

Eggcited for Chickens!

by Hafsa Saleem

Your First Year Guide to Raising Backyard Chickens



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Homestead Hafsa LLC
www.homesteadhafsa.com
support@homesteadhafsa.com

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Acknowledgements

~ To my incredible mother, Ayesha ~

Thank you for teaching me to be bold and be strong.
You always allowed me to do whatever makes
me happy and brings me the most joy.
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~ To my loving husband, Bilal ~

Thank you for always supporting me in all of
my endeavors, I appreciate you. I am
deeply grateful to have you as my life partner,
business partner and best friend.

**~ To my homestead friends on Instagram
& my social media audience ~**

I'm glad we connected! I truly appreciate
the overwhelming amount of love and
support from all of you.
Thank you!

Congratulations on getting this ebook from the Off-Grid Homestead Bundle!

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- \$100 Amazon or TSC gift card
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So we're not strangers...

In my early years, experience in gardening while helping my grandmother and later working with a nature conservation group in high school planted the seeds for an interest in homesteading. During college I worked on a large-scale farm with over 1,000 animals including chickens, pigs, goats, cows and horses. This was a fantastic learning experience! Every day I was up early before sunrise to let the animals out, bring them fresh feed, water and hay. I also cleaned out stalls and groomed the cows and horses. This was a contrast to growing up in a suburb a few minutes outside of New York City.

From the early days of college up to now, I have been a business owner with multiple businesses. I've run a landscaping company, an executive recruiting company and an online sales business. Since graduating and getting married, I've worked with my husband in a marketing business related to sales training and public speaking. For almost a decade we were traveling extensively all over the US. In 2018 when my mother passed away from stage 4 cancer, I made a renewed commitment to a healthier lifestyle through homesteading full-time.



When the pandemic started in 2020 and we stopped traveling, I immersed myself in homesteading. I never expected that spending time around these wonderful birds would bring me so much contentment! It helped me to disconnect from the chaos in the world and allowed me to find my daily peace. Raising chickens simply for farm fresh eggs turned into something fun and highly rewarding because they are a joy to have!

Let's get started!

Introduction

“We’re getting chickens!” It was a beautiful summer day, my husband and I were standing in front of over a hundred Rhode Island Red hens ready to select five of them to take home. I had inquired online on a Craigslist ad for “chickens available” because we had decided to get chickens for farm fresh eggs. If you knew us as our friends did, you would have been very surprised that we were starting this journey. “Chickens? How do you know anything about chickens?” our friends asked, after seeing pictures we shared. They didn’t know that as a young adult I had worked on a large animal farm and loved caring for animals.

We selected five and brought them to their new home. Patricia, Phoebe, Princess, Lily and Sophia! When I first started looking online for details on raising backyard chickens, I found myself piecing together information from many sources and felt a bit scattered. I also felt that I couldn’t relate to people teaching this information because they had been in farming most of their life, I had only worked on a farm for a short period and that was a decade ago.

The idea of “Homestead Hafsa” on YouTube and Instagram came to me from a desire to share my passion for chicken keeping and healthy living, and do it in a very simple, upbeat and fun way. “Eggcited for Chickens” was born from the many questions that I receive from my audience. I decided to compile my knowledge in an easy to follow and practical guide for others.

Have you ever wondered if you could homestead with backyard chickens? Are you curious as to how much time and effort it will take? Do you have questions related to expenses and space requirements?

In this book you will learn:

- How to raise backyard chickens for eggs
- What breeds to start with and how many
- How to set up a space for them and protect them
- How to care for them as they grow and start laying eggs
- How to hatch chicks naturally
- How to handle chicken illnesses and injuries

Congratulations on starting your homesteading journey!

Yours truly,

Hafsa



Getting Started

Chapter

- 01 Chicken Terminology
- 02 Chicken Anatomy
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Chicken Terminology

Chicken: To be specific, refers to *both* male and female.

Chick: Baby chicken, refers to both male and female.

Autosexing: Select breeds where chick gender is identifiable by feather colors.

Straight run: A group of newly hatched chicks, mix of male and female, that have not had their gender identified.

Pullet: Female chicken, less than one year old.

Cockerel: Male chicken, less than one year old.

Hen: Female chicken, more than one year old.

Rooster: Male chicken, more than one year old.

Wattles: The two reddish flaps of flesh under a chicken's beak.

Comb: The fleshy, usually red crown on top of a chicken's head.

Crop: Part of the chicken's digestive system that stores food before it moves to their stomach. It's a visible protrusion on their chest when full.

Fluffy butt: A term that chicken owners use to describe a chicken's soft feathered bottom backside.

Vent: The opening from where a chicken expels waste, also from where hens release their eggs.

Cloaca: The anatomical term for the vent. The cloaca is also used for mating.

Pasty butt: When droppings stick to a chick or chicken's vent area, causing a partial or full blockage.

Spurs: The sharp, pointy, claw-like growths on the back of a rooster's legs. They use spurs to defend their flock and to defend themselves.

Forage: To search for food; when chickens scratch and peck at the ground to look for edible things.

Brooder: An enclosure for chicks, usually indoors and temperature controlled.

Coop: A safe enclosure for chickens to sleep in at night.

Chicken run: A fenced enclosure around the coop or attached to the coop, where chickens have space to walk. The run may or may not be covered.

Chicken tractor: A floorless enclosure that serves as a movable run and allows chickens to forage on different sections of grass.

Feeders & Waterers: Special containers used for chicken feed and water.

Free range / Free ranging: When chickens are allowed to roam freely and forage outside of their chicken run.

Roost: A wooden beam or branch that chickens relax and sleep on. This term is also used to describe the action of chickens sleeping.

Bedding: The material used to cover the floor of the coop and sometimes used in the chicken run. Examples are pine shavings, hemp, straw and paper shreds.

Nesting box: The compartment where hens lay their eggs, it may or may not be attached to the coop.

Egg song: A term that chicken owners use to describe the loud squawking and clucking sounds a hen makes after laying an egg. It seems they announce and celebrate their egg laying achievement!

Clutch: A group of eggs gathered by a hen for hatching.

Broody: When a hen decides to incubate a clutch of eggs by sitting on them all day and night. Her maternal instinct has activated a desire to stop laying eggs and hatch chicks.

Candling: A method used to check for the outline on a developing chick embryo. This is done by holding a bright light against the egg.

Incubator: A device used to hatch eggs without a hen. It simulates avian incubation temperature.

Bloom: The outermost covering on an egg. It is the last part of the shell put on as the hen lays an egg. It's also referred to as the cuticle.

Fairy egg: A very tiny egg with no yolk, also referred to as a “fart egg.”

Double yolk / Double yolker: A big egg with two yolks.

Molt / molting: When chickens annually shed their feathers for a period of a few weeks or up to a few months and grow new feathers.

Dust bath: When chickens roll around in dirt to keep clean. This helps keep parasites off them.

Panting: When chickens breath heavily with their mouth open, from stress or very hot weather.

Preening: When chickens groom themselves with their beaks and preen gland.

Preen gland: It is located at the base of a chicken's tail on their lower back. It secrets a thick, transparent oil that chickens spreads over their feathers.

Pecking order: The social rank of chickens, established by an “alpha” personality. This is displayed by pecking each other.

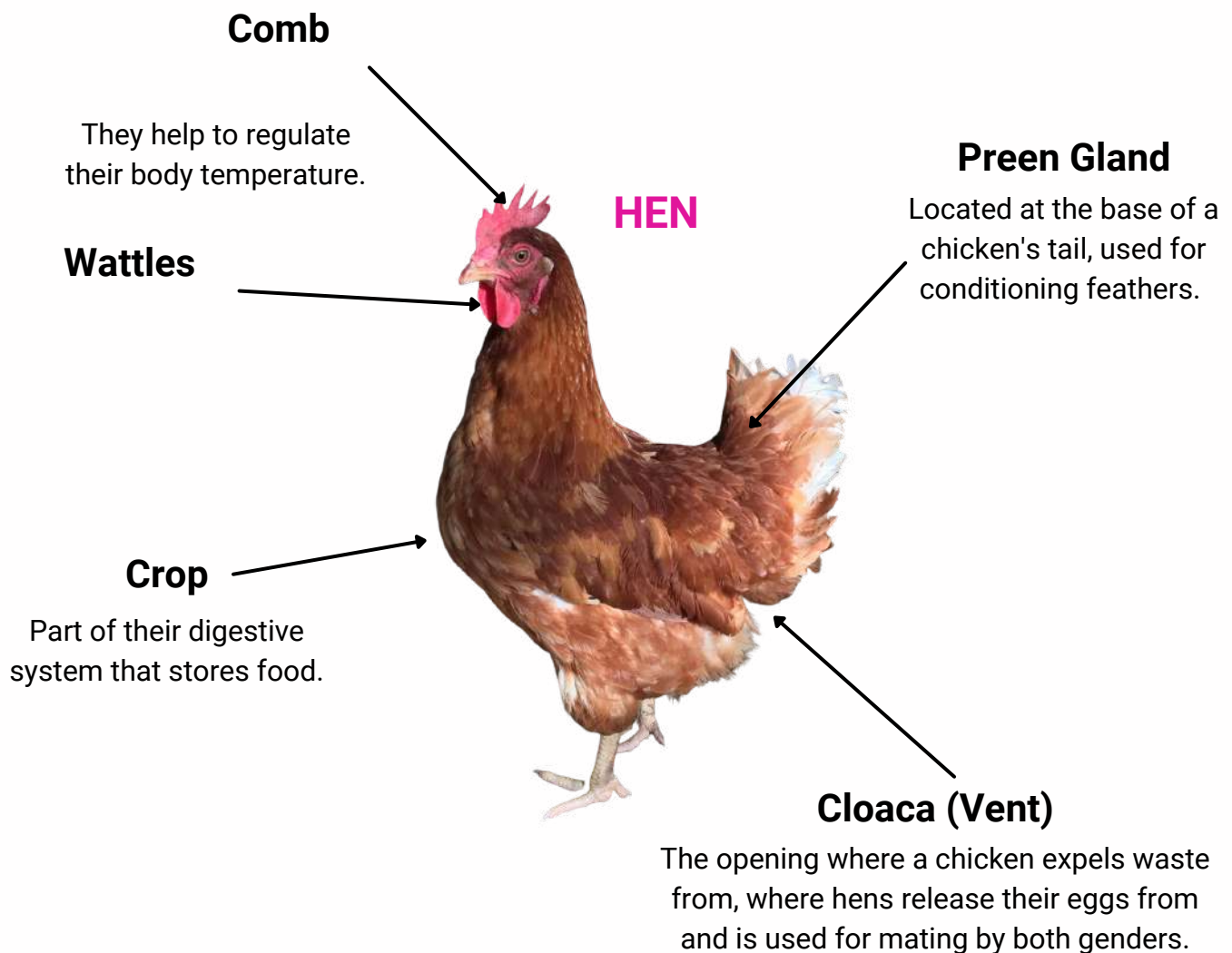
Flock: A group of birds that are kept together.

Necropsy: A lab procedure to determine the cause of death in an animal.

Homestead: A house, farmhouse and surrounding land used for farming, or a farm-like environment. Modern day “Homesteading” has a broad definition, it refers to a lifestyle of self-sufficiency – a practice of living in a more natural way. Homesteading is often used in reference to activities including composting, gardening, chicken and animal keeping and much more.

Chicken Anatomy

Both male and female chickens have a comb, wattles, crop, preen gland and cloaca or vent.



One of our Rhode Island Red hens

ROOSTER

Comb

Usually larger and more pronounced on roosters than on hens.

Saddle Feathers

The feathers in front of the tail. Roosters have softer, pointier and longer ones compared to hens.

Sickle Feathers

The showy, curvy long feathers on a rooster's tail.

Hackle Feathers

The feathers around a chickens neck. Roosters' have pointy hackle feathers while hens have rounded ones.

Cloaca (Vent)

Rooster Spurs

They start as a bud as seen here. They become a large claw like growth on the back of a rooster's legs. When fully grown they are used to protect themselves and the flock from predators.

Our Swedish Flower Rooster

Chicken Myths: True or False



All chickens are female

False. As stated in terminology, “chickens” can be used to reference males (roosters) and females (hens).



You need a rooster for eggs

False. Hens lay eggs throughout the year without a rooster. If you want to hatch chicks, then you will need a rooster to fertilize the eggs.



Roosters crow only in the morning

False. They start in the morning and periodically crow throughout the day. Some breeds crow more than others.



Roosters are mean

True and False. While this is true for some, this is not true for all roosters.



Chickens make a lot of noise

False. While some roosters crow throughout the day, hens are usually quiet. All chickens make noises briefly when you let them out in the morning, when you walk up to them and when hens sing their egg song. The rest of the day hens are relatively quiet.



Chickens require a lot of land

False. While this depends on how many chickens you plan to own, even with a small fenced in backyard and a small coop you can keep a few.



Amberlink Rooster
Charlie



Chickens smell bad

False. Chicken *poop* smells bad, as any animal poop does. If you don't keep their coop and run clean, then their area will smell. Chickens themselves do not smell bad.



Chickens attract flies & rodents

False. Their poop and moldy food from moisture attracts flies and rodents.



Chickens are dirty

False. Throughout the day they preen themselves using their beaks to clean their feathers. Sometimes their feet are dirty because they step on their poop.



Different color eggs vary in taste

False. They look the same on the inside, variations in taste happen because of their diet and amount of free-range time.



All chickens lay an egg daily or twice a day

False. Different breeds vary in how many eggs they lay per year. A few breeds lay up to 350 eggs per year, but most produce a lot less. A chicken *can* lay two eggs in a day, however it is very rare.



Eggs bought from a store are the same as eggs from backyard chickens

False. Store bought eggs were usually laid 30 days ago or longer.



You can't eat fertilized eggs if you have a rooster

False. If the incubation process hasn't started (if a hen hasn't sat on them for an extended period) then you are okay to eat them.



You must wash and refrigerate eggs immediately

False. Upon removing them from the nesting box you can leave them out for several weeks, unwashed. They have a clear coating on them called "bloom" that allows them to be left in a cool room temperature for several weeks. You should wash eggs right before you cook them.



Brown eggs are more nutritious

False. The eggshell color does not make a difference.



Eggs will hatch into chicks if chickens sit on them

False. They will only hatch if the eggs were fertilized by a rooster. Even when you have rooster, not all eggs are guaranteed to be fertilized and not all eggs hatch.



You can't have chickens if you have a cat or a dog

False. Cats and dogs can be trained to get along with chickens. Cats may try to attack chicks, but they can be trained not to.



Chickens are vegetarian

False. They are omnivores. Chickens love to eat insects, worms, rodents, small snakes, frogs, fish and many types of meat treats.



Chickens cannot fly

True and false. While they cannot fly high or far, they *can* fly for short increments. Depending on the breed, chickens can fly distances up to 50 feet and reach a height of up to 10 feet. Some chickens also prefer to roost in trees at night. There have been recorded instances of chickens flying a distance of a few hundred feet!



