Retail galvanized steel is not the same as the old commercial grade galvanized steel, and these feeders will
rust sooner rather than later. Rusty feeders are impossible
to clean, look terrible, and make you look like a bad poultry
keeper, so don’t bother buying steel.

This goes double for today’s metal double wall water
founts. Back in the day, they were your only option for a
heated chicken waterer, but now they offer heated plastic
water founts. I always suggest buying plastic now, since the
new galvanized double wall founts rust quickly and break
at the welds, causing a vacuum leak and consequently a big
water leak. Nipple drinker systems are far superior to water
founts of any design, so if you haven’t done so already, con-
side building a nipple bucket to make your life easier.

Products You Don’t Need

At the risk of sounding like a ranting snob, I’d like to air
my biggest gripe with the retail poultry world. You don’t
need half the stuff they’re trying to sell you for your backyard
chickens! Chick growing equipment is the biggest offender in
my eyes. Most first-time chicken buyers will purchase chicks
at a retail location that wants to sell you a whole bunch of
chick-specific equipment. Your $12 chick purchase quickly
becomes $50 or $60 before you can bat an eye. You need a
special chick feeder, a special chick water fount, that handy
little thermometer meant especially for raising chicks and oh,
don’t forget our super-duper plastic draft guard thing, you
definitely need that! Right, I have a bridge to sell you too.

What makes this feel like such a scam is this; you’ll be
back in eight weeks to buy the full-size chicken feeders and
waterers your backyard chickens actually need, since your
chickens now empty that little chick water fount in under two
minutes, if they can drink from it at all. All that equipment you
bought is now useless to you, and I hope they didn’t already
get rid of the little thermometer. When you’re looking for top-shelf commercial equipment, look for names like Kuhl, Brower, and Big Dutchman.

Adapting Full-Size Equipment for Chicks

If you’re brooding birds in a small box, the upright
chicken feeders and waterers do make your life easier. But
when you’re brooding on the barn floor, your birds can use
adult equipment just as easily as chick specific equipment,
with some adaptations. Full-size feeders are just as effective
at delivering feed to chicks as they are for mature birds, but
chicks are vertically challenged, so be sure to place full-size
feeders at ground level and ramp up your bedding to meet
the lip of the feeder. If you’re still using water founts; stop! I
highly recommend building nipple drinkers (it’s cheap, easy,
safer, and far healthier). If you’re stuck with a water fount
for now, filling the trough with marbles will stop chicks from
drowning. The quail bases for those small quart water founts
are great for preventing chicks from drowning, but marbles
in the trough can work just as well.

Speaking of troughs, those old-school metal or plastic
trough feeders with the flip top are another one of those
things you think you need, but all they do is serve dirty feed
to your backyard chickens. Today’s tube and trough gravity
feeders are far superior to the old style chick trough design.

Commercial vs. Retail

Today’s retail-grade plastic chicken feeders and waterers
be serviceable, as long as they are not abused. You will
notice that the plastic is thin and it won’t like the sun all that
much, but the price is likely right and they’re readily available.
Big name brands in the retail world are Miller Manufacturing
(AKA: Little Giant) and Harris Farms. When deciding what to
feed chickens with, some people may figure these will suffice,
but there are better quality feeders available.

Commercial feeders are built to withstand the abuse you
can expect to see on a working farm, which can be rough
sometimes. Good commercial plastic feeders feature thick,
well-designed plastic parts as well as metal reinforcements
when needed. Unlike many inexpensive retail feeders, mod-
ern commercial feeders usually include spill shields or grates
(either as a separate part or integrated into the pan), which
helps to stop your birds from pulling feed out of the feeder
without eating it. Especially if your feeders are not set at the
correct height, or you have different height birds in your flock,
a spill shield or grate will help keep the feed in the pan and
off the floor of your coop where it will go to waste. When
looking for top-shelf commercial equipment, look for names
like Kuhl, Brower, and Big Dutchman.

