

# KEEPING CHICKENS

## The Ultimate Guide

Getting Started • Housing & Accessories • Feeding  
Diseases: Causes & Treatments • Layer & Broiler Management



<b>Benefits Of Keeping Chickens</b>	<b>1</b>
<b>Building A Backyard Chicken Coop</b>	<b>2</b>
<b>Building Chicken Nesting Boxes</b>	<b>4</b>
<b>BumbleFoot</b>	<b>5</b>
<b>Chicken Feeding Worries</b>	<b>6</b>
<b>Chicken Fencing That Will Save You Money</b>	<b>7</b>
<b>Chicken Parasites: Causes and Treatments</b>	<b>8</b>
Common Causes of Parasitic Infestation in Chickens	8
Common Chicken Parasites and Treatment	8
<b>Chicken Sour Crop: Prevention and Treatment</b>	<b>9</b>
Signs and Symptoms	9
Prevention	10
Treatment	10
<b>Getting Started: The Pecking Order</b>	<b>10</b>
Hens & Roosters	11
The Hen House	11
The Bigger, The Better	11
Settling Down	11
<b>Keeping Chickens as Pets</b>	<b>11</b>
<b>Keeping Chickens for Egg Production</b>	<b>12</b>
Factors That May Affect Egg Production	13
<b>Keeping Chickens for Meat</b>	<b>14</b>
<b>Keeping Chickens Healthy</b>	<b>15</b>
Provide Them with The Perfect Environment	15
Protect Them From Predators	15
Follow The Proper Feeding and Watering Techniques	15
Give Them Space to Move	16
<b>Keeping Chickens in the City</b>	<b>16</b>
<b>Keeping Chickens Warm in Winter</b>	<b>17</b>
<b>Keeping Chickens from Eating or Breaking Their Eggs</b>	<b>18</b>

<b>Producing High-Quality Chickens</b>	<b>19</b>
<b>Protecting Chickens from Predators</b>	<b>20</b>
<b>What Do Chickens Need to Survive and Thrive</b>	<b>21</b>

## Benefits Of Keeping Chickens

If you have decided to raise chickens or are currently keeping some in your backyard, familiarizing yourself with the benefits can be very rewarding. You might have your own ideas already, but it won't hurt to expand your knowledge on the pros of raising chickens at home.

**Home-Produced Eggs Are Healthier.** Scientific evidence suggests that battery eggs contain a higher amount of salmonella, and thus, can be harmful to us with prolonged intake. There's a consensus among chicken owners that the eggs their flocks produce are safer since they have full control of their poultry's diet. Raising your own chickens ensures that your flock is getting a balanced intake of proper nutrients and vitamins paramount for producing eggs safe for human consumption.

**You Can Save More Money From Home Produced Eggs.** Having three or more chickens that constantly produce eggs saves you the trouble of buying eggs at your local supermarket. A normal hen could lay an average of 300 eggs a year, provided that they are getting the proper nourishment. Increasing the number of hens can also provide more returns, provided that you are buying poultry and chicken feed at a cheaper price.

**The Waste Products Of Your Chickens Can Be Utilized As Fertilizers.** It has been noted in many sources that chicken waste is one of the best fertilizers around for its high amount of nutrients and nitrogen, which can help your garden produce vegetables at a faster rate. And the fact that they're organic makes your crops free from harmful chemicals. It's also a plus that your chickens feed on bugs and insects that incessantly wreak havoc on your crops.

**Chickens Make Good Pets.** The hens, especially the "bantam" types, are docile in nature, not to mention that they are total beauts! Many types of breeds are beautiful in appearance, most notably Barred Rocks, Wyandottes, Orpingtons and Cochins. You can always do an image search for photographs of certain breeds to decide which are to your liking. A chicken's plumage has an overwhelming variety of colors, and I guarantee that the kids will have fun looking after them too. Chickens, while not as smart as dogs, can be very playful and friendly. If trained real well, some of them can eventually pull off some tricks, and you can show them off to your friends.