Chickens are not intelligent

False. They are quite intelligent. Studies have shown that chickens can remember up to 100 faces (humans and chickens) and dozens of words. They can also communicate with each other.



Chickens have poor eyesight

False. Chickens have better vision than humans. They can see ticks and small bugs in the grass very easily when they forage.



All chickens sound the same

False. While they may sound the same to us, chickens have the ability to make 30 different sounds, each one with a specific meaning. Some of the things chickens communicate include: warning other chickens of a predator, announcing when they find food and purring when they are relaxed. Mother also hens talk to their chicks and most hens celebrate laying their eggs. Some breeds are more talkative than others.



Chickens are boring

False. They are quite entertaining at times. Chickens can be observed to be playing with each other, jumping on top of things and running after each other. They can also be trained to come to you and to perform tricks. Some people even keep a few chickens indoors as pets!



All chickens are the same

False. There are hundreds of chicken breeds, all with very different features such as size, feather color, feather type, personality, egg size and egg color.

Know the Rules

Most cities and suburbs have ordinances for keeping backyard chickens therefore, it's important to find out if your town allows backyard chickens before you buy them. If you live in a neighborhood with a homeowners association, you need to check with them as well. Where chickens are permitted, you should know the number of hens allowed, if roosters are approved and how many. Also inquire what the fence requirements are because many areas require that you have a fence around your entire property.

Chickens love to explore and forage! They are known to dig up gardens, kick up mulch and they poop anywhere. As a result, neighbors may complain if your chickens wander onto their property. Naturally, no one wants to deal with someone else's pet making a mess on their yard or walkways. Roosters are the same and additionally can be loud. When you keep your neighbors happy, you can avoid complaints to your association or town. Some towns have even banned all residents from keeping backyard chickens simply because of one careless chicken owner and one complaining neighbor.

If space allows, it's best to place the chicken coop and run farther away from your home. No matter how much you clean their space, there will be some odor at times especially during warmer weather. Chickens also make some noise early in the morning and when they sing their egg song. If you have roosters, they may crow throughout the day. Unless you are okay with hearing chicken sounds from a close distance, place their coop and run twenty feet or more away from your home.



Reasons to Get Chickens

There are multiple reasons why people decide to get chickens. Having them as pets and for eggs are the most common, the other reason is for meat. Based on these reasons you'll decide what breeds to get. This book is focused on raising chickens for eggs.

For Eggs

Chickens lay anywhere from 80 to 350 eggs per year depending on their breed. Egg sizes range from small, medium to large. Eggshell color varies based on breed as well.



For Meat

Only a few breeds are primarily raised for meat and are referred to as “broiler chickens.” They have a shorter lifespan and are raised a bit differently than those for eggs. This is important to know so that you don't accidentally buy meat birds thinking they will produce eggs over several years.

For Both Eggs and Meat

There are several breeds which can be raised for both meat and eggs, often referred to as “dual purpose” chickens.

As Pets

Many breeds are known to be very friendly. Pet breeds usually have ornate feathers and colors, but they often lay less eggs per year or smaller sized eggs. Some chicken breeds are more docile making them easier to keep as pets, especially for children. Chickens usually follow you around like a dog or cat and come to you when you call them. Some people even keep pet chickens in their home and put chicken diapers on their fluffy butt!

Details on specific breeds are covered later.

Chicks or Chickens?

That is the question!

A common question is “What should I start with – chicks or chickens?”

Chicks

Starting with chicks is the most common way to begin for first time chicken owners. One benefit of getting chicks instead of mature hens is that you can purchase them from multiple sources and select from a variety of breeds. Chicks require more effort during their first six to eight weeks of life, however it’s a delight to watch them grow. It also means having ample space to set up a chick brooder, a safe and heated temperature controlled enclosure, usually kept indoors. You will need to set this up in an area where they will not be disturbed by children or pets.



Day old chicks

Chickens

Starting with hens means you can have fresh eggs sooner, whereas with chicks you have to wait at least five months or more for them to mature and start laying. If you want to get eggs sooner, start with at least 18-week-old pullets, or get mature laying hens.

Personally, my husband and I wanted to have fresh eggs immediately so we bought laying hens. I also had experience with chickens so I felt comfortable with this decision. When we brought home our first five hens, one of them gave us our first egg the very next day! How EGGCITING!

Hatching Eggs

Another option is to get “hatching eggs”. These are eggs you can buy to hatch in an incubator. Most people get hatching eggs only after they’ve had some experience in raising a flock.

People who already own chickens also buy hatching eggs to put under a broody hen, especially if they don’t have a rooster, but they want chicks. If you decide to get hatching eggs to start your flock, you will need to buy an incubator and wait **21 days for the chicks to hatch**. There’s also no guarantee that all of them will hatch, and you will not know how many will be male or female.

As you grow your flock or you decide that you want to breed chickens, using an incubator is useful because you have the potential to hatch dozens of chicks at one time. Incubators create a temperature controlled environment however, you may need to monitor the humidity level.







Chick starting to hatch



Minutes after hatching

Deciding How Many

At a very minimum start with three chicks, ideally five or more. This is also true if you are starting with pullets or mature hens. Here are some reasons to get a group of chicks or chickens:

-  Chickens are highly social animals and love to be in groups.
-  Chickens lay less eggs in the winter and when they are in molt. When you have more hens than you need, you still get some eggs during those times.
-  Chicks help each other stay warm by huddling together, with or without an additional heat source. When they are mature, they also help each other stay warm in colder temperatures.
-  Sometimes chickens die unexpectedly due to illnesses or predator attacks. It's best to have a few more than you need.

How many chickens should you buy for eggs?

Simply do the math on how many eggs you consume in your household per week.

| # of laying hens | Breeds laying 200 eggs/year | Breeds laying 300 eggs/year |
|------------------|-----------------------------|-----------------------------|
| 3 | 11 eggs per week | 17 eggs per week |
| 4 | 15 eggs per week | 23 eggs per week |
| 5 | 20 eggs per week | 28 eggs per week |
| 6 | 23 eggs per week | 34 eggs per week |
| 7 | 26 eggs per week | 40 eggs per week |
| 8 | 30 eggs per week | 46 eggs per week |

Where to Buy Chickens

Local Farm Supply Store

If you live in an area with farm supply stores, these are great places to buy chicks. In the US we have stores such as Tractor Supply, Rural King, Southern States and farm co-op stores to name a few. Chick season in these stores is from Spring through Fall. You will see a chick section that is usually gated or enclosed. This is so that people can't handle the chicks without an employee.



In most stores you'll see large silver tubs with one or two chicken breeds in each tub. When you see a sign that says "pullets" it means that they are all female chicks; when you see a sign that says "straight run" it means that they are mixed male and female. Even when you buy chicks out of the pullet section, you may later discover one or more of them being male. This can happen sometimes.

When you buy chicks from farm supply stores, they will require you to purchase a minimum number of chicks, usually three to five. You can't buy one lone chick. If you buy chicks in the fall, they require a minimum purchase of five to ten.

Local Chicken Farm

Finding a local chicken farm is a great option if you're looking for chicks of any age or want to get laying hens. We bought all of our chickens from a chicken farm we found through an online ad. When you are new to chicken keeping and you get to visit a farm you have the opportunity to observe their set-up firsthand and talk to the owner or staff to get questions answered.

Mail order

Yes, delivered in the mail! Fun fact: You can mail order live chicks in the US from hatcheries all around the country. The benefit of mail ordering chicks is that you have more options to select a specific breed. Chicks can survive up to three days without food and water after hatching because right before hatching they consume the yolk and membrane of their eggshell for extended nourishment.



Few days old

When chicks are shipped immediately after hatching and they arrive to you within three days, they usually survive the journey perfectly fine. I say “usually” because unfortunately one or more may not survive during transportation. Sometimes the package may end up sitting at the post office, undelivered or not picked up in time. There is also a risk that they may be mishandled or left in a cold place.

When your chicks are received by your local post office, a staff member is supposed to call you immediately. You may consider visiting your post office a few days prior to the delivery to speak to the Postmaster to make sure they know to expect your chicks. Also confirm that they have your phone number.

Hatcheries also require a minimum purchase of three or more chicks per order because chicks huddle together to stay warm. To be safe, it is best to order chicks by mail when the climate is warm in your area so that they don’t get cold when delivered to your post office.

Chicken Owner Expenses

The cost of chicks and chickens will depend on the breeds and their age. Most chicks sell for a few dollars each. Pullets, cockerels, hens and roosters are sold for \$10 - \$30 USD each. If you're buying rare or specialty breeds, then obviously they may cost more. Along with purchasing birds you will need to purchase supplies. These expenses will vary depending on the quality, brand and where you are purchasing them from.

These dollar amounts are typical in the US:

| | | |
|----------------------------------|--------------------|---|
| Chicks | \$3 - \$7 each | Depends on breed |
| Pullets or laying hens | \$10 - \$30 each | Depends on age & breed |
| Brooder: cardboard / plastic tub | Free - \$5 | Homemade or Purchased |
| Brooder: metal (galvanized) | \$50- \$200 large | |
| Heat lamp for brooder | \$10 - \$20 | Both heaters work. Details in Chapter 15 |
| OR Radiant heat plate | \$40 - \$110 | |
| Bedding: pine, hemp, straw | \$5 - \$20 per bag | Depends on type & size |
| Feeders | \$10 - \$40 each | Depends on size, style, material & brand |
| Waterers | \$10 - \$40 each | |
| Chick feed 30 - 50 lb bag | \$20 - \$40 | Varies by size, brand, organic, non-organic & medicated |
| Grower feed 30- 50 lb bag | \$20 - \$40 | |
| Layer feed 30 - 50 lb bag | \$20 - \$40 | |
| Scratch grains 30 - 50 lb bag | \$12 - \$20 | Varies by brand & size |
| Grit (feed additive) | \$8 - \$15 | Varies by brand & size |
| Oyster shells (feed additive) | \$15 - \$20 | Varies by brand & size |
| Chicken coop for 5 chickens | \$250 + | New, used, or home built |
| Chicken run for 5 chickens | \$100 + | Build it or readymade |
| Fake eggs for nesting boxes | \$5 - \$10 | Depends on quantity |
| Chicken health supplies | \$100 + | Details in Chapter 42 |

How to Save Money

Chick Brooder

Instead of buying a brooder, you can use a cardboard box or large plastic tub that you may already have at home. It should be very sturdy and have tall sides. Most stores that sell kitchen appliances and furniture have large sturdy boxes they throw out when they receive new inventory, the kind of box a washing machine or dishwasher is shipped in. Hardware stores also have nice boxes they throw out from large items.



Chicken Coop and Run

You can usually find used coops on community “for sale” apps such as OfferUp and on websites like Craigslist and Facebook Marketplace. Also check Facebook “Buy & Sell” groups for your town. We purchased our first small coop when it was on sale at a local store. When we were ready to upgrade, we bought a larger pre-owned coop we found on Craigslist. It was for sale at a significant discount off the original price. We renovated it, enhanced it, added our own style to it and now it looks better than new.



When buying a used coop, upon bringing it to your home it's extremely important to do a deep cleaning before putting it to use! Chances are high that it has poultry lice or mites hiding in the cracks and crevices, not to mention other bacteria. Scrub and wash the floor, walls, roosting bars and nesting boxes. Use hot water, soap and a dish sponge or steel wool. You may need to spray special chemicals to kill mites and lice. If you really want the coop to look like new you can sand down the wood and refinish it. Let the moisture completely dry out before welcoming your chickens.

If you know how to build things with wood or you have a family member or friend who has this kind of carpentry experience (and the tools required), you can design and build a chicken coop and run. This is cheaper than buying a pre-built coop. In addition to the first one we bought, we also built a hybrid chick brooder (pictured below) that we use as a spare coop when we don't have chicks. For example, we use it to quarantine new chickens and as a chicken hospital.



Biosecurity

Chicken “biosecurity” refers to practicing simple hygiene techniques to keep you and your chickens healthy. These are methods you implement in working with and around your poultry and other animals. When introducing new chickens to your flock, these measures can help avoid bacterial cross contamination and disease. Biosecurity also applies to when you are in contact with other chicken owners, and even when you walk through farm supply stores because germs and bacteria from their poultry can spread to your flock.

Here is how to protect yourself and keep your flock healthy:



Thoroughly wash your hands with warm soapy water for at least half a minute after you handle any chickens or animals, your own or someone else's.



Wear a separate set of shoes and clothing when you are around your flock. Do not wear those same shoes into your home so that you don't bring bacteria from the run into your house. This is especially important if you have a dog or a cat and even small children.



When you have other chicken owners visiting you in your chicken run, have them wear a different pair of shoes or have them thoroughly clean their shoes before entering your chicken area.



If you use any supplies from other chicken keepers, meticulously clean and disinfect them.



Keep your coop, run and nesting boxes clean. When the bedding starts to smell bad it may be time to completely replace it with fresh bedding.



If you decide to add new birds to your existing flock, add chicks and not mature chickens if possible. It's less likely that the chicks are carrying an illness that can spread to your existing flock.



If you add new mature chickens to your existing flock, quarantine them in a separate pen for a few weeks to be sure there are no illnesses.

Daily Routine

Here is a daily routine of what to expect with chicks and chickens.

Chicks

It's important to check on chicks multiple times per day. You may find yourself wanting to spend a lot of time with them anyway since they are so adorable! Throughout the day, check that they have plenty of feed and water. No matter what style feeders and waterers you use, chicks find a way to kick up bedding into them. Make sure that all of their feeders are clean and not covered in bedding. Chicks often poop on their feeders. You might take out the feeders and waterers a few times a day to clean and re-fill them.

Common situations with raising chicks are "pasty butt" and respiratory illness. Pasty butt is when poop is stuck to their vent and this must be cleaned. When you pick them up you can also listen to make sure their breathing doesn't sound abnormal. Any anomaly could be a sign of a respiratory issue. It's important to pick up your chicks and check them daily. These situations and how to handle them are covered in detail in the chapters on chick care and chicken illnesses.

Chickens

Our routine is to let our chickens out of their coop early in the morning, at or shortly after sunrise. Once they are all out of the coop we take a few minutes to scoop out their droppings from the night before and freshen up the bedding. We use a small bucket and a garden hand rake the same way we clean our cats' litter box. This helps keep the coop and nesting boxes clean and keeps the flies away. The dirty bedding and droppings are discarded in a compost pile.

Next, we check that they have plenty of clean water and feed in their respective containers. If the weather has been humid or rainy, it's important to check that there is no mold in the feed as this happens on rare occasion.

In the late afternoon, after the collecting their eggs. we usually let our chickens free range. If you let your chickens free range outside too early in the day, there's a chance that they may lay their eggs anywhere. You may not even discover the eggs until a later day because they may be hidden under a deck, in a bush or a random place.