Specialty Feeders for Backyard Chickens

My favorite feeder by far is my Kuhl 250 lb. range feeder
because it has made feeding my backyard chickens so much
easier. Range feeders are built to live outdoors and come
in many sizes, rated by the pounds of feed it can hold. If I
wanted to fill my feeder, I could put five 50lb bags of feed in
the hopper, but I don’t usually need that much. Since it sits
outside, it does have special design features, such as a rain
fly that keeps the feed dry and clean for my birds. This feeder
sits outside of my coop, which helps keep raccoons and other
predators out of my barn. The local wildlife prefers to gorge
themselves at the buffet of layer feed I have in my range feeder
rather than work at breaking into my coop, which means my
chickens are less of a target than when I used to feed inside
my coop. I have some seriously fat raccoons and opossums
during these days, but now I also have chickens that are more likely
to die of old age than being taken by a predator.

Home Brew Equipment

For those of us who are handy, there are so many ideas
and how-to’s out there on the internet that I couldn’t possibly
cover them all here. One word of caution, or perhaps one
major design consideration you should take into account is;
how are you going to clean this thing? Designs that don’t dis-
assemble for cleaning, or include porous materials like wood,
are a real challenge to clean properly. Plan on using plastics,
PVC tubes, stainless steel, or at least well painted or sealed
wood to deny bacteria or other disease-causing organisms a
place to hide and thrive.

I’m quite partial to my commercial equipment for chicken
feeders and waterers, which might make me look snobbish,
but I’ve thrown so much broken equipment away over the
years, I’ve come to appreciate the quality they offer.
Knowing what to feed baby chicks is a critical first step to giving them a fighting chance. Precocial as they may be, chicks are still vulnerable to their environment, which is why we as good stewards must give them the tools to survive and thrive. Those tools, besides a well-managed brooder setup, is a rock solid nutrition plan.
Starting Supplements
Most hatcheries offer initial chick boosters, such as “Quick Chick” and “Grow-Gel” to compensate for shipping stress. If you’re concerned about how to care for baby chicks, then feel free to add these pick-me-ups to your nutrition plan, especially if you’ve ordered a small batch of chicks. I’ve tried these supplements before and although they certainly don’t hurt, I personally haven’t seen any hard evidence of their necessity or effectiveness. Don’t consider them mandatory, especially if you’re receiving full boxes of 100 chicks or more. Shipping full boxes of chicks greatly reduces shipping stress, which is better than trying to compensate for undue stress with supplements.

What to Feed Baby Chicks
Feeds come in different rations (a ration is industry speak for recipe or formulation) for different birds. The most common feeds available to retail consumers are Chick Starter Feed, Grower Feed, Layer, Fat and Finish, Breeder and Game Bird Feed (for game birds like pheasant and quail). Some feed mills combine names like “Start and Grow” or “Game and Show,” which may be confusing to you. When in doubt, look up that specific feed brand’s recommendations for what to feed chicks on their website. “Chick Starter Feed” or “Start and Grow” is what you should feed baby chicks. These rations will advertise between 18 percent to 22 percent crude protein content on the tag. Anything lower or significantly higher in protein content is inappropriate for use as a chick starter feed.

How Long to Feed Starter Feed
How long to feed starter feed largely depends on the specific ration you’ve chosen. Some feed brands have yet to combine their first two stages of feed rations, so their feeding recommendations may include a classic chick starter feed ration for the first eight weeks of age, then require you to move on to a dedicated grower ration and feed that until 20 weeks of age. Many feed companies offer a ration that combines these two feeds such as the “Start and Grow” feed ration I mentioned previously. Most companies who offer these combination rations suggest feeding them from day one to 20 weeks of age.

Mash Feeds
Almost all feeds are offered in a variety of consistencies. The usual available consistencies are mash, crumble, and pellet, which refers to the size of an individual piece of feed. Consistencies have more to do with the age of your bird and reducing feed waste than anything else. Mash feeds are a consistency similar to sand, which is what you should feed baby chicks because they can’t eat big pieces of feed yet. Crumbles are a midpoint between mash and pellet meant for growing juvenile birds, and pellet is the best consistency to feed adult birds.