There are still a plethora of benefits, and there's no doubt you will discover many of your own. Having the initiative to learn about your hens and taking a humane approach to raising chickens can pave the way to maximizing these benefits, and both you and your avian family will be happier for it.

# Building A Backyard Chicken Coop

Every design in building a backyard chicken coop will involve three issues, how it will affect hygiene, chicken productivity, and cleanliness.

## **Ample Spaces**

In designing a chicken coop the normal method for chicken raisers is to allow **3 to 4 square feet of space per chicken**. The correct space will provide the chicken with enough room to mill about and keep them more productive. Chickens are very social animals, they enjoy having other chickens around, but they can also be cranky. When they are on their best behavior, chickens will huddle together, scratch together and stay put if not feeding. When something takes their fancy though they can squabble and peck at each other though it doesn't happen much.

It could be a little droplet of water running across a wire, a territory that they are foraging even when there are no signs of potential food morsels, just about anything. The chicken sometimes can be cranky enough and peck each other, sometimes to the death. This is sometimes complicated as when other chickens see blood, they could help peck the hapless chicken until most feathers fall or seriously wounded.

*Ample space rules that out.* When building a backyard chicken coop it is important to determine first the number of chicken intended for the coop. When that is decided, raise the planned chicken coop above the ground to keep them healthy and for easier cleaning and maintenance.

## **Consider Ventilation**

Chicken droppings contain ammonia and create dampness inside the coop. Aside from that every animal and bird has their own unique odor that stales the air. The design of the chicken coop must allow proper air ventilation to keep the air inside the coop circulating. Choose the materials for the coop well as it could affect the proper circulation of air inside. Chickens are survivors but they are not exactly hardy. One death, often caused by dampness will affect the other chickens too. Aside from ventilation, the chicken coop must be insulated to keep the chickens comfortable and well in cold climates.

## **Food and Waste Management**

Chicken leave dropping everywhere. When not well managed, the droppings emit gasses that are not good for the health of the chicken but could also bother people. When building a coop,

provide perches designed along with a feed spot. Chickens are one of those animal types that poop while feeding. Perches and feeders should be designed for easy cleaning. When designing the feeders, raise the elevation as high as the chickens back to prevent the chickens from scratching their feed and creating a mess when feeding. This design is also the same for the water pans. Clean water must be available to the chickens every day.

These are the basic elements when building a backyard chicken coop. However, light sources are also an important consideration as well as the appearance of the chicken house. These, however, depend largely on material choices and aesthetics. For chickens, so long as they have a clean and steady feed, ample space, dry and with good ventilation, they are content.

## Building Chicken Nesting Boxes

Chicken nesting box designs come in all sizes and shapes. Design suggestions also vary. The large variety of designs speak volumes about personal experience and preference. In building chicken nesting boxes, there are designs that stand out in view of practicality and function.

First though, a good chicken nest box must be planned to encourage the chicken to lay eggs productively. The basics are this. You build a box, put in some straw or wood shavings and when the time comes so too the eggs. But when there is low egg production chances are something must be done to improve the nest box. For as many eggs as possible, here are some suggestions:

Often, chicken nest boxes are built to house the maximum number of chickens and often there are practical management reasons for this. The fact though is that when the nest box is crowded, chickens prefer laying eggs on the floor where the eggs are dirtied, trampled on, and even eaten lowering production. Chickens are actually more productive when they nest in smaller boxes. A box that could house four chickens at a time is good. Smaller is better. When nesting boxes are smaller, there is also less room for the chicken to kick around the straw or wood shavings, creating less mess and keeping the straw where it should be.

The roof of chicken nest boxes are sloped so that chickens do not roost on the roof. A roof not angled steeply will invite chickens to roost there and when that happens the eggs will not survive. Inside the nest box, keep at least two inches of straw, wood shavings (pine is preferable) are even better.