Half an hour before sunset we make sure that they are all back in their fenced in run and we secure it. Usually they've already started to return to their area as sunset time approaches.

After sunset we check that all of them are in the coop and on the roosts. Sometimes some of the chickens don't go into the coop on their own so we pick them up and put them inside. We lock the doors and latch the nesting box lid.

If we know that we're not going to be home before sunset, we coordinate to have a neighbor or friend lock them up. When we go out of town, we arrange to have someone let them out in the morning and make sure their feeders are stocked.

Our routine may be different than other chicken owners because my husband and I both work from home full-time. For those who are not home during the day, the routine will probably be different – the eggs can be collected in the evening. Your chickens may only be free ranging when you're home to let them out and more on weekends. Providing daily free range time contributes to their good health because it is natural for them to roam freely and for you it means less cleaning of the run.

There are also several types of automatic chicken coop doors available online. These are easy to install and can be programmed to open and close on a specific schedule. Most people program them to automatically open the door at sunrise and close it after dark. An automatic door can additionally be installed on the run to let them free range at a certain time even if you're not home to let them out.

When my husband was editing this book and he read the above information about automatic doors, he asked "Why haven't we installed one yet?" We looked at various brands and decided to get [an automatic door by Run-Chicken](#). The door is very simple to use, easy to install and looks great on our coop. Now we absolutely love having the option to sleep in late in the morning!



www.bestcoopdoor.com

Chicken Breeds

A breed is a classification of a group of birds with distinctive traits and characteristics. There are several hundred chicken breeds in the world!

Classifications

Bantam: Miniature, raised for eggs and as pets

Layer: Raised primarily for eggs

Broiler: Raised primarily for meat

Dual purpose: Raised for both meat and eggs

Ornamental: Raised for show

Production: Raised for high egg or high meat production

Some dual-purpose chicken breeds (for eggs & meat):

Jersey Giant, Brahma, Orpington, Plymouth Rock, Wyandotte, Rhode Island Red, Light Sussex, Australorp, Delaware, Cochin

Some of the most friendly and docile chicken breeds:

Brahma, Easter Egger, Barred Rock, Silkie, Orpington, Australorp, Wyandotte, Rhode Island Red, Sussex, Polish, Sebright, Pekin, Faverolle

If you are a chicken owner and your favorite breed is not listed, realize it's impossible to include every breed. Email me if you have a breed you think I should add.

Some of Our Hens



Silver Laced Wyandotte
Chloe



Rhode Island Red
Lily



Easter Egger
Rosie

When deciding what breed to get, you should consider the climate where you live. Some breeds are better suited for colder climates while others do better in hot weather. If you live in an area with all seasons then any breed is fine, but you must take extra precautions in harsh weather. Details on how to care for chickens in extreme temperatures is covered in Chapters 30 & 31.

Chickens regulate their body temperatures with their comb and wattles. If you live in a warm climate, it's better to have chickens with less feathers and a large comb. Chickens do not sweat, they expel extra body heat through their comb and wattles. The larger their comb is, the easier it is for them to handle warmer weather. A common large comb type is the single comb. Some breeds that do well in warm weather include Rhode Island Red, New Hampshire Red, Welsummer, Leghorn, Barred Rock, Orpington and Sussex.

If you live in a cold climate, it's better to have chickens with dense feathers and a small comb. Chickens that have a large comb are more susceptible to frost bite. For this reason, chickens with smaller combs do better in the cold. Common small comb types include pea comb and rose comb. Some breeds that do well in cold weather include Wyandotte, Dominique, Australorp, Buckeye, Ameraucana, Araucana and Brahma.

Comb Types

V comb



Single



Walnut



Strawberry



Carnation



Pea



Cushion



Buttercup



Rose



Feather types & features

Frizzle: Curly feathers. Breeds that may have frizzle feathers include Polish, Cochin, Plymouth Rock and Silkies.

Feathered feet: Some breeds have feathers on their feet including Booted Bantam, Belgian d'Uccle, Brahma, Cochin, Marans, Faverolle and Silkie.

Crested chickens: These are chickens with elongated feathers on their heads, usually found on ornamental breeds. While they are cute, these breeds are more prone to the dangers of aerial predators because their feathers partly cover their eyes. The most well-known breed with crested feathers is Polish.

Beard: Elongated puffy feathers below a chicken's beak. Easter Eggers, Olive Eggers and Ameraucana are some breeds that have a beard.

Ear tufts: When a group of feathers grow around or near their ears. Araucana chickens are known for this feature.

Muff: Short feathers that look like puffy cheeks on the side of a chicken's face and below its chin. Breeds that have a muff on their face include Easter Eggers, Olive Eggers and Ameraucana.

Feathered Feet on our Blue Marans Hen



Easter Egger Hen
Penelope

Ayam Cemani

This a beautiful rare breed from Indonesia, and worthy of mention. The Ayam Cemani is known as the “all black chicken” and they are literally that – ALL BLACK – inside and out. Their feathers, beak, wattles, comb and internal organs are all black. Their feathers are black, yet iridescent with a hint of green that shows when they are in direct sunlight.

They are a very docile breed, and being a rare breed they are in high demand for their features. Our Ayam Cemani chickens are one of our favorites because they have a very sweet and calm temperament. This breed lays a small cream-colored egg and produces approximately 80 eggs per year. We now also breed them. Send me a message on Instagram if you’d like to add them to your flock!



Ayam Cemani Hen
Enya



Ayam Cemani Rooster
Shakespeare

The bloom is the outermost covering on an egg.
Occasionally people consider the bloom to be the egg color.

Chicken Breeds ~ Egg Colors


| | | | |
|---|-------------------|---|-------------------------------------|
|  | White | Silkie Polish Leghorn | Ancona Hamburg Andalusian |
|  | Dark Brown | Welsummer Black Copper Marans Penedesenca | |
|  | Brown | Brahma Sussex Australorp | Delaware RI Reds Barnevelders |
|  | Blue | Araucana Ameraucana Cream Legbar | Easter-Egger |
|  | Green | Olive Egger Easter Egger | |
|  | Pink | Australorp Easter Egger Light Sussex | Plymouth-Rock Cochin |
|  | Speckled | Welsummer Cuckoo Maran | |

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Select breeds lay cream eggs such as Silkie, Speckled Sussex & Ayam Cemani.

This chart lists a handful of common breeds and how many eggs they lay per year. There are many more breeds!

Chicken Breeds ~ Top Egg Layers



| | | |
|-------------|---|--|
| 300+ | Isa Brown White Leghorn Rhode Island Red | Sex Link Red Star Black Star |
| 250+ | Golden Comet Speckled Sussex Blue Plymouth Rock Rhode Island White | Australorp Dominique Easter Egger |
| 200+ | Barred Rock Plymouth Rock Cream Legbar New Hampshire Red | Delaware Wyandotte Welsummer Brahma |
| 150+ | Orpington Barnevelder Ameraucana Olive Egger | Polish Maran Sussex Cochin |
| 100+ | Frizzle Silkie | |

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There are many more breeds

Environment

Chapter

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- 15 Waterers
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- 17 Chicken Coop
- 18 Chicken Run
- 19 Cleaning
- 20 Protecting
- 21 Dealing with Loss

Feeders

Chicks and chickens love to scratch at the ground and at their feeders. When you use the wrong style of feeders or don't hang them, they will easily get knocked over. Always use feeders made specifically for chicks and chickens so that you don't waste feed. If the feeders are outdoors, cover them when it rains so that the feed doesn't get soggy or develop mold.

The flip top feeder style pictured below is great for chicks because it's harder for them to knock over and it allows them to spread out as they eat. However, since they can jump on top they might still poop on it. This style is available in plastic and metal.



Flip top feeder

For chickens of all ages, we like to use hanging feeders. We converted some of our feeders into hanging ones by attaching [d-hooks](#). You can hang them with a chain or twine, but you'll discover the chain is easier to adjust in height when combined with a carabiner. We installed hooks inside of our chick brooder and outside our main coop to easily keep the feeders raised.

We also have a feeder hanging underneath a tree by the coop, using a piece of twine tied to a branch. Another feeder stays under our chicken-teepee perch area we made from wood pallets. Depending on the coop style you have, you don't need a feeder inside the coop.



5 lb hanging feeder



Small hanging feeder

Waterers

Use waterers that are designed for chickens. Do not give them water in a bowl, they will knock it over very easily. Poultry waterers come in several sizes and styles. Some are made ready to hang, others can be raised by placing them on top of a heavy object like a brick or cinderblock. As with feeders, you don't need waterers inside the coop, although this depends on your set up. To avoid having excessive algae in the waterers, keep them out of the sun. Once in a while you will have to clean them because sometimes algae is unavoidable.



1 Quart & 5 quart waterers raised and hanging

In our opinion, the best styles are the hanging waterers with [nipple feeders](#) and [auto-fill watering cups](#) that re-fill as the chickens drink. Pictured below is our 4-gallon waterer that we bought and added cups to, as well as a 5-gallon food grade bucket that we converted into a waterer by adding both nipple feeders and auto-fill watering cups to. This was easy to do: we simply drilled holes on the side and installed them. We have both styles so that the chickens can drink from the one they prefer. These styles keep the water clean longer since they are fully closed.

Check daily that they have clean water and that the containers are full, especially in the summertime. For chicks, check their water a few times a day. With older chickens, using larger water containers will allow you to only have to check it once per day or every few days.



4 Gallon waterer with cups



**5 Gallon waterer with cups
and nipple feeder**

Chick Brooder

A brooder is important for chicks because they need a safe enclosure and a temperature controlled environment. You can use any large container such as a cardboard or wood box, plastic bin or metal galvanized tub. Most people find that a metal tub works the best because it is deep, easy to clean and the shape is rounded. At around three weeks old, chicks will start trying to fly over the top. Your brooder should have high walls so that they can't jump out, especially as they start to grow. For this reason, the brooder should ideally be placed on the floor and not elevated on a table.

If the brooder is not rounded, chicks usually run into the corners when they get startled or scared. When you have a lot of chicks and this happens, unfortunately one or two chicks may get smothered. Those that get stuck in the corner may perish. When you use a rounded brooder or place any large object in the corners of their space this situation can be prevented.

The brooder should be kept in a space where there are no drafts and it's important that chicks always have a source of heat. The two common types of brooder heaters are the traditional heat lamp and the radiant heat plate. Both are efficient, at the same time they are very different.



Heat lamp: This will cost less compared to a heat plate, but requires a bit more effort in safely securing and setting up. It's best to mount the heat lamp above the brooder in a way that allows you to adjust the height. You can use a chain to hang it, or mount it on a table or chair. Light stands are another option. Either way, make sure that it's secure. If the heat lamp falls on the chicks it will kill them, additionally the bedding may catch fire.

For one-week old chicks, install the lamp at a height where the temperature is 100°F at their level. Don't worry, this doesn't cook them! Every week you will need to reduce the temperature by 5°F, this can be done by slightly raising the heat lamp. A valuable purchase is a brooder thermometer to measure the temperature underneath the lamp.

One trick is to simply watch their behavior: if the chicks all huddle under the lamp, it's not warm enough and it needs to be lowered; if they all spread out far from it, it's too hot and needs to be raised.



Heat Lamp



Radiant heat plate: This device is a better alternative to the heat lamp, however it costs more. Heat plates do not create extra light in the room and they are significantly more energy efficient, using only 14 watts compared to 250 watts for a heat lamp. A heat plate simulates a mother hen keeping chicks warm beneath her. These heaters are available in different sizes for different quantities of chicks. You can adjust the temperature easily by changing the height because the plate has four adjustable legs. Similar to the heat lamp, you raise it as the chicks grow. There is no special mounting required.



Radiant Heat Plate



Brooder Bedding:

There are many options for bedding in the brooder such as newspaper, shredded paper, pine shavings and hemp bedding to name a few. For a while, we were using pine bedding. This is the most commonly used material and comes in fine, medium and coarse. Pine shavings tend to create a lot of dust and after some use, it will start to smell. Then we discovered hemp bedding, which is used for other animals too such as rabbits, gerbils, hamsters and most farm animals.

Important note, do NOT use cedar wood shavings because they are toxic to chickens.

Our personal preference is hemp bedding in the brooder (and in the coop). It lasts significantly longer than anything else because it's more absorbent. Hemp bedding also has no odor and produces considerably less dust over time, which is especially important for chicks. The bedding we use is by [Eaton Pet & Pasture](#), shown on the following page with a link to order.

Brooder Cover:

To keep the chicks from jumping out of the brooder and to avoid something falling in, add a mesh frame lid on top. Another option is to make a framed cover out of ½ inch hardware cloth and wood beams or use a large window screen. There should still be air flow and visibility.



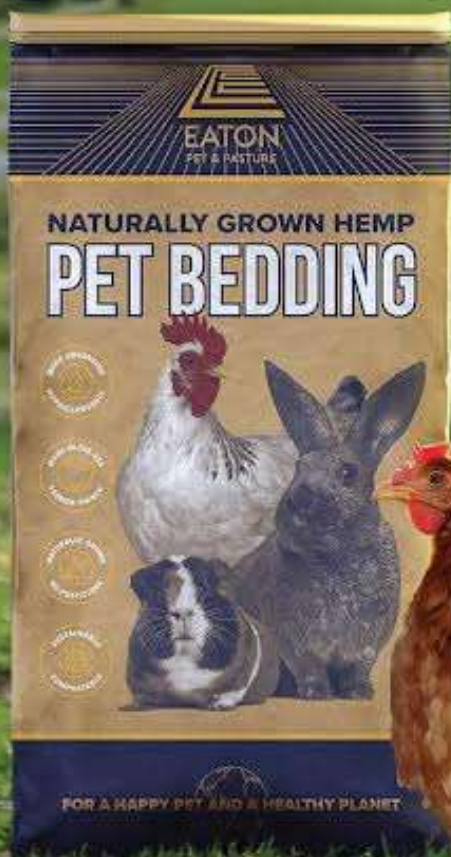
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Chicken Coop

Buy or Build

Chicken coops are available in many styles and sizes. One question people often ask when getting started is, “Should we buy a new coop, a used coop, or build one?”

When you buy a new or used coop you will save yourself a considerable amount of time and energy. When buying a used coop you save money, however you will need time to thoroughly clean and disinfect it and you may need to make some repairs.

If you are looking for a used coop, check online using apps such as OfferUp and websites including Craigslist, Facebook Marketplace, Facebook groups for your town or county. You can also convert a shed to a coop.

When buying new, search online for local chicken coop sellers so you can visit and see them before making a purchase. Many companies also ship easy to assemble prefabricated coops.

If you know how to build things from wood or know someone that does, building the coop is a great option because you can customize it to your desired size and include specific features. By building your own coop you save money, at the expense of time. You can decide if you would rather save time and energy, or save money.