Healthy chicks grow exponentially, so when I brood a group of standard-size chicks, I fill my feeders with a crumble, then top the trays off with a mash. By about four days old, standard-size chicks have grown large enough to eat the smaller crumbles they find, and they will dig around the big chunks they can’t eat yet. Before you know it, they will be dining on crumble exclusively.

Chick Grit
Part of what to feed baby chicks to make them thrive is grit. Chickens don’t have teeth, but they still have to masticate what they eat so they can properly digest it. In lieu of teeth, chickens have an organ at the end of the esophagus called the gizzard. The gizzard is effectively a big pouch of muscle with a thick and resilient lining. This muscular pouch contracts and squeezes the feed your bird ingested, but as resilient as the liner is, it’s not hard like teeth. Chickens throughout their life eat little bits of hard objects, usually little stones, and those stones live in the gizzard to serve as “teeth” to grind feed in the gizzard. Eventually, those bits of stone wear down and pass along the digestive tract, until they are once again reunited with the ground from whence they came.

Commercially available chicken grit is usually ground granite, sold in small quantities that come in different sizes. Buy a size specific to feeding day-old chicks, since a larger grit will be too big for them to use. Don’t buy too much grit, since all you need to do is sprinkle a little over top their feed once in a while. If you don’t supply your chicks with grit, it’s not the end of the world. Chicks will find little bits of hard substance in their bedding and in their feed, but it’s easier for them if you provide some grit.

Medicated Chick Feed
Medicated chick feed exists for one reason and one reason only; to confuse you. Alright, that’s not true, but for many beginning backyard flock owners, it sure seems to be one of the many unexpected things you find along the way. Medicated chick feed (or medicated chick starter) is a solution to a long-standing chick-rearing problem known as Coccidiosis.
What is Coccidiosis?

The disease known as Coccidiosis is not a virus or a bacteria, but instead an infestation of coccidia. Coccidia are protozoan parasites, which is a fancy way of saying it’s a microscopic critter. These microscopic critters are very common in the world of poultry, and the lion’s share of backyard chickens have experienced a run-in with one of the many varieties of coccidia. Under healthy circumstances, a chicken will ingest an oocyst (coccidia egg), the oocyst will “sporulate” (hatch) and the protozoan parasite will invade a cell in the wall of the intestine. In that cell, this little critter will produce more oocysts, which will cause the cell to burst and the new oocysts are carried out with the feces. One coccidia parasite can destroy over a thousand cells in a host bird, but chickens will build an immunity when faced with a low-level infection.

Chickens with low-level infections will not show any signs of illness, however, when you have a group of birds living in the same pen, one infected bird can cause a chain reaction and the whole coop can become a coccidia factory. When a chicken ingests too many oocysts, its gut gets overrun and too many cells become damaged for them to absorb food. Because of all the broken cells in the gut, chickens also start bleeding inside, which comes out looking like bloody diarrhea. Not only will birds be losing blood, but a secondary infection will occur, which leads to septicemia (infection of the bloodstream) and then death. All this can happen quickly and without warning, and before you know it you’ll have sick chicks everywhere.

Medicated Chick Feed

Baby chicks are born with underdeveloped immune systems and immunity to coccidia is not passed down through the egg. Fragile chicks are a prime target for coccidia, and that’s why medicated chick feed is so important to us. No, the medication in question is not an antibiotic, instead, it’s a product that serves as a coccidiostat or retarding agent that slows down the reproduction of coccidia. Amprolium is the most common brand name of coccidiostat sold in medicated chick feed, but whatever brand it is, it’s still a coccidiostat. Thankfully the FDA was wise enough to exclude Amprolium and its cousins from its Veterinary Feed Directive (VFD) order, which is why we can still buy medicated chick feed here in the United States. Additionally, Amprolium also falls under the “Small Animal Exemption Scheme” (SAES) in the United Kingdom, so expect to see it readily available wherever you are.

Chick starter feed that has been dosed with a coccidiostat will say “Medicated” somewhere on the label or packaging. Amprolium is the most common, but remember it’s not the only coccidiostat available on the market.