Coop Size

This depends on how many chickens you plan on keeping, the type of breed and if you plan on increasing the size of your flock in the future. Some breeds like Jersey Giant, Brahma, Cochin and Orpington grow to be much larger so they require a bit more space than the average chicken. A general rule of thumb is to have two square feet of space per chicken inside the coop.

Important Coop Features

Whether you buy or build, the following items are important:

- Wood roosting bars for chickens to perch and sleep on
- Nesting boxes, at least two to three, potentially more for larger flocks
- Window(s) with hardware cloth to protect from predators and allow ventilation
- Ramp and door for chickens to go in and out of the coop
- Large door for you to access the inside for cleaning and maintenance
- Raised coop to prevent rodents from building a nest underneath
- Locks or secure latches on all doors and nesting box lid (if you have a lid)
- Vinyl flooring and/or removable tray



Roosting Bars



Nesting Boxes



Coop we bought used and renovated

- Locks on door and nesting box lid
- Windows with hardware cloth
 - Large front door
 - Raised coop

Different Coop Styles

Style choice is personal preference. Here are a few styles.



Small fits 5 -10 chickens



Medium fits 10 -20 chickens



Large fits 20-30 chickens. Has a full size walk in door.



Large fits 20-30 chickens. Has a full size walk in door, attached run and enclosure underneath.

When you set up the chicken coop, a great idea is to line the floor and nesting boxes with vinyl sheets cut to size. This is done before adding the bedding. All of our coops have a vinyl lining that is secured in place with a small wood board screwed in at the door openings. The board also helps keep the bedding from spilling out.

By adding vinyl from the start, it allows you to clean the coop more easily when you do a deep cleaning and it protects the wood from moisture. Underneath the vinyl we sprinkle DE (food grade diatomaceous earth for poultry), which helps to keep it dry and more importantly keeps parasites such as mites and lice away. If you can, install a tray on the coop floor which can be pulled out to easily remove old bedding. Our home-built coop was designed with a pull-out tray.



Removable tray with vinyl lining in chick coop



Vinyl lining in nesting box

An alternative to vinyl lining is **Herculiner**, which is a truck bed liner. It is a liquid or spray on that covers and seals the floor with a tough, textured polyurethane coating. It can be applied to many different types of surfaces, such as concrete, plastic, rubber, metal, wood or fiberglass. You can also use a liquid deck sealer, which is a clear waterproofing sealant. The deck sealer is not as durable as the truck bed liner.

Chicken Run

We're not talking about the animated movie! A "chicken run" can be a partial or full enclosure, attached to or surrounding the coop. It allows your chickens to forage and get exercise while protecting them from the natural elements and predators. Additionally, it ensures that your hens lay their eggs inside the coop or at least within the run, rather than outside in another place. Personal experience has shown it's extremely important to have a full enclosure around the coop for when it rains/snows and when you are out of town.

Some people make a chicken run out of a dog pen enclosure. If you do this, you'll need to use hardware cloth to close the gaps between the frame sections. Another option is to build a run with 2x4 wood boards and hardware cloth. Chicken wire is popular, but it doesn't always protect chickens from predators the way hardware cloth does. At a minimum, we recommend using a galvanized metal fence with metal fence posts with a height of at least six feet.

Our chicken run has evolved over time. We started with a basic wire fence. Now we have a galvanized metal fence with deer netting wrapped around it. This prevents the chickens from sticking their head out and also keeps raccoons from reaching in. Instead of deer netting, you can use hardware cloth on the lower half.

We added a four foot section of deer netting that is extended above the fence using bamboo poles attached to the metal fence posts, creating an aviary style space. This height prevents the chickens from flying out. For overhead cover, we use a giant tarp sunshade above our coop and run area. This gives the chickens shade and keeps them dry when it rains and snows.



The chicken run should have plenty of perch space for all of your chickens, as well as multiple waterers and feeders in different locations. We set up a perch area around our home built chicken teepee made of wood pallets. We added an extra backboard for protection from the elements. It turned into a fun “jungle gym” area that serves multiple purposes:

- The chickens hide under it when they see a predator flying above or near.
- They relax underneath when they need shade or cover.
- Walking around it and underneath it keeps the chickens occupied.
- It creates ample perch space.

On the ground we use chopped alfalfa (not the long alfalfa pieces which get stuck in a chicken’s crop). Chickens love to scratch at it and it’s healthy for them to eat. More importantly, it keeps the ground slip-free for us when it rains and snows. If you have a muddy or snow filled area, spreading alfalfa hay on top will make your life easier. This is available at farm supply stores and may be available from local farmers.



Cleaning Chicken Coop and Run

A clean coop and run will keep your chickens healthy and prevent many illnesses. It also helps to keep the eggs clean because chickens don't trail in poop from their feet into the nesting boxes. Less poop also means less flies during warmer weather. Here is how we clean our chicken area:

Daily: We start by scooping out the droppings from the night before with a small [garden hand rake](#) and a bucket. We also clean the run daily the same way.

When the alfalfa hay in the run turns brown or gets washed to the sides by heavy rain, we rake it all out and lay down fresh alfalfa hay. It has a nice scent and helps to cover up any odors.



Alfalfa hay in our chicken run



Monthly to Quarterly: We remove all bedding, clean and wipe the floor and add fresh bedding. This is also a great time to inspect the coop for uninvited bugs. You'll probably find spider webs and possibly wasp nests.



Semi-annually: We recommend deep cleaning your chicken coop every six months. This should be done in the late afternoon when the chickens can free range for a few hours. If you are using chemicals or cleaners it's important not to expose the chickens to the fumes because you don't want the chickens to inhale them. We wait until they are done laying for the day so that we don't disturb them.

When deep cleaning, we wear gloves and a mask to protect ourselves. First, using a metal putty knife, we scrape away dried poop on the roosting bars, walls and corners of the coop. Then we remove all of the bedding with a hand rake and small shovel, and use a shop-vac to vacuum out dust and debris from the edges and corners.

Next, we take out the vinyl lining, thoroughly scrub it with soapy water and steel wool, and allow it to dry. If the vinyl looks like it should be discarded instead of cleaned, we replace it with a new vinyl sheet.



We spray the entire coop, interior and exterior, with poultry lice and mite killer. A popular product called **Permethrin***, available at farm supply stores and online, is sold in ready to use spray bottles as well as a concentrate that must be diluted. **This diluted spray is okay to use directly on the chickens if they have a mite infestation.** We let the coop dry for a few hours then replace the clean vinyl and add fresh bedding on top. When cleaning the exterior of the coop we also check for mold and mildew and spray mold remover spray before the Permethrin if necessary.

*Note: Permethrin is toxic to cats and fish.

Protecting from Predators

One hard part about having chickens is dealing with predators. Unfortunately, chickens have many animals that prey on them and want to get into the run and coop. Predators include raccoons, opossums, minks, skunks, rats, foxes, coyotes, bobcats, owls, hawks, vultures, bears, stray cats and some dogs. Some predators kill chickens and don't even eat them, while snakes usually go only for the eggs.



royalty free photo



royalty free photo



royalty free photo



Photo credit: Jim Lambrightt



royalty free photo



royalty free photo

How to Protect Your Flock

One way to protect your chickens is to train them to come back to the coop by early evening. Once it's dark, if they are free ranging far, then it is extremely hard to find them because they fall asleep wherever they are. Secure your chickens and your coop every evening by sunset. With a daily routine of rounding up our flock half an hour before sunset, we've now trained them to do it on their own.

While some chicken owners don't use a coop and only have an outdoor enclosure or pen with several roosting bars, it's best to give them a full enclosure to sleep in at night. With a coop you and your chickens will feel safer especially with every wall and ceiling covered with wood or hardware cloth.

If you have dog(s) they need to be trained to get along with the chickens. Walk them with a leash around the chicken's area. Do NOT allow them to run around the chicken run chasing after the chickens. They can be scared to death.

Additional ways to protect your chickens:

- Having a rooster can help protect your hens.
- Provide a fenced in area for them. Adding chicken wire or deer netting to the top of their space will protect them from birds of prey. We let our flock free range outside of the fenced area for a few hours around late afternoon, however majority of the time they remain in a large fenced in area.
- To completely secure the run you can invest in an electric poultry fence.
- Another form of security is to dig a trench along the fence line of their area and bury hardware cloth partially in the ground so animals like foxes can't dig their way in from underneath.
- Never leave food or trash outside especially near your chickens' area because this attracts predators at night.
- If possible, always have a raised coop so rodents won't live underneath it.
- We use solar motion sensor flood lights near the ground around the coop area. If an animal walks by, it will be startled by the light. Solar motion sensor lights are inexpensive and they have worked well for us.
- Coop windows should have hardware cloth as a screen to prevent predator entry. The door(s), and nesting box lid(s) if you have them, should have secure animal-proof latches. On one occasion we suspected an animal making frequent visits at night, so we set up a trail-cam night vision camera. We discovered a giant raccoon trying to open the nesting box in the middle of the night! A secured coop and nesting box will keep predators out and keep your chickens and eggs safe.
- Prepare yourself to act quickly when something happens. We will literally grab anything to scare off a predator – a rake, a shovel, etc.

Dealing with Loss

One challenge of chicken ownership is dealing with loss. The reason could be a predator attack, illness or old age. It could even be an attack from other chickens. Regardless of how your chicken died, you may wonder, “What did I do wrong?” This feeling is natural. I know, because we felt the same way when it happened to us.

Our first time dealing with loss was when we found Chewy, a six week old chick, pecked to death. We knew some of the chicks were involved in a fight because another chick had an injury on her eye and Chewy had a bloody neck. It’s possible that the bleeding neck caused all the other chicks to attack and kill him. Sadly, chickens will do this when they see blood.

The next incident happened one evening when we couldn’t find Priscilla, one of our pullets. We searched everywhere, but we couldn’t find her because chickens fall asleep wherever they are once it’s dark. The next morning while walking to the coop we saw an owl in the brush on the ground. As we approached it was startled by us and flew away. We found Priscilla’s remains where the owl had been.

A few months later, we were working outside. Suddenly, we heard some commotion. Our rooster and some of the chickens were crowing really loud! We ran over to them to find a vulture had attacked Princess, one of our hens. The hen was killed and the culprit flew away. We realized that we had to fortify their space so we installed more deer netting. Most chicken owners have had a similar experiences at some point, learning lessons the hard way. Do NOT think that there are no predators in your area!



Chewy



Priscilla



Princess
(the chicken, not me)

In another unrelated incident, we lost a hen due to illness. This is Daphne, an Easter Egger pullet. She went into the coop right after I took this picture. The next morning, when we opened the coop, all the chickens came out except her. We found her lifeless inside the coop.



We had no idea what the cause of death might be because she always looked healthy. We took her to a vet lab the same day to have them do a necropsy. This is a procedure to determine the cause of death, similar to an autopsy. Anytime you have a chicken die, especially when it's unexpected and from an unknown cause, this step is important to protect your flock's health. In most areas the cost is reasonable and you'll get a detailed report.

The lab results of Daphne's necropsy were as follows:

"Suspect cause of this chicken's demise is associated with lymphosarcoma but microscopic evaluation is needed for confirmation. Lymphosarcoma in chickens is commonly caused by Marek's disease or Lymphoid leukosis. Lymphoid leukosis, caused by a retrovirus, is usually seen in semi-mature or mature birds and causes a B-cell lymphoma in the bursa and multiple tissues. Marek's disease, caused by a herpes virus, is usually seen in young birds between 5 - 25 weeks..."

Marek's is something that can potentially be avoided if chicks are vaccinated for it when they are a day old. We acquired Daphne as a pullet, so getting her vaccinated at that time was not an option. In this situation, her death was completely unexpected and unpredictable. By the way, if you have a chicken die from illness and you don't get a necropsy done, the easiest way to discard the chicken is to bury it.

These incidents are normal and an unfortunate part of chicken keeping. It's important to know that they are unavoidable.

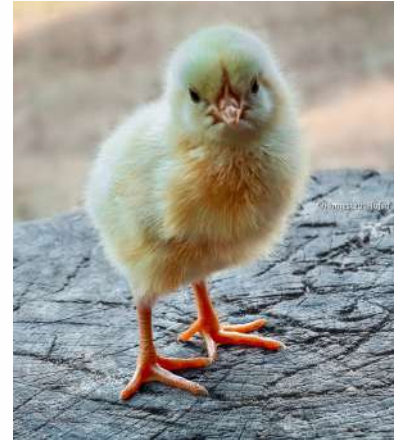
Chicks

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Chick Safety

When purchasing chicks from hatcheries, you have the option to vaccinate them against Marek's disease. For the vaccine to work, it must be administered before hatching or the day they hatch. Purchasing vaccinated chicks is safe for them and equally for you. However, it is not guaranteed to protect them from illness. Chickens that have been vaccinated rarely get sick, but they will spread Marek's to non-vaccinated chickens. In the US, chick vaccination is optional.



Chicks bought from farm supply stores are usually not vaccinated. If you buy non-vaccinated chicks or chickens from anywhere, it is even more important to practice biosecurity because Mareks can be transferred very easily through people interacting with other poultry owners or their flock.

While chicks are extremely cute, they are very fragile in their early stages. They can get stressed very easily and have delicate digestive systems. Before you bring home your chicks, have electrolytes and probiotics on hand for them, these supplements help them in times of stress and with digestion. A commonly used product is called [Sav-A-Chick](#), this can be purchased at most farm supply stores and online. They come in liquid and powder form in small packets. You simply mix them in a gallon of water and pour it into a small waterer. Electrolytes and probiotics should always be made available to chicks in addition to plain water. Place the two waterers near each other to allow your chicks to drink from both.

They need to be kept in a brooder for six to eight weeks. Chicks can be handled easily and this helps them to become familiar with you. When handling them, keep them close to the ground in case they jump. They are very delicate and sometimes cannot survive a fall.

You will see that chicks in their first two weeks of life sometimes collapse to the ground abruptly. They look dead and this often concerns new owners. They simply fall asleep very quickly, and often. Sometimes they fall over and lay flat on the ground while other times they fall asleep standing. Both are normal behaviors and amusing to watch. Chicks grow very fast, so enjoy them while they are young!

Chick Health

Chicks are more prone to illness because they are fragile and delicate. Here are some ways to set up a healthy environment for them and how to inspect them:

Keep the brooder dry and bedding clean. Wet and dirty bedding can lead to a host of illnesses which can be easily avoided such as: Aspergillosis or brooder pneumonia, Infectious Bronchitis (known as the chicken cold) and Salmonella. Another illness caused by overcrowding is Rot Gut.

Limit dust and drafts. Both can cause respiratory issues that can lead to death if not treated immediately. Sometimes even when treated, it's too late to save them. You can check their breathing by simply holding them close to your ear and listening. If you hear a raspy sound or difficulty breathing, treat them with a product called [VetRX](#). This is covered more in the chapter on chicken illnesses. If you are using a small room, place towels or rags underneath the door(s) to limit drafts and to keep the room warm.

Check their vent for “pasty butt” daily. Pasty butt, as the name implies, is when their poop gets stuck to the feathers around and in front of their vent. This creates a partial or full blockage and can lead to death if not remedied immediately. If you see a chick with pasty butt, use warm water with a soft cloth or paper towel and gently remove the dried poop. Use your hands if necessary, it's recommended to wear gloves.

Keep their feeders and water clean. Chicks poop on their feeders very often. If they peck at their droppings and ingest them it can cause Coccidiosis, a parasitic disease common in chickens that can lead to death. Coccidiosis is passed through chicken droppings. The parasite damages their intestinal tract and prevents them from absorbing necessary nutrients. Chicks with Coccidiosis will have an orange or red color in their poop.

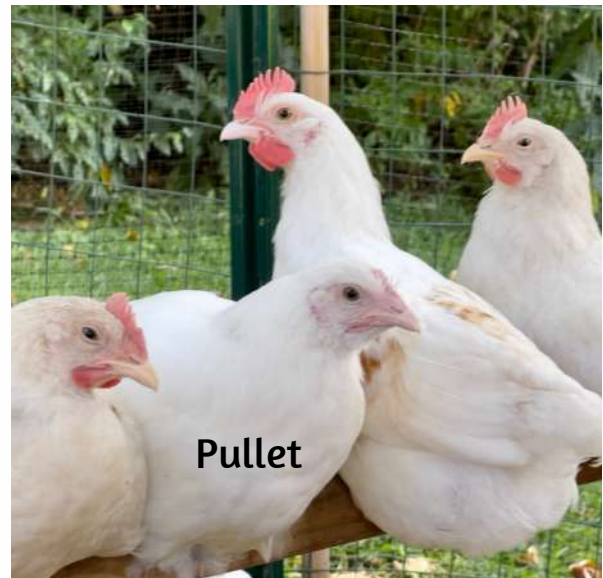
Give them space and provide a dust bathing area. As chicks grow, they will start pecking at each other. Give them more space and enough places to perch otherwise the pecking can lead to fighting. Even with ample space, sometimes you can't eliminate the excessive pecking. Provide chicks with a patch of dry dirt that they can dust bathe in to keep their feathers clean and parasites off of them.

Chick Gender Identification

Gender identification is called “sexing” a chicken. As with several different bird varieties, chicken gender is not easily identifiable at the time they hatch and even up until they are four to six weeks old.

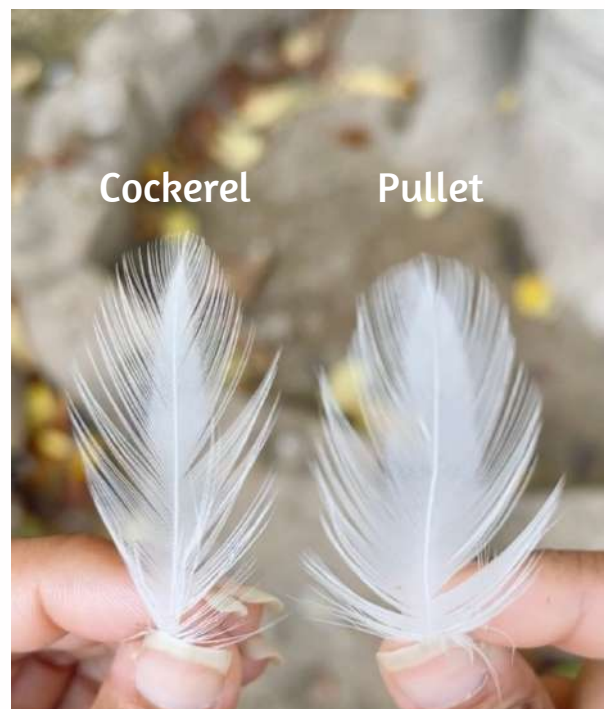
There are several ways to determine chick gender based on behavior and physical characteristics.

Pullets (female chicks) have a smaller comb compared to cockerels. In this picture there is only one pullet, the others are all cockerels. *Comb size can be compared if they are the same age and if they are the same breed. Chicks of different breeds may have varying comb sizes.



Cockerels (male chicks)

- Stand very erect and tall compared to pullets.
- Tend to fight each other.
- Some will start crowing at two months old, however they may not start crowing until well after starting to mate.
- At three to four months old they will start mating with the hens by jumping on top of them.
- Feathering is usually more colorful; this varies with different breeds.
- Hackle feathers (around their neck) are very pointy on the ends compared to pullets, which are more rounded.



Hackle (neck) feathers

Autosexing

Some pure breed chickens have different down colors or markings from the start when they hatch, allowing you to easily determine if they are male or female. This is called “auto-sexing.” Autosexing breeds include:



Cream Legbar:

Female chicks have a dark brown bold stripe that runs down their back-resembling chipmunk markings.

Male chicks have a lighter stripe and light-colored spots on their heads.



Bielefelder:

Females have a chipmunk stripe on their backs.

Males have a white or yellow spot on their head and are a lighter color.



Plymouth Rock and Cuckoo Marans:

Females have darker down and legs and yellow toes.

Males are paler with white spots on their head.



New Hampshire Red, Buff Orpington & Buckeye:

Females have either a dark spot on their head or stripes on their back.

Males have a white or cream-colored spot on each upper wing.



Dark Cornish, Light-Brown and Silver Leghorn & Welsummer:

Females have a dark stripe over their head.

Males have a light-colored stripe.



Rhode Island Red:

Females are a dark red.

Males have a light cream or white spot on their wings.

Sex-link chickens are a cross between two different breeds for better egg production and to easily determine chick gender. Since they are hybrid they do not fall into the above “autosexing” category typically reserved for purebred chickens.

References: mypetchicken.com, cacklehatchery.com, mcmurrayhatchery.com

Chick Feed and Grit

The primary feed for chicks is called crumble chick starter feed. You can also give it to them as mash, which means crumble feed mixed with water. If your chicks are not vaccinated, it is recommended that you give them a “medicated chick starter feed” to keep them healthy.

Next, you have the option to get organic or non-organic feed, this is based on your personal preference. There are several brands to choose from. Whichever brand you go with, get “chick starter” or “chick grower” feed that’s 18% protein.

Chicks go through feed very quickly. To avoid having to buy feed often, it’s best to purchase the largest bag, usually 30 to 50 lb. Store it in a dry place in air tight moisture proof containers. We also buy Silica gel packets to put in their feed containers, these help to keep the feed dry because they absorb moisture. If you use Silica gel packets you have to be careful not to tear them open and not allow chickens to ingest the pieces.

A supplement to add is chick grit to help them with digestion. Chick grit comes in small bags. It can be sprinkled on the ground near the feeders or placed in another feeder. It should be offered free of choice in addition to regular feed. Read the instructions on the bag to calculate the amount of grit to offer. *Do not feed *chicken* grit to chicks because the pieces are too large for them.



One month old chick



Chick Grit

Chickens

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Chicken Feed

Primary feed for chickens that are over 18 weeks old should be layer feed, which is available in two forms – crumble and pellet. Our chickens seem to prefer crumble feed, however it can be messy when compared to pellet feed. There are many brands for layer feed. You can get organic or non-organic. Layer feed should be 16% protein, or 18% for molting chickens. We provide our flock with Nutrena NatureWise feeds.



Crumble Feed



Layer Pellet Feed

There are a few items that you can add to supplement their diet.

- To help your hens lay eggs with stronger eggshells you can add crushed oyster shells to their feed. This is available wherever chicken feed is sold.
- You can also add chicken grit for digestion. Important to note: *chick* grit is different from *chicken* grit. Chickens can eat chick grit, but you do not want to give chicken grit to chicks because the pieces are too large for them.
- Both grit and oyster shells can be sprinkled on the ground near the feeders or placed in another feeder, given to them free of choice.

Outside of their main feed, chickens have many other common household foods that they can eat. They love to eat vegetables, fruits, dry treats and meats. We like to chop up vegetables and fruits for them, but with certain items you can also hang the food from a string, or stick it on a skewer in the ground so that they can all peck at it. Chickens can be fed kitchen scraps, those listed below, as long as they are still fresh and haven't turned moldy.

These food are okay to feed chickens:

Fruits & vegetables:

- Tomatoes
- Watermelon
- Apples*
- Berries
- Grapes
- Carrots
- Cucumbers
- Lettuce
- Spinach
- Kale
- Swiss chard
- Celery
- Broccoli
- Cabbage
- Squash
- Cauliflower
- Pumpkin
- Peppers
- Melons
- Bananas
- Garlic**
- Onion**
- Chives**

Dry treats:

- Grubs (fly larvae)
- Dried fish
- Dried crickets
- Mealworms
- Scratch grains
- Whole grains
- Sunflower seeds
- Pumpkin seeds
- Raisins & nuts
- Dried herbs



Grubs

Meat treats:

- Cooked meats (unprocessed)
- Cooked fish***
- Canned fish***
 - Sardines
 - Tuna
 - Salmon
- Cooked eggs
 - Scrambled
 - Hard boiled mash



Sardines

*Apple seeds are toxic

**In small amounts

***Low sodium, in water, no oil, no spices

To get your chickens to trust you and come to you when they see you, hand feed them frequently. Let them peck at the food in your hand or in a small cup or container. If you have kids, they will enjoy doing this too. We have always hand fed treats to our flock and now they are extremely affectionate! A few of our hens have become so comfortable around people that they even go up to our neighbors and visitors that they are seeing for the first time.



When we got our first five hens, my husband and I trained them to come to us by clapping and making loud sounds every time we brought them feed and treats. After doing this for two weeks our chickens knew to come running to us from across the field – over an acre or two away – the moment we made any loud clapping sound. This now works even if we aren't presenting them with food. Training them to come to us has made it much easier to get them back to their run when we need to round them up if they are free ranging.

Sometimes our chickens follow us around like puppies when they see us outside. They will also keep us company while we're gardening or engaged in other work outdoors. If you're raking leaves in the fall, they will love to help you move leaves around as they forage. It's very entertaining!

What NOT to Feed Chickens

If children are going to be around the chickens, it's important that they know not to drop these foods in their area. These are items you absolutely do not want to feed chickens.

- Moldy or rotten food, including spoiled chicken feed
- Caffeine in any form, such as coffee grounds and tea
- Junk food, chocolate, candy and gum
- Anything that expands in water such as uncooked dry foods: rice, lentils, pasta, dry beans, quinoa and oatmeal - all of these cooked are okay to feed
- Raw eggs: They can eat raw eggs and they usually will when one falls on the ground and cracks in front of them. Don't give them raw eggs though because they will peck at their freshly laid eggs and eat them.
- Processed meats – any meat modified by salting, curing, fermentation and smoking such as hot dogs, salami, balogna, ham, bacon, beef jerky. Canned and uncooked meats are also not recommended.

Foods that are toxic to chickens include:

- Avocado pits and shells, they *can* eat the avocado pulp.
- Green potato skins, they *can* eat cooked potatoes.



Dry oats



Raw eggs



Avocado peels

Mixed opinion foods:

- Citrus foods are known to lower egg production.
- Dairy, including plain yogurt, milk and cheese because they cause diarrhea.

If you grow flowers, fruit trees and vegetables around where your chickens will free range, check that you do not have any plants growing that are toxic to them. Plants toxic to chickens: foxglove, azalea, hydrangeas, night shade, holly, ferns, lupine, lobelia, yew, periwinkle, flower bulbs, oak trees, rhubarb, apricot leaves and pits.

Dust Bathing

Chickens take dust baths by rolling around in the dirt. They use their wings to toss the dirt on their back and under their wings. Cleaning themselves this way keeps off parasites such as mites, fleas and lice. It also helps condition their feathers. Sometimes it seems to be a social activity because they do it in groups and it appears to relax them. For these reasons, a dust bathing space is essential for their health and well-being.

If you want to make a designated dust bath, you can use a sand box, a plastic tub or a kiddie swimming pool filled with a mix of sand, dirt and DE (diatomaceous earth, only food grade). A fine sandy texture and six to twelve inches in depth is ideal. You will want to make sure it stays covered and dry so rain and snow don't turn it into a messy mud pit.

A dust bathing spot can also be a patch of dry dirt. If you don't provide one, after some time they will convert any area of dirt into their dust bathing space. During a period of frequent and heavy rain, our flock turned the ground under their coop into a dust bath. We also created an additional spot for them at the base of a tree in their chicken run. This was done by adding stone blocks around the tree and stacking them in a circle to create a retaining wall, then filling the gap with dirt and sand. We keep this space clean using a rake and we occasionally add more dirt because they toss some of it out when they bathe.

Our chickens have claimed additional bathing spots – under the deck, under a raised shed and other places in the woods around us. You will see that all chickens enjoy this activity.



Dust bath at base of tree

Believe it or not, chicks will innately start dust bathing a few days after they hatch! We discovered this because we built a sandbox play area in their brooder – a 16”x 36” box 6-inches deep, filled with dirt and wood ash. Chicks started dust bathing in it immediately when we introduced it to them!

How to enhance their dust bathing experience:

- Provide chicks and chickens with a few dust bathing spots
- Add DE (food grade diatomaceous earth) to help them keep parasites off
- Add dried lavender, dried lemon balm and other herbs because the chickens enjoy it, and some herbs repel parasites.
- They love ash from a wood fireplace or fire pit. Instead of ash going to waste, add it to where they normally do their dust bath. Obviously, you need to make sure there are no embers burning.

Note: Do NOT use charcoal ash, only wood ash where no chemicals were used to start the fire.



One week old chick dust bathing

Molting

Molting refers to the annual process of when chickens renew their feathers. The season can last **two to four** months and is different for every chicken. It's nature's way of having them refresh their feathers. Chickens start their first molt around **18** months old and then it happens again annually, as you approach fall and winter.



When your chickens are molting, you may see them lose a significant number of feathers. Their feathers will be falling everywhere – you will see feathers in their coop, under the coop, in the nesting boxes, where they dust bathe and wherever they free range. Sometimes it looks a bit concerning when you see the quantity of feathers being shed.

During molt, chickens typically **stop laying eggs** and **use this time to build up their nutrient reserves**. Each chicken will have a different length of time in molt. Some will start sooner, and some will start later in the season. Some chickens grow new feathers faster than others, even if they are the same breed.

To help support their feather growth you can add more protein to their diet. One way is to buy feed that is 18% protein. Besides feed, you can provide them high-protein treats such as grubs, dried crickets and dried fish. Additionally you can give them meat treats. Our chickens love to eat canned fish including sardines and tuna. (Canned fish should be labeled “in water”, **not** oil, and with **no salt or spice added**.)