Medicated chick feed is an all-or-nothing sort of thing; either you use it or you don’t. If you intend to use it, start from day one and keep feeding it per the feed mill’s feeding directions (usually found on the feed bag’s tag or their website). Be careful that you don’t accidentally buy a non-medicated bag of feed, otherwise, you just sabotaged yourself and left your birds unprotected. Switching back to a medicated feed after an accidental feeding of non-medicated feed is effectively throwing money out the window and is ill advised. Chicks should be fed a medicated feed continuously with no interruptions for best results, and be sure to follow the feed mill’s advice on how long it should be fed.

Organic Alternative

An organic alternative to Amprolium-treated feed would be the widely used apple cider vinegar trick. Organic certification groups suggest that their growers use apple cider vinegar in the water of chicks when brooding to control coccidia populations within the gut. The theory is that the vinegar acidifies the digestive tract, making it difficult for coccidia to thrive. This method has not been officially studied, but it is widely used. In my travels, I like to ask the opinion of people who know far more about chickens than me, and the unilateral response I’ve received when asking about this method is “Can’t hurt, might help.” That’s coming from poultry scientists and poultry veterinarians alike. The theory appears sound and it’s widely accepted, but no official study has been done to prove or disprove the practice.

Immunizing Chicks

If you’re a progressive type, then you likely bought birds that were immunized for Marek’s disease, but did you know there’s a relatively new inoculation available called Coccivac? Coccivac is an optional inoculation that hatcheries can perform, which is effectively a spray of solution on the backs of day-old chicks that is full of compromised (weak) coccidia oocysts. These compromised coccidia are ingested by the chicks as they preen, which then go about the business of infecting the bird. The trick here is that these coccidia are weak compared to wild strains, and give your chicks the opportunity to build resistance before they can do any harm. If you did receive coccivac-treated chicks, do not use medicated chick starter or apple cider vinegar. Using either of these methods will wipe out the “good” coccidia and put your chicks in harm’s way.

What Chicken Grower Feed is Right For You?

Chicken grower feed and adult feed rations are a critical part of raising healthy, productive chickens. Once your chicks pass 20 weeks of age, they’re really not chicks anymore and shouldn’t be fed as if they still were. Juvenile birds require a different feed ration to perform, grow, and live well. That feed ration is a chicken grower feed and which one you use will largely depend on what kind of birds you’re growing, and for what purpose.

Layer Breeds

For layer or dual-purpose birds, like the Leghorn or Rock, you need to feed them a poultry feed formulation for layers to get the best results. Starter, grower or combo rations will be way too high in protein for your layer-type birds.
Medicated chick feed is an all-or-nothing sort of thing; either you use it or you don’t. If you intend to use it, start from day one and keep feeding it per the feed mill’s feeding directions.

Medicated chick feed is an all-or-nothing sort of thing; either you use it or you don’t. If you intend to use it, start from day one and keep feeding it per the feed mill’s feeding directions.

Medicated chick feed is an all-or-nothing sort of thing; either you use it or you don’t. If you intend to use it, start from day one and keep feeding it per the feed mill’s feeding directions.

and will not have the calcium levels to support strong shells. For these birds, which constitute the vast majority of backyard birds, a standard chicken layer feed with an advertised crude protein level between 15 percent and 17 percent is ideal. At this point, maintaining the same brand and feed ration is critical to keeping your birds in lay. Any sudden change to a different brand of feed may bring your layers to a screeching halt in production. Additionally, if you feed a ration that is “too hot,” or higher than 18 percent crude protein, you will see abnormal behavior in your birds. A feed that is too high in protein can cause birds to become agitated, self-mutilate by pulling feathers, and all sorts of odd behavior.

Fancy Bantams

If you’ve gone the miniature chicken route with fancy bantam breeds, then you should consider your options. Back when I started with show chickens, most feed companies offered a breeder formula meant for show birds. That’s becoming harder to find these days because most feed companies have combined their game bird and show bird formulas since they were closely related anyway. These feeds range between 15 percent and 22 percent crude protein typically, and you should research what feed ration is recommended by your chosen feed company. Don’t rely on the store associates recommendations; follow the feed mill’s advice since they know the product far better than any store clerk.

Chicken Grower Feed

If you’re growing birds for meat, you have options. Many feed companies offer different stages such as chicken starter feed, chicken grower feed and possibly a “fat and finish.” I’ve used fat and finish rations with my turkeys and my broilers and have found it to be largely undesirable. These fat and finish rations were prevalent in the days of castrating (castrating roosters, typically of a “dual-purpose” breed), but today’s modern meat breeds don’t require such a ration. If you do use a fat and finish ration with your modern meat birds, expect to be disappointed with all the wasted fat on the inside of the body cavity.

One exception may be the newer “slow grow” meat birds like Red Rang-
Chicken grower feed and adult feed rations are a critical part of raising healthy, productive chickens. Once your chicks pass 20 weeks of age, they’re really not chicks anymore and shouldn’t be fed as if they still were.

Production is the first to go, causing the reproductive tract to shrink to save internal space. Hens that are being overfed will stop laying to make room for more important functions.

Fat may weigh less than muscle, but added fat does weigh down chickens. This means more effort is required to mobilize themselves, which causes the heart and lungs to work harder. This added effort can become taxing.

Chicken lungs are a rigid structure, unlike the elastic balloon-like lungs of mammals. Still, chickens need to move air through their lungs to absorb oxygen into the bloodstream, and they use air sacs to do so. Air sacs are thin, fragile structures that occupy the free space within the body cavity. Chickens use them much like a bellows for a fire, by compressing them with their breastbone. As fat intrudes into the body cavity, space and capacity are lost, and your overfed hens will have a harder time breathing.

Very much like humans, a chicken’s heart has a hard time coping with all this added stress. The job of moving blood through the body becomes more and more of a chore, and much like how your biceps grow in response to heavy use, your chicken’s heart muscle grows. Unlike your biceps, the heart of a chicken will grow and expand, until it can’t close its valves anymore. When that happens, blood stops moving and you now have a dead chicken.

Scratch Grains

Classic scratch feed (not to be confused with a balanced ration) is the chicken’s equivalent of a candy bar. Scratch feed, or scratch grain, is a treat and you must feed it sparingly if at all. Scratch feed has been around since before balanced feed rations existed. Nutritionists have since learned that scratch feed is terrible for birds, but tradition has kept it alive and selling. If you don’t already feed this stuff, then don’t. If you do feed scratch, then feed it sparingly. A 25-pound bag should last 10 hens a year or more in my opinion.

Corn is also not a healthy thing to feed too much of. I don’t have a need for it and haven’t fed it to my birds for years, but cracked corn makes a good distraction, gives birds an extra calorie boost for a cold night, and it works well as bribery. The commercial feed you purchase at the store is already predominantly corn or soy based, so they really don’t need more of it. If you opt to feed some anyway, then use cracked corn since chickens have a hard time crushing whole kernel corn in their gizzard.

The long list of what chickens can eat includes many things, including chicken! As far as feeding chickens scraps go, feel free to feed them meats, cheese, vegetables, fruits, bread, French fries, boiled eggs, and most anything else in small quantities. What not to feed chickens; onions, chocolate, coffee beans, avocados, and raw or dried beans. These things can cause health problems in chickens.

How Much is Too Much?

With the exception of modern meat-type birds, you shouldn’t be worried about how much to feed chickens, but you should instead be more concerned about what chickens can eat all the time. Ideally, for top performance, chickens should be fed a balanced ration (such as a layer, grower or starter feed) as “free choice” (always available, all the time). That balanced ration is everything they need, but if you desire to give them treats or use them as a replacement for your garbage disposal, don’t let the treats or scraps constitute more than 10 percent of their daily diet. Even at 10 percent, you are running the risk of loading them up with too much fat and not enough of the good stuff they need to live a happy, healthy, long-lived life.
No one loves chickens like we do.

Show your birds how much you care with NatureWise® Feather Fixer® Poultry Feed. It was the first product out there to help chickens get back to looking and feeling their best during molt, by supporting feather growth.