Winter Care

The amount of daylight chickens receive will affect their egg laying. When they receive less than 12 hours of daylight they will lay less eggs. During winter months, some chicken owners add a light inside the coop to increase egg production. This is not really necessary, in my opinion, because it's unnatural for them. Artificially adding light at night increases egg production at the cost of potential stress, decreasing their life span. They need darkness to rest at night. It's better to facilitate an increase in egg production by adding more protein to their diet. Better yet, to get more eggs simply get more chickens!

The normal body temperature of a chicken is 105°F to 107°F (40°C to 41°C). They can withstand cold weather very well, even if temperatures fall below freezing. Chickens regulate their body temperature with their dense fluffy feathers. Breeds that do well in cold temperatures have more dense feathering and smaller combs. Therefore, choosing the appropriate breed is important. Some of these breeds include Brahma, Wyandotte, Cochin, Marans and Australorp.



Chickens don't need additional heat at night. While we think they may be freezing, they huddle together and fluff up to stay warm. Using an additional source of heat can be dangerous, coops and barns have been known to catch fire. When chickens step out in the morning, a drastic temperature change can also hurt them more. You can insulate the coop to keep the heat inside, but there should still be ventilation.

While they can get through the winter perfectly fine, it is important to slightly change their diet and feed amount. Chickens increase food intake during cold weather, which helps them get through the season. Ensure that they have plenty of feed available to them all day. We use a high protein layer feed and give them meat treats like canned fish once or twice per week. You can also feed them scratch grains and corn a few hours before sunset. Their bodies must work harder to digest corn which also heats them up.

Preparing their coop and run for winter weather is important:

- Keep moisture out of the coop by removing waterers if you have them in the coop. If you leave water inside the coop at night the chickens will be more prone to frostbite on their wattles, comb and feet from the added moisture in the air, or from spills.
- Use the “deep litter” method. This is a technique where you leave four to six inches of bedding in the coop and cover the chicken manure with a thin layer of new bedding every week. This produces natural heat that stays inside.
- If you have snow where you live, they need to have an enclosure that is fully covered and will stay dry, however ventilation is important. They can still go out in the snow if they want to, but they also need to have a dry environment.



- Use alfalfa hay in the chicken run. It will help keep the ground dry and it will give them something to forage on since they probably won't be able to in the snow.

- Face the main door of the coop and the run **south** for the most amount of sunlight.
- If you can bring electric power to the run area, purchase heated waterers. If not, you will have to bring out fresh water in the morning and again once or twice during the day. When the temperature is at or below freezing, this naturally freezes the waterers. We don't use the cup or nipple waterers in the winter because they are not heated and tend to freeze.



Lastly, have some fun with them because some chickens enjoy running in the snow. Most people make a snowman, I made a snow-chicken! Snow-rooster to be exact. I made a life size snow-rooster that looked just like our rooster Charlie. Sadly, Charlie was not impressed and destroyed my snow-rooster a few seconds after taking this picture!

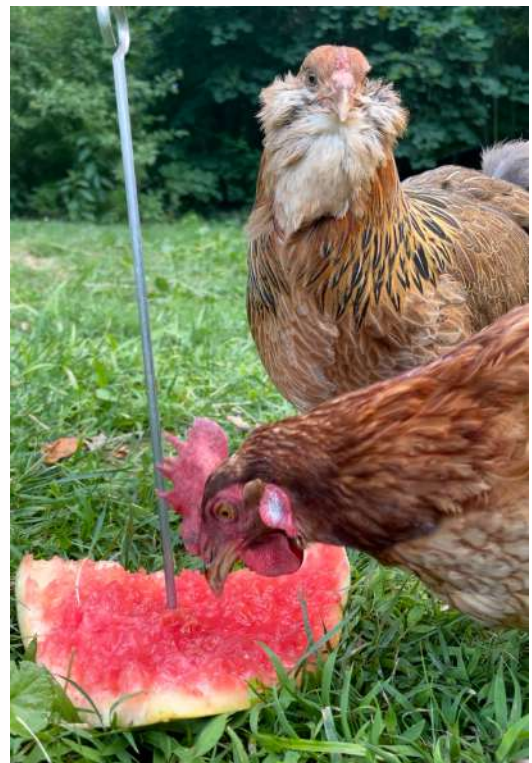
Summer Care

In hot weather you will see your chickens panting and walking around or sitting with their wings partially open – this is normal! First time chicken owners usually panic when they see this. Chickens do not have sweat glands. By panting and keeping airflow under their wings they are cooling themselves down. Breeds that do well in hot weather have larger combs which allow them to expel heat more easily.

You do have to help them out in hot weather. Be attentive because they can suffer from heat stress, overheating and they can even die in extreme weather conditions. Most importantly, keep an eye on them as you would with any animal or pet.

Here are some ways to help them in hot weather:

- In addition to regular layer feed, serve them fresh cool treats and high moisture foods like cold watermelon and cucumber. We refrigerate watermelon for at least an hour before giving it to them.
- You can give chopped fruits and vegetables, cold or frozen.
- Avoid scratch grains and cracked corn. These foods heat up their bodies because they use more energy to digest them.



- Avoid using the deep litter method in the summer, it may make the coop hotter. The coop bedding only needs to be two inches deep.
- You can give them shallow water to walk in, some chickens will use it and enjoy it. Use a container such as a kiddie pool or tray, or simply wet the ground because they like to stand on moist ground.
- On days of extreme heat, if you have a sprinkler system let them walk around in the mist.
- Ventilate the coop so that there is air flow. In addition to the ramp door and windows being open, we leave the big door open during the day. On our first coop we purchased from a store, we added two new windows with hardware cloth to create more air flow, and made covers to close the window in the wintertime.

Before



After



**Windows we added to coop using
6 inch hole saw and hardware cloth**

Chicken Behavior

One thing they love to do on sunny days is sunbathing. Chickens love to lounge in the sun, they spread their wings to relax while laying down on one side. You may observe that they do this in groups.

Year round, chickens love to forage when you let them free range. They scratch and dig for worms and all types of insects. If you have a compost pile or leaf pile, let them access it! They will do a great job in helping you to “turn over” the material.

On the contrary, if you have a manicured lawn, put up a small fence around loose mulch and your garden. Otherwise they will kick the mulch out, kick up dirt everywhere and pull out seedlings.

Chickens roost at night but they also like to perch during the day to relax. You can give them access to natural logs or wood beams. Make sure to give your flock enough places to perch during the day so that they can spread out. In the morning and evening time, they'll perch in groups and preen their feathers.

When they perch at night, it is called roosting. Most chickens like to lay their feet flat so the perches and roosts should be at least two inches wide. To avoid the risk of splinter injury, you can improve the roosts inside the coop and in the run by using a power sanding tool to make them smooth. Do not disturb them at night because it will stress them.



This may surprise you – when chickens find small snakes, small frogs and mice they have a feeding frenzy! They love to eat all types of small critters including reptiles and rodents. When one chicken finds food, the rest of the flock will chase after them trying to take that food away. It is very entertaining to watch!



Potato position

Lastly, there is the “pecking order”. Chickens show their dominance by pecking at each other throughout the day and even when they are roosting. The healthiest and most aggressive hen will usually be the flock “boss”. Sometimes their pecking looks like they are being very mean to each other, but it’s their natural behavior. Chickens sometimes peck on those that are ill or injured.

If you ever see that one chicken is being pecked at too much, to the point where they have one or more bald spots or are injured, isolate that chicken from the flock. Check that they are healthy, give them some time to grow back their feathers and heal. If you see that one chicken in particular is being a bully and violent to the rest of the flock, remove them from the flock for a few days. When you re-introduce that chicken, their behavior should reset.



Mouse

When chickens are not eating, laying, roosting, foraging, dust bathing or sunbathing they simply hang out in a funny position called “the potato position”, a term chicken owners use to describe this.

Growing Your Flock

Over time you may decide to increase the number of chickens in your flock. Or perhaps you lose some and decide to replace them. Introducing new chickens should always be done gradually. There are two reasons: First, they can physically hurt new members of the flock because of their pecking order. Second, for health reasons.

When you start to integrate the new arrivals, have multiple feeders and waterers spread out because the existing flock will scare off the new chickens from the feeders and waterers. Otherwise, the new chickens may find it difficult to access food and water.



Have multiple roosting spots for the same reason. The existing chickens will initially scare them away from sitting with them, or they will peck at them and chase them away. To avoid this, set up several roosting bars. After a few hours or a few days they will get along fine.

Adding New Chicks

When you purchase or raise chicks, they should be kept indoors under a heat lamp until they are ready to go outside (unless they are raised the natural way with a broody hen). The best time to let chicks outside is when they have grown their feathers, or “feathered out”, and when the outdoor temperature is at least 50° F (10° C). If the temperature is still cold or freezing at night, they are safer inside.

You can start introducing chicks to your existing flock after the chicks are six to eight weeks old. To safely integrate chicks with an existing flock, we let them co-mingle through a fence for up to two weeks so that they all see each other, but can't be pecked at. Once they are all familiar with each other we allow them to free range in the same space for few hours every day.

Integrate them gradually and watch them closely, keeping an eye on their behavior. If it seems that the chicks are okay in the same space, then let them be. If not, put the chicks back in their own fenced area or brooder until ready.

After a few weeks of them being together during the daytime, manually place the chicks in the coop on a roost, but only at after dark. Do this for a few nights until they finally go in on their own with the rest of the flock.

Adding New Hens and Roosters:

For health reasons, do not mix new mature chickens into your existing flock immediately because you don't know if they have any illnesses that can spread. Chickens are very good at not showing signs of an illness for several weeks. If they have health issues, it may take two to three weeks for signs to show.

Quarantine your new chickens for a few weeks in a separate pen or enclosure. Once you see that they are fine, allow them to free range with your flock daily. Then when you see they are ready to be integrated, place them in the chicken coop on a roost at night, once the others are starting to fall asleep or are already sleeping. Let all of them wake up together in the coop the next morning. Most chicken owners use this technique and this method has proven to work for us on several occasions.

To our surprise, some of our newer hens took over the dominant "alpha" role in the pecking order because of their breed type. Our Wyandotte hens below were late additions yet they are the flock bosses now!

Our Wyandotte hens



Chloe & Goldie

Roosters

Chicken owners often refer to a rooster as a “roo.” Here are some reasons why you might want to have a roo in your flock:

- Breeding
- Keep your hens happy by mating, this seems to increase egg production.
- They help protect the hens from predators by crowing and using their spurs.
- Help to keep the peace amongst the flock. If there is a lot of pecking going on, it may decrease with a good rooster present.
- They are fascinating! They have beautiful feathers and may be very ornate.



How many hens to have per rooster depends on the breed, the size of flock and the size of their space. A ratio of **seven to twelve hens per rooster is usually enough**. If you have more than one rooster, then you'll also need more space for them. When you have multiple roosters in a smaller area, they may fight each other. Some people think it's impossible to have more than one rooster in one space, however if the roosters mature together as they grow up then they usually don't fight. When you provide a larger space, it's easier to have more than one.

Roosters Like to Mate

Roosters start mating between the age of three to four months old. They will mate with different hens throughout the day, and they will do it often. One rooster can mate **30 times per day or more**.

A fascinating thing to observe is the rooster “courtship dance” that they perform around hens to get attention. The rooster will circle around the hen with his wings dropped towards the ground while making sounds and stomping his feet. The hen will either welcome him or run away. At other times the rooster will simply run after a hen and jump on her, then use his beak to pull at the back of her head feathers.

A rooster mates with a hen by jumping on top of her. She will usually try to get away. The rooster will usually pin the hen to the ground with his talons and pull at the back of the hens head with their beak. They mate by having their cloacas touch and the process only lasts a few seconds. The rooster transfers sperm to the hen, and the next egg laid by the hen has the potential to be a fertilized egg.

Some roosters are more aggressive when they mate and this causes hens to lose feathers on their wings and the back of the heads. A significant loss of feathers on one or more hens can be a sign that you don't have enough hens for your rooster or his talons need to be trimmed.

Rooster Behavior

Some roosters have been known to become aggressive with their owners. This happens sometimes when they see you picking up or handling hens and chicks. They will flap their wings towards you and they may try to peck at you or jump on you. This is why some people say "all roosters are mean." It's simply their way of being protective.

Never turn your back to a rooster when they show you aggressive behavior because it may invite them to attack you. Instead, simply hold your ground and keep your eye on them. It helps to walk with a stick to deter them from attacking.

If you ever have a situation of a rooster *repeatedly* being aggressive towards you, the easiest thing to do is "re-home" him. This means finding him a new home. Some chicken owners also call this situation "time for chicken dinner". If you hatch chicks and later realize you have too many roosters in your flock, it's equally a good idea to re-home some.

Some roosters are very friendly and docile. Their temperament may depend on the breed. Mia, the rooster I'm holding here for example is extremely calm and sweet. Most roosters identify who their owner and caretakers are. Our roosters follow us around and enjoy being hand fed treats. As long as you are friendly towards them and give them their space, they can get along well.



Mia, barnyard mix rooster

Hens

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Egg Laying

Many new chicken owners often wonder "when are my pullets going to start laying?" Most breeds start laying at around five months old, while some breeds don't start until eight months old. **Every breed is different**, so check online to see when your breeds are supposed to start laying.

When a pullet is ready to lay, she will go to a nesting box on her own. If her favorite box is occupied by another hen, she may wait until that space is vacant. Other times, she will go in one box for a while, then get up and move to a different box.

This may seem obvious, but you want your hens to always lay their eggs in the nesting boxes. When they don't lay in their nesting boxes, they lay in random places. It can be dangerous for them to lay outside because this attracts predators, especially snakes.

In the beginning we would let our hens free range all day. After a few months, as they started exploring a wider area of the property we noticed the egg production numbers drop. We later discovered our chickens had stashed almost 70 eggs over several weeks – in four separate piles around the property – and one of these egg piles was an acre away!

We discovered the first large egg stash one night when our hen, Sophia, was missing. We found her well after dark tucked away in a pile of leaves under our deck sitting on the eggs, silent. If we had not found her (because she was broody and wanted to hatch them) a predator would have easily gotten to her in the night, as we're surrounded by woods.



Sophia, broody hen



If your hens are at an egg laying age and you let them free range early in the day in an unrestricted space, it is likely that they will have an egg stash somewhere.

Can you train your hens to lay eggs in the nesting box? YES! Simply place fake eggs where you want them to lay, in this case one or two in each nesting box. Ceramic eggs can be purchased from most stores that sell chicken supplies. You can even use golf balls as a substitute. When they see fake eggs or anything similar, hens are more likely to lay there. We always leave fake eggs in the nesting box. Since the incident with Sophia, using them has helped us avoid stray egg piles. Keeping our flock in their fenced in the run until mid afternoon has completely solved it.



Here are some ways to help your hens lay in their nesting boxes:

- Give them nesting boxes that are appealing – they should be clean and dry with soft bedding. Nesting boxes should give them a private, covered and individual compartmentalized space. They should still have natural light coming in.
- Give them plenty of roosting space at night so that they are refreshed and relaxed. Chickens get stressed out from not enough roosting space which affects their ability to lay.