MORE INFO AT NUTRENAWORLD.COM/FEATHERFIXER.
When thinking about basic chicken coop design, you need to consider six main things. Whether you plan to construct a high-end, designer chicken coop or something basic, you’ll need to keep your birds safe from predators. You must give them enough room inside the coop. You’ll need to provide a place for the hens to lay their eggs and for all the birds to roost at night. The chickens must be protected from cool winds and precipitation, but you also need to allow for ventilation in the coop. Finally, you have to be able to keep it all clean. Let’s look at each of these pieces of basic chicken coop design a little more closely.
PROTECTION FROM PREDATORS

Just about every predator out there likes to eat chickens: coyotes, fox, raccoons, opossums, hawks, and more. One of your biggest and most important tasks as a chicken keeper will be to keep your birds safe from predators. Before you even get birds, consider the predators that live in your area. Keep that in mind as you put together your chicken coop design.

The materials for constructing your coop should be sturdy. If you are purchasing a pre-made coop, inspect all the parts and don’t buy anything that’s flimsy. Instead of chicken wire, use hardware cloth for your runs and window openings. Hardware cloth is stronger than chicken wire and when held in place with heavy-duty wire staples provides good resistance to the most determined creatures. Every opening should be covered, even small spots up by the ceiling; any opening is a possible entrance for a predator.

Additionally, you can run hardware cloth around the perimeter to prevent digging. Personally, we ran it almost two feet around the whole perimeter to make a skirt. To do this, cut a piece of hardware cloth the length of the side of the coop and about three feet wide. Using a 2 x 4, bend it into an “L” with a short side (less than a foot) and a long side (less than two feet). Staple the shorter side to the bottom of the coop and the long side lay on the ground. We lined ours with landscape cloth to prevent weeds then used timbers to create a rock bed around the edge of the coop. Any digging predator would have to dig more than two feet to get into our coop.

When picking a lock for your door, get one that even a raccoon can’t open. We’ve had good luck with gate latches. My husband rigged ours so we can open them from the inside with a wire in case the door swings shut while we’re inside.

Part of predator-proofing your coop is making sure you lock the door too! A great lock will do you no good if you don’t shut the doors. Think about how you will keep a regular schedule to get your girls locked up and who will do it for you when you’re not home. You may consider an automatic chicken coop door, which can be built at home or purchased pre-constructed.

If your birds are going to free-range, predator protection goes to a new level. For this, it’s good to always be thinking, “What may try to get my birds in this situation and how can I prevent it?” Don’t assume that predators only lurk at night; we have seen firsthand that especially brazen coyotes have come into our yard during the day.
2 SQUARE FOOTAGE
You may be wondering: How much room do chickens need? The answer to that question depends on how much time your birds will be inside. If they will graze outside, they’ll require less room in the coop (two to three square feet per bird) but if they’ll be cooped up all the time, you need to provide a lot more room per bird (three to four times the room). Overcrowding can lead to negative behavior and health problems so make sure you have the square footage to support the number of birds you intend to get.

We generally aim for about five birds per nesting box in our coop. It is funny though; they will have their favorites.

3 NESTING BOXES
Your hens will need a comfortable spot to lay their eggs in the coop. This can be as basic as a bucket filled with straw. Our neighbors’ 10 chickens all share one five-gallon bucket filled with straw. Sometimes two chickens stuff themselves in it at the same time! We generally aim for about five birds per nesting box in our coop. It is funny though; they will have their favorites. When we collect eggs, some nests will have 10 eggs in them and some will have two. The nesting box should be about a foot square and have plenty of soft bedding in the bottom to protect the eggs from getting crushed, especially if you have multiple birds using the same nest. For ease of collection, it is tremendously helpful for your nesting boxes to be accessible from the outside of the coop. My husband built ours in a fairly traditional design with a heavy hinged door on top. We used to have a coop where you had to hold the nesting box lid open while you collected the eggs, which was surprisingly difficult if you were also holding a heavy basket of eggs. Consider the angle of your door so that it can rest in an open state, leaning against the coop, instead of being held open by you. You’ll appreciate this small detail every time you collect eggs.