If your nesting boxes are attached to the coop or inside the coop, do not allow your chickens to sleep in the boxes at night because they will poop in them. If you see droppings in the nesting area when you're collect eggs, this may be a sign that one or more of your chickens is sleeping there. To stop this, check the coop after dark. If you see chickens sleeping and they are not on the roost, move them and place them on a roost.

If you have a nesting box with a lid, always open the lid slowly during the day so you don't startle a laying hen. Otherwise they usually get up and walk away and return at a later time to finish laying. Hens can take half an hour or longer to finish laying an egg. They sometimes make sounds during this time and may cluck very loud at you or other chickens.

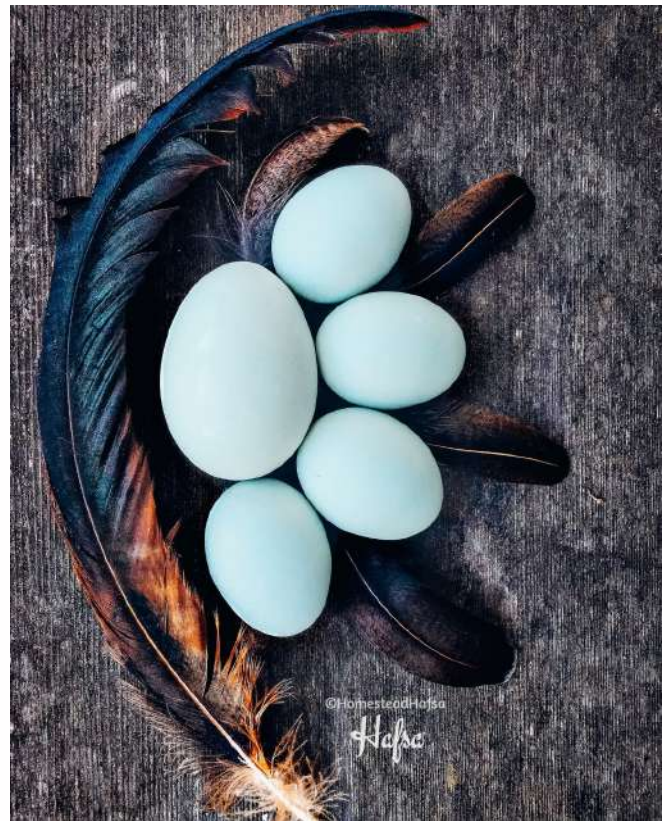
At the end of the egg laying process, the egg has a clear protective layer on top called the bloom. Until this layer is dry, it's best not to touch the egg immediately after it was laid. The clear coating seals the eggshell, prevents bacteria from getting inside and reduces moisture loss from the egg. This bloom allows freshly laid eggs to sit out for a few weeks, if they are unwashed and kept in room temperature. Always wash your eggs right before cooking them.

Imperfect Eggs

Sometimes eggs come out in funny sizes. When pullets start laying, their first few eggs are usually very small and may have slight imperfections such as rough texture and uneven color. Occasionally you will get a "fairy egg" or "fart egg". This refers to when chickens lay an egg with no yolk. They are often called the "oops" eggs.

Alternatively, once in a while you get a jumbo "double yolker" egg, which has two yolks. This occurs when a chicken releases two yolks into the same shell, and it usually happens with younger chickens. In both cases they are safe to eat. There are also times where you might find an egg within another egg!

The eggs pictured on the right are all from our Easter Egger hens. The largest egg is a double yoker. We happened to be near the coop and heard the hen who laid this large egg scream as she laid it. We ran over thinking something had attacked her, but then found this giant egg!



Double yoker on the left

Once in a while you will get a deformed egg. This can be a sign of a deficiency in or too much of something in their diet. Other times it is simply that a pullet recently started laying and her body is adjusting.

Some deformed egg types and their causes include:

- Calcium deposits: there is too much calcium in their diet.
- Soft eggshell: possible heat stress and older hen. Add a small amount of apple cider vinegar to their water for a few days to help with soft shells.
- Thin or no eggshell: there isn't enough calcium in their diet. Add Morning Bird liquid calcium to their water and oyster shells to their diet.
- Hole in eggshell: chicken pecked at it or their toe hit it.

When you buy eggs from a store, they all look similar because the imperfect eggs are not sold. When you own chickens, you see the imperfections. It's normal to get a weird looking egg on occasion. However, if you see that a chicken is consistently laying an abnormal egg or most of your hens are, then do your research as soon as possible to find out what is causing it. There are many types of egg deformities.



Shell on the side



Extra shell

Egg Test

If you find an egg stash outside and you're not sure of how old the eggs are, there is an easy way to test if they are still edible. This is called the "float test." Gently put the eggs in a large bowl of water. If the eggs sink, they are okay to eat. If they float, they are too old. This method does not work 100% of the time.



When we found the stash of around 70 eggs, we used this method. While majority of the eggs passed the test, we did not need to consume 70 eggs ourselves. We certainly weren't going to eat or give away eggs that had been outside for a few weeks or more. Instead, we boiled all the eggs over a few days and fed them back to the chickens. Chickens can eat cooked eggs? Yes!

When you have a surplus of eggs, a great option is to boil them and feed them back to your flock. Cooked eggs are healthy for them because they are high in protein, vitamin A, vitamin E and beta carotene. When chickens are going through their annual molt, feeding them mashed cooked eggs helps them to replenish their nutrients and grow back beautiful feathers. You can also add fresh or dried herbs like oregano, thyme, rosemary, mint, lemon balm, chives and green onions.

Eggshells

A chapter about eggshells? YES! Save your eggshells when you cook eggs because they can be re-used in a few ways. Thoroughly wash the empty shells and let them dry, then crush into small pieces. You can also bake the shells in an oven to dry and sanitize them by killing any bacteria on them.

The first way to re-use them is to feed back to your chickens! Is this weird? No, because they are a fantastic source of calcium for your hens and this helps them to lay eggs with hard eggshells. You can sprinkle the crushed shells on the ground in the chicken run. It's important that they are crushed because you don't want your chickens to start pecking at their own eggs in the coop to eat them.



Crushed Shells



Ground Shells

Another way to re-use eggshells is in your garden. We use an electric spice or coffee grinder to turn the shells into a fine powder. We sprinkle ground eggshells on top of the soil, then rake it in deeper when we are planting seeds or transplanting seedlings. Eggshells in your garden are a great source of calcium, act a natural fertilizer and as an organic pest control.

Broody Hen

A broody hen is one that has decided to incubate a clutch of eggs. Basically, her maternal instincts have kicked in. She will sit on the eggs day and night until they hatch. If they are not fertilized by a rooster, she will still sit there expecting them to hatch, which is **not a healthy situation**.

A hen can “go broody” at any time and you may have multiple hens go broody simultaneously. **When a hen is broody, she will stop laying eggs during this time**, get feisty and peck at you when you go near her to collect the eggs she is sitting on. This is normal as she’s a little possessive.



If you have fertilized eggs and a broody hen, but you don't want to hatch chicks at the moment, you must help her break her broodiness. First, remove the fake eggs. Next, remove eggs every day as early as possible so that she cannot sit on them. If the broody behavior is extreme, **remove her from the flock for a few days and keep her isolated in a separate pen to help her break her broody behavior**. When they do not have any eggs to sit on for a few days, they naturally go back to their normal egg laying routine.

Now if you want to hatch chicks but you don't have a rooster to fertilize the eggs, you can buy hatching eggs and swap them out. There are many places online and on social media sites like Facebook and Instagram where you can find hatching eggs for sale. You can place hatching eggs (of any breed) underneath a broody hen, she will sit on them for **21** days or until they hatch.

Broody Hen Hatching Chicks

Your broody hen will require some monitoring during the 21-days it takes to incubate the eggs. It's important you make sure that she gets up daily to drink water, eat, to poop and dust bathe. At times, a broody hen will not get up to eat and drink unless you force them to. Simply pick them up and place them near their feed and water. They will start eating, drinking, they'll do their business, get some exercise and then they'll rush back to their eggs. Keep a close eye on her daily to check that she is in good health. Broody hens are more prone to mite and lice infestations because they stay in the same place for several weeks.



Chicks few days old

A great idea is to have her incubate the eggs some place safe outside of the coop, such as a separate pen with feed and water available. You can use a small box about the same size as a nesting box, cut out one wall and fill it with bedding, and place this box with the fertilized or hatching eggs in the pen and she'll take her place on them.

There is another benefit to this separate space: if your broody hen sits on the eggs in a nesting box with the other hens, she'll keep that box occupied for 21-days until the eggs hatch and this may create a shortage of available nesting boxes for the others. Some of the hens may need or want that same box to lay eggs in. You may observe that some hens have their favorite box and always gravitate to the same spot to lay their eggs. If she is occupying someone else's favorite box, this may create a conflict. The broody hen may get violent with the other hens or they may try to attack her.

After a week of incubation, you can confirm if an egg has an embryo developing inside by "candling" it. In a dark room, hold a bright flashlight under the egg to illuminate the inside. If an embryo is forming you will see the outline.

When the chicks start to hatch on the 21st day, it's better not to assist in the hatching process! Let the chicks make their exit from the eggshell on their own. If the chick is fully out of the egg but part of the shell is still stuck, you can delicately and carefully remove the piece of shell. Most of the time there is no intervention required. It is important to keep an eye on them daily because in rare instances, some hens will attack their own newly hatched chicks.

The mother hen will begin to care for the newly hatched chicks by feeding them and keeping them warm. She will also demonstrate foraging for food and preening feathers. Soon you'll see the chicks doing the same. Having a broody hen hatch her own chicks is – in our opinion – easier and better than using an incubator. It's also a delightfully memorable experience!



Newly hatched chicks

We used our “chick coop” – a hybrid brooder and run – that became the nursery. It is raised yet low to the ground and has a door that works as a ramp for the chicks to easily come in and out of. If you have a dog pen, it can be used for the same purpose.

Chicks hatched naturally grow and develop much faster than chicks hatched in an incubator. They will be very playful with their mother hen, jumping on top of her and going for a ride! They all huddle underneath her throughout the day and evening to stay warm until they are ready for outdoor temperatures.

We keep the mother hen and her chicks away from the rest of the flock for a month or more because other hens may try to peck at them. The mother hen may attack the other chickens if she feels that her chicks are in danger.

Chicks can start going out in the grass in their first few days along with the mother hen, as long as it is over 50°F. This way, chicks start learning to forage immediately. Their mother hen will usually let the chicks be independent after six weeks. She will return to the flock on her own and start laying eggs again.

At six weeks old chicks can start to free range on their own, but you should still supervise them. Luckily by now they instinctively know to return to their brooder or designated space.

When they are eight weeks old we gradually introduce them to the flock using the technique covered in the chapter on growing your flock.



Chicken Health

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Chicken Illness and Injury

Disclaimer: Always consult with a veterinary care professional when you have an ill or injured chicken. The information provided here is based on my personal experience and online information. The purpose is to raise your awareness on chicken illnesses. Information provided is not guaranteed to prevent, cure or fully treat an illness or disease. Consult a professional when possible.

Can you take a chicken to a vet? YES! Some people are surprised at this answer. You may have to call a few veterinary clinics to check if they offer avian veterinary services. When you take your chicken to the vet, you'll surprise some people in the waiting room – while they are sitting with their dog or cat, you'll have a chicken!

Chickens can hide their illnesses for a while, but there are several signs that will let you know that they are not in good health.

- Discolored comb and/or wattles
- Pale face around the eyes
- Lethargic behavior
- Not eating and/or not drinking water
- Isolating themselves from the flock
- Discolored droppings
- Blood or mucus in droppings
- Diarrhea
- Discharge from eyes, nose or mouth
- Raspy sounding voice
- Respiratory distress / abnormal breathing
- Panting when the weather is *not* hot
- Not foraging
- Standing on one foot / limping
- Not wanting to roost at night
- Not laying eggs
- Repeatedly laying abnormal eggs
- Abdomen looks or feels different
- Swollen or discolored vent
- Visible mites or lice in coop or on their feathers
- Empty crop (when you feel that their crop is not filling up after eating)



**Peggy, broody hen
with mite infestation**

Some home remedies work well in certain situations, yet it's best to consult a veterinarian. There are also services where you can speak to a vet online or over the phone for an initial diagnosis before going to a clinic. Click [here](#) for the website we use. To find a local accredited veterinarian, check the [USDA website](#).



Patricia, ill hen at vet clinic

When you have an ill chicken, remove them from the flock immediately. They may have something that is contagious, and they are more prone to being pecked at by the others. Keep them in a safe isolated space where you can keep an eye on them.

It's important to have a designated chicken hospital or quarantine space for when you have ill or injured chickens. In addition to our chick brooder/coop we built, we use a 36" looped wire collapsible dog kennel. You can place it in your garage or basement. Make sure it is kept in a safe space. Line it with the same bedding you use in your chicken coop and hang a small waterer and feeder inside.



If you ever have a chicken with a flesh wound separate that chicken from the flock. Here is what you can immediately do to help them:

- Gently wash the wound with sterile saline solution, diluted **Betadine** or with “hypochlorous acid” solution.
- If the bleeding does not stop, apply coagulant powder, “**styptic powder**”, or use clean gauze and apply pressure until the bleeding stops. You can use the same powder used for cats and dogs, readily available at pet supply stores.
- Apply poultry antibiotic ointment to the wound.
- Do not apply anything to your chicken that has the suffix “**-caine**”, such as benzocaine.
- Keep a close eye on them for signs of infection. Wait until they are fully healed to mix them back with the flock.
- See first aid kit supplies in the next chapter.

If you feel that an injury is not something that you can treat, take them to your veterinarian. Chickens can heal from small and large flesh wounds, although it may take a few weeks.

With any chicken illness, isolate the chick or chicken immediately. Majority of chicken illnesses can be prevented by providing a healthy environment and they can be treated at home or with prescribed antibiotics from a veterinarian. All situations listed below can lead to death if not treated promptly. It is important to respond immediately!

PASTY BUTT

Symptoms: Droppings stuck to a chick's or chicken's vent, blocking waste elimination

Cause: Stress and temperature fluctuations

Prevention: Provide a healthy clean environment, check their vent often for blockage

Treatment: Using warm water and a towel gently wipe off droppings

FLY STRIKE

Symptoms: Fly maggots living inside the vent and/or feeding on exterior of vent area

Cause: Chicken with pasty butt that has flies lay their eggs around it's vent

Prevention: Inspect their vent area often especially in hot weather

Treatment: Give the chicken a warm bath with Epson salt, delicately remove the dried poop and maggots with a tweezer over a few days until the maggots are all gone

COCCIDIOSIS

Symptoms: Lethargic, pale comb, droppings are discolored and have blood in them

Cause: When a chicken ingests droppings, coccidia parasite attaches itself to the chicken's intestinal lining, damaging it's intestinal tract, prevents absorption of nutrients

Prevention: Provide a clean environment and practice biosecurity

Treatment: Use cocci-care or an antibiotic prescribed by veterinarian

FATTY LIVER HEMORRHAGIC SYNDROME

Symptoms: Overweight chicken, drop in egg production

Cause: Feeding too many treats and carbohydrates such as corn and bread creates an excessive amount of fat in their liver

Prevention: Provide quality chicken feed and only 10% treats

Treatment: Change the balance of carbohydrates and fat in their diet.