The nesting boxes are hinged at just the right angle so that they can rest on the building to make collecting eggs easier.
**ROOSTS**

When you are thinking about what does a chicken coop need, roosts are certainly one of the essentials. Chickens have an instinct to perch up high at night. Before they were domesticated, they perched high up in trees at night. One of my neighbors tells a story about how his birds long ago got locked out of the coop for some reason one evening and, desperate to get up high, they perched in the trees nearby. From that night on, they always went up into the trees at night. Though this is a fun story, it is certainly safer for your chickens to be inside a locked coop (raccoons can climb those trees, too).

Inside your coop, you’ll need to provide at least one square foot of perch for each chicken. In cool climates and winter, they’ll use less because they all scoot together for warmth but in summer they’ll need the space to stay cool. We have tried round roosting bars (think reclaimed tree limbs) and 2 x 4’s on their narrow sides and other scrap wood about that size. Whatever you use, make sure it is sturdy enough to support the weight of all the birds that will sit on it at once. Secure it so it won’t spin when weight is applied because chickens move a fair amount and will knock each other off if the roosts are moving around a lot. Each roost should be just wide enough for them to wrap their feet around it. We’ve tried two styles: “stadium seating” and straight across. The girls seem to prefer stadium seating; we assume this is because it allows for the hierarchy that is so important in a flock.

---

**ENDLESS POSSIBILITIES**

Whatever the chicken coop design you have dreamed, make sure to consider these six elements and your chickens will have a safe and healthy home. The details from here are what will make your coop fun and personal. Will you add nesting box curtains? A chicken swing could be fun! You could choose a theme … the possibilities are endless.

---

**WIND PROTECTION**

Your coop will need to keep your birds protected from precipitation, and more importantly during the winter, from the wind. Interestingly, though, it must also provide adequate ventilation to prevent moisture buildup that can lead to disease. Birds produce a lot of humidity and moisture with their body heat and their waste. We left the top few feet of our henhouse open, covering it with hardware cloth. This allows for a lot of airflow but it is mostly above the chickens so they aren’t getting directly hit with big gusts of wind. When it gets very cold (-15°F or lower), we staple heavy plastic up over most of this to provide further protection, but otherwise, it remains open all year round. Another option might be to reuse some old windows, which could be easily opened or closed. If you do this, make sure to line the inside with hardware cloth so even when the window is “open” it is still predator-proof.

---

**HOW YOU WILL CLEAN IT**

Finally, all chicken coops require regular cleaning. Learning how to clean a chicken coop is part of every chicken keeper’s initiation into raising birds. When thinking up your chicken coop design, consider how you will get inside to clean. Do you want it to be tall enough for you to walk inside? If it’s small, will the roof come off to let you scoop out the dirty bedding? Make cleaning a part of your design and you’ll be thankful as long as you keep chickens!
A Guide to Sick Chicken Symptoms

Know Chicken Disease Symptoms and Treatments

By Janet Garman

It’s good to know what a sick chicken looks like, so we can try to help our feathered pets feel better quickly. We are all uncertain at times, but there are certain criteria you can use to assess if your bird has sick chicken symptoms. First, let’s explore what a healthy chicken looks and acts like.

How Does the Chicken Look and Act?

A healthy chicken is a busy chicken. It is aware of what the other chickens are doing. The healthy chicken is pecking the ground, scratching the dirt, and chasing others away from a tasty morsel. When you first open the coop in the morning, the chickens should eagerly exit the building, raring to start a new day. They should be happy to see food added to the bowls or feeders and start eating. Any chickens who stay on the roost, or worse, are hiding in a dark corner should be immediately and gently checked over.

When you look at a healthy chicken it looks — healthy! Feathers are glossy and in place, the comb and wattles are waxy looking and full of color, and the eyes are bright and clear.

Healthy Chickens are Communicating

Chickens talk to each other during the day and some chickens talk a lot! When you spend time with your chickens you will start to recognize certain sounds that are made repeatedly. While my chickens are free ranging, I am often doing cleaning chores around the barnyard. But, sometimes I hear a certain sound coming from my chickens and I just know it is an alarm of some sort. Whether they saw a predator, noticed a hawk in the sky, or were injured by another flock member, the sound is unmistakably alarming. It differs greatly from the regular clucking and squawking that they make. Another alarming sound is any respiratory sound. Coughing, heavy breathing sounds, and raspy sounds are signs of serious illness and should be
evaluated quickly. With the current wave of avian influenza sweeping the country, it would be good to familiarize yourself with avian influenza symptoms. Always isolate the bird with sick chicken symptoms and reduce the chances of any contagious disease spreading through the flock.

**Healthy Chickens Have Healthy Droppings**

Some may feel this goes a bit too far but notice the chicken’s droppings. There are two basic types of droppings that are excreted daily. One type is often seen first thing in the morning. It is firmer and capped with white urine salts. Less frequently, the chicken will expel a runnier brown or green, fecal dropping. While both of these droppings will have a slight odor, you should note if the odor is extremely bad or if the appearance is really out of the normal range for your flock. Keep in mind that certain vegetables, such as beet greens may turn the droppings a different color temporarily, without the chicken appearing ill.

**Healthy Chickens Have Healthy Appetites**

Chickens who are unwell do not eat much. Sometimes they stop eating completely. This is another reason it is good to observe your flock when you are feeding. If a chicken does not come for food, stays off to itself, and is not pecking at the ground for insects or morsels, something could definitely be wrong. What follows next is weight loss, another sign of illness.

Young chickens are continually growing and maturing. A young chicken who does not eat enough will not gain weight like the others in the flock. The young birds continue to fill out in size for the first six months. Even after egg laying begins, some growth and weight gain can still be occurring. Older hens and roosters should be able to maintain their weight. The older hen that begins to look scrawny and small, may be suffering from an undetected illness. Some of my chickens prefer to eat from the feeder and some prefer to free range while I am supervising. Knowing what is normal for them is also a good indication of how they are doing health wise.

**Healthy Young Hens are Laying Eggs**

Many factors can influence egg laying, including age, molt, weather, stressful environment, and placement of nesting boxes. If you reliably get an egg a day from a good laying hen, and then she stops laying, you may wonder why my chickens stopped laying? The quality of the eggshell can also be a sign of problems. Thin, weak shells can be caused by inadequate nutrition or inadequate mineral absorption. Knowing what to feed chickens will help you avoid any illnesses due to inadequate nutrition.

Chicken diseases and illness can be caused by a number of things. Viruses, bacteria, molds, fungus, and parasites are the infectious type of illness. Often, if one of these occur, more than one bird will be affected. Some sick chicken symptoms are mild, leading to a day or two of not feeling up to par and exhibiting a low appetite. Other diseases, such as Avian Influenza can and will wipe out the flock in a matter of days. My recommendation is to not panic when sick chicken symptoms are observed. Assess the bird’s overall health, using the sick chicken symptoms listed here. First, isolate the sick chicken, to help prevent the spread of any possible contagious illness.

**Preventing Illness**

As is the case with all types of animals, prevention and a healthy life will go a long way to preventing serious illness. Feeding an appropriate healthy diet, supplementing with herbs, and treating the chickens with probiotic-rich foods will help them ward off many minor illnesses. Clean and sanitary conditions are also important. Removing droppings that attract flies, keeping the coop dry and well ventilated, and replacing soiled wet bedding immediately will all help the birds stay healthy.

---

### Sick Chicken Symptoms

- Is the bird active or listless?
- Is the bird grooming or is it unkempt with ruffled feathers?
- Is the bird interested in eating or not?
- Is the bird coughing or expelling fluid?
- Is the bird able to stand on its own?
- Is the hen still laying eggs or not?
- Is the bird excreting normal or abnormal droppings?
FEED IT FORWARD

It’s our giving program designed to help organizations who share our belief that the bond between animals and people changes lives.

Through Feed It Forward™, we’re offering grants to qualifying organizations, we’re raising public awareness for those organizations and the amazing work they’re doing, and we’re continuing efforts to help animals in immediate need in disaster-struck areas.

Because we believe that animals change lives. And we want to help.

To apply or to learn more about organizations we’ve already helped visit FeedItForward.org.