EYP or EGG YOLK PERITONITIS

Symptoms: Abdominal and vent swelling, weight loss, lethargy, respiratory distress

Cause: When a developing egg is ruptured inside a laying hen and the yolk is deposited within her body cavity

Prevention: None, although overweight hens may be more susceptible to it

Treatment: Take to a veterinarian immediately. They will treat with antibiotics.

ROT GUT

Symptoms: Chick with diarrhea that has a rotten odor

Cause: Overcrowding and unclean environment

Prevention: Provide ample space and a clean brooder

Treatment: Antibiotic prescribed by veterinarian

INFECTIOUS BRONCHITIS or CHICKEN COLD

Symptoms: Nasal discharge, gasping, coughing and sneezing

Cause: Lack of or poor biosecurity, unclean brooder

Prevention: Practice biosecurity and provide a clean brooder

Treatment: Antibiotic prescribed by veterinarian or antimicrobial therapy

SOUR CROP

Symptoms: Crop feels squishy and does not empty at night, food inside the crop ferments and turns into a yeast infection, chicken stops eating

Cause: Disruption of normal bacteria that inhabits the crop and difficulty digesting

Prevention: Always provide chickens with access to fresh clean water daily, grit to help them digest their food and regularly check their crop

Treatment: Provide probiotics or add a tiny amount of raw unfiltered apple cider vinegar to another waterer for a few days

MITE or LICE INFESTATION

Symptoms: pale comb and face, lethargic, loss of appetite, anemic, feather loss, visible parasites near vent, under feathers and wings

Cause: Prevalent in warm weather and when chickens do not dust bathe often

Prevention: Allow chickens access to a dust bath daily. Use DE in the coop, run and dust bath areas. Deep clean coop every six months and spray for parasite killer.

Treatment: Spray poultry parasite killer under wings. Give the chicken a warm bath in soapy water using a drop of dish soap. Give two more baths in plain warm water and let it soak for 10 minutes. Dry with a towel and hairdryer on low setting.

WORMS

Symptoms: Lethargic, not eating, visible grey or white tiny worms in poop

Cause: Happens in spring and summer from ingesting them

Prevention: Keep the run dry and not wet or muddy, keep the grass cut short, allow them to free range in different areas, replace coop bedding with fresh dry bedding

Treatment: Natural remedies - add crushed garlic to their water or a small amount of raw unfiltered apple cider vinegar twice per year. Antibiotics can be prescribed by a veterinarian.

BUMBLEFOOT

Symptoms: Infection on a chicken's foot characterized by swelling and redness

Cause: Staph infection from the bacteria staphylococcus, common inside coops

Prevention: Provide clean dry bedding, low roosts and sand down any rough edges

Treatment: Do not cut, soak infected area in warm water and Epsom salt. Apply antimicrobial poultry spray and poultry antibiotic or Neosporin without pain reliever.

VENT GLEET

Symptoms: chicken's cloaca inflamed, yellowish-white discharge from vent area which sticks to the feathers on their butt, vent area might be red

Causes: PH imbalance, fungal infection including yeast, bacterial infection, stress, hormones, protozoa or other parasites

Prevention: Healthy balanced diet, the correct feed for it's age, probiotics every few months, clean water daily and grit

Treatment: Give the chicken a warm bath with Epsom salt for a few days and dry off well, provide fresh water daily with probiotics, grit, apply anti-fungal cream on vent daily and trim vent feathers very carefully, not too close to it's skin

PROLAPSED VENT:

Symptoms: hen's vent is inverted and pushed outside it's body

Cause: hens that start laying too early or lay too large an egg

Prevention: keep hens from becoming overweight and limit light at night

Treatment: Soak her bottom in warm water and apply antimicrobial spray or ointment

MUSHY CHICK DISEASE:

Symptoms: Navel infection, unabsorbed yolk sac, dehydration and a putrid smell

Cause: Chick's navel not healing and becoming inflamed with bacteria

Prevention: Careful control of incubator temperature, humidity and sanitizing it

Treatment: None, infected chicks usually die within a few days of hatching

ASPERGILLOSIS or BROODER PNEUMONIA:

Symptoms: Chicks with respiratory distress

Cause: Unclean or wet brooder that has mold

Prevention: Keep the brooder clean and dry

Treatment: Most treatments are ineffective. Find the source of the mold and remove it immediately.

E-COLI

Symptoms: Fever, lethargic behavior, trouble breathing, diarrhea, coughing

Cause: Triggered by immune suppression, poor environment, fecal contamination

Prevention: Clean brooder, avoid overcrowding and stress

Treatment: Antibiotic prescribed by veterinarian however it has a high death rate in chicks.

SALMONELLA

Symptoms: Weak, lethargic, loose yellow or green droppings, purplish combs and wattles, drop in egg production, increased thirst, not eating, weight lost

Cause: Spread through mouse droppings in water, feed, damp soil or bedding/litter

Prevention: Provide clean bedding, water, feed and run

Treatment: Antibacterial medication prescribed by veterinarian

FOWLPOX

Symptoms: Lesions and thick dark scabs usually on the comb, wattles and face

Cause: The avian pox virus transmitted through biting insects

Prevention: Practice biosecurity, quarantine new chickens and limit mosquitoes

Treatment: Isolate the infected chicken(s) immediately because it is highly contagious. There is no cure, but there is treatment for the symptoms. Visit your veterinarian for a prescription.

EGG-BOUND

Symptoms: Hen has an egg stuck inside of her

Cause: Too much protein in a hen's diet, stress, internal worms, low quality feed, dehydration or weakness from a recent illness, large or double yolked egg too large to pass through, genetics or a calcium deficiency

Prevention: Use a commercial layer feed and limit treats to 10-15% of their diet

Treatment: Act immediately, put her in a warm bath with Epsom salt and very gently help her push the egg out otherwise she can die within 24 hours. There are videos on YouTube that describe this process in detail.

MAREKS DISEASE

Symptoms: Inflammation and tumors in the nerves, spinal column, and brain; paralysis in the legs, or wings or head tremors

Cause: Very common disease in chickens caused by herpes virus

Prevention: Vaccination when chicks are a day old can help

Treatment: Day old chicks can be vaccinated for it. Death is sometimes sudden.

This is a list of the most common chicken illnesses with brief descriptions. More information is available online. Always consult an avian veterinarian.

References: backyardpoultry.iamcountryside.com, tractorsupply.com, southernstates.com, freedomrangerhatchery.com, the-chicken-chick.com, chickenvet.co.uk, mypetchicken.com, poultryworld.net, thehappychickencoop.com

Personal Experiences

Here are a few chicken health situations we experienced and how we responded.

Peggy

Our nesting boxes and coop had a mite infestation. We had to empty out the coop and do a deep cleaning. Peggy, our broody hen, and her unhatched eggs were covered in mites with only two days remaining before the eggs were scheduled to hatch. The day before this discovery she looked perfectly healthy. Now she had looked visibly ill and near death. She had moved off of her eggs and out of the nesting box, we found her sitting near the fence.



We removed the eggs immediately and used a compressed air can to blow the mites off. Peggy looked lifeless and pale. She had lost all color in her face, comb and wattles and she had no energy to eat or drink. We sprayed a small amount of diluted Permethrin under her wings. This is the same poultry parasite killer we use on our coops. After a few hours we gave her three rounds of warm baths in a small plastic tub, each round with fresh water and soap. The tub is a cat litterbox our cat never used, it was kept as a spare. We used warm water with a small squirt of Dawn dish soap because it's known to be safe for use on birds.



The first two baths were to flush out the pests and clean off the Permethrin. With the third round we let her soak in the water for at least 10 min, without soap. We were making sure to keep her face well above the water at all times. Peggy was calm and showed zero resistance. In fact, she appeared to enjoy it and looked very relaxed. We dried her feathers with a few small towels and used a hairdryer on the lowest setting to completely dry her off.

Next, we placed her back on the eggs in the clean nesting box and she stayed on them. However, she wouldn't get up to eat or drink on her own. Several times during the day, we used a large poultry syringe to gently put water on her beak and hand fed her mash feed. Luckily, she was receptive to drinking and eating this way. This hand feeding process continued for the next two days, and Peggy showed great signs of recovery as the color began to return to her face.

As soon as her chicks started to hatch, her energy level came right back to normal. She was excited to be a mother hen! For the next two months we watched her joy and enthusiasm in caring for her chicks. Today Peggy is doing better than ever!



Peggy and her chicks

Patricia

This is our oldest hen, Patricia. One day we noticed that she was a bit aloof from the flock. Her comb and wattles were discolored, she was lethargic, not eating or drinking and had diarrhea. Using a syringe, we immediately hand fed her water mixed with electrolytes. A few hours later, the redness in her comb and wattles returned and her energy level improved. Keeping an eye on her over the next day revealed that she still had severe diarrhea.



We took her to our veterinarian. Doing an analysis on her droppings revealed she had a case of worms. For the next two weeks, we gave her antibiotics and kept her isolated. As her condition improved we re-introduced her to the flock. However, her energy level was never the same as it was before and she completely stopped laying.

Months later, one day we found Patricia sitting alone and clearly distanced from the flock. She again looked ill and couldn't stand up. We isolated her from the other hens and kept her in our "chicken hospital" spare coop. The next morning we treated her to a warm bath and dried her off. She still wasn't drinking or eating feed on her own so we hand fed her more electrolytes and treated her to boiled mashed eggs mixed with fresh herbs - oregano, lavender, thyme, mint and green onion. She was eating it all!

In the following days as Patricia's energy improved, we gave her treats such as watermelon and chopped vegetables. She was also eating her mash feed we mixed with water to make sure she is hydrated. She would sit in the grass most of the day and she looked much more alert than before. Within a week she was gaining weight.

Over the next three weeks, we noticed she didn't want to roost at night. Instead she would sleep on the bedding of the coop floor. We knew Patricia was still recovering. On the fourth week, she finally started roosting on her own. Her energy level, weight and alertness improved enough to be re-integrated with the others. After nearly a month of isolation, one night we reintroduced her to the flock — we placed her on a roost in the big coop while the rest of the chickens were asleep. The next day they all woke up together and Patricia looked completely normal, happy to be with her friends!

Patricia

Day 1 Morning



Day 1 Evening



Day 2



Day 3



Day 7



After 1 month



Penelope

A few months ago, Penelope, one of our Easter Egger hens, started limping. She was keeping her right leg raised and wouldn't put it down. We examined her legs and feet and there were no visible signs of infection or injury. We kept her in a kennel for 10 days to keep her from walking too much and to prevent her from jumping on a high perch. By not allowing her to exert herself and limiting her free range activities, luckily, she healed completely.



Easter Egger Hen
Penelope

Health Supplies

Supplies to have on hand:

Electrolytes & probiotics for stress, lethargy or heat stress

- Sav-A-Chick electrolytes <https://amzn.to/3B183md>
- Sav-A-Chick probiotics <https://amzn.to/3iYgXuy>
- Rooster Booster electrolytes, probiotics and vitamins for older chickens bit.ly/3sx1kNK

Syringes for orally administering electrolytes, nutrients and medications

- Large syringes <https://amzn.to/3sF9mnW>
- Small syringes <https://amzn.to/3k9io8L>

Medications

- Cocci Care - prevents coccidiosis <http://bit.ly/3k7B2xU>
- Corid - treats coccidiosis (when you see blood in poop) add to water for 5 days <http://amzn.to/3bjDssN>
- VetRX - treats respiratory infection. Warm the bottle in hot water with the top open to release vapors. Wear gloves and apply on comb, wattles, feet and under their wings. <https://amzn.to/3k62snS>
- Terramycin - broad spectrum antibiotic used to treat bacterial infections on and around their eyes bit.ly/2XI5QxF

Wound treatments

- Vetericyn Plus - antimicrobial poultry spray to clean pecking wounds, cuts, frostbite and sores. Non-toxic relief without stinging or burning. <https://amzn.to/3z4GFTB>
- Blu Kote - wound spray for treatment of surface wounds, abrasions, and ringworm. Antiseptic, fast-drying and highly effective against pus-producing bacteria and common fungus infections. <https://amzn.to/3mhHIMD>
- Hen healer <https://amzn.to/2XGrDps>
- Wound dust <https://amzn.to/2UA4Udu>
- Neosporin without pain relief
- Saline <https://amzn.to/2W9xWAU>

Supplies to have on hand:

Bandages

- Vet wrap <https://amzn.to/2W6AoZ1>
- Butterfly bandage <https://amzn.to/3mw7jl9>
- Gauze <https://amzn.to/3yYrTxI>
- Medical tape

Calcium deficiency

- Liquid calcium for poultry <https://amzn.to/3su00eA>

Mites & lice prevention and treatment

- Food grade DE (diatomaceous earth) for the coop and dust bath <https://amzn.to/3mjo42G>
- Permethrin II concentrate parasite killer for the coop and chickens <https://amzn.to/3mj7ekC>

Other supplies

- Organic raw unfiltered apple cider vinegar for deworming twice per year
- Powdered baby bird formula for hand feeding <https://amzn.to/3kjke8j>
- Epsom salt for soaking in warm bath
- Plastic tub or clean plastic litter box for chicken baths
- Disposable gloves



Closing

It is said that “Words don’t teach, only experience can teach”. This is true with all life experiences, and I found this to be true even with keeping chickens. No matter how many videos you watch or how much you read, in the end we realize experience is the best teacher. At the same time, it’s nice to have some information ahead of time to be prepared. After reading everything I’ve shared, I truly hope you feel informed.

It’s a joy to raise backyard chickens! They provide love and entertainment as well as fresh eggs. If you have already started the chicken keeping journey then you know what I’m talking about, like the “eggitement” of seeing your chickens in the morning when they come out to greet you! If you are about to get started or still considering getting chickens, I promise you that you’ll be EGGCITED FOR CHICKENS!

Thank you for allowing me to share this with you.

Sincerely,
Hafsa

Please share www.eggcitedforchickens.com with anyone you know who may benefit from this ebook. If you are interested in learning more, I also have a course and review your setup with you, one on one via video call. Send me a DM on Instagram [@homesteadhafsa](https://www.instagram.com/homesteadhafsa) for more info.

Congratulations on getting this ebook from the Off-Grid Homestead Bundle!

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Win a variety of prizes throughout the year:

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