If you can, provide a chute where the eggs will roll after being laid, and collected at a separate place, the added cost of the chute will be paid for in terms of more usable eggs. It will also be practical as it will eliminate the need to disturb the chickens whilst collecting eggs.

Alternatively, construct the chicken nest boxes with doors that open on the outside so that you can collect the eggs from outside the coop without disturbing the chickens very much. Build a lip at the opening to prevent the eggs from rolling out when the doors open. A two-inch high lip is enough to keep the eggs safe. Likewise, build a similar lip at the entrance to the nest boxes that serves as a chicken step. This will prevent the eggs from falling inside the chicken coop as the chicken kicks around before laying more. The lips will also keep the straw inside the nest.

The sizes in building chicken nest boxes vary widely. In general, the height should be about 9" and if you intend to limit chickens inside the box, a 12" square is sufficient and allow the nest boxes be cave-like, cold and dark.

# BumbleFoot

Bumblefoot is the growth and accumulation of the hard tissues in the foot that then get swollen, inflamed and may be painful to chickens. Vets will be able to explain the technical terms and causes better, but for most of us here's what to look out for and how to prevent it.

## The Symptoms

An abscess forms in the sole of the foot of the chicken and often this is overlooked, as bumblefoot in chicken looks very much like calluses. The foot of the chicken is swollen and often hard tissues build up. Then the chicken starts to limp, wherein more serious cases there is blood in the footprints. Bumblefoot in chickens could deform the foot severely but when detected early treatments are more effective.

## The Causes

*Perches* -Bumblefoot starts with a bruise on the foot that turns into small wounds that become infected. These are due to the habit of chickens perching anywhere and everywhere that suits them. Perching on very narrow wires, runs made of wires that extend to the ground and perching on narrow edges and sharp corners cause bumblefoot. Another usual cause is jumping from too high perches and landing hard.

*Improper Nutrition* -Bumblefoot is also likely to occur when there is a Vitamin A insufficiency. Seeds, a chicken favorite are low in vitamin A. The vitamin promotes increases resistance to parasite infection aside from aiding digestion and appetite. An obvious sign that the chicken lacks vitamin A is when the plumage lacks the usual lustre, is pale and rough. There is also the lack of color intensity in the cere and there is yellowish and scaly accumulation on the beak.

*Infection* – The little wounds and lacerations on the soles of the feet provide a good breeding ground for parasites and bacteria that when left untreated will eat into the bone, become acute and endanger the life of the chicken.

*Prevention* – Provide good perching areas inside the coop and make sure there is no chicken run wire on the ground. Place perches with varying circumferences around the perimeter of the run.

Chickens will eat just about anything and so they respond well to vitamin supplements. Provide food that is rich in Vitamin A. Carrot for one is a very good source. Greens are also good sources as are pumpkins and potatoes. Throw in vegetable and fruit peels, chickens loves this. It has been shown time and again that once the vitamin deficiency is resolved, bumblefoot heals.

*The Treatments* – Antibiotics cure bumblefoot. When the infection is not severe, clean the feet first in warm water for ten minutes before applying the ointment or the antibiotic. If the

bumblefoot is severe, soak the feet in warm water for ten minutes, use a sharp knife, remove the scabs working around it removing the scabs and the puss until you are left with a clean hole, apply the ointment or the antibiotic, bandage the foot or use a vet wrap and repeat the process every day until the bumblefoot is healed.

## Chicken Feeding Worries

For people who are planning to start raising chickens, one of their main concerns might be associated with the right feeding practices. Such as the best portions, proper preparation techniques for feeds, and the overall quality of the feed. Failure to do one or the other correctly could mean malnutrition of the flock.

Chickens are very low-maintenance birds. In fact, they have survived life on earth longer than us and their population surpasses ours a hundred fold. While it is true that they too, are prone to disease and parasites, their population is proof of their strength. Just imagine how better they can manage in a caring environment with responsible owners.

Chickens eat practically anything. They will scratch for worms, they are happy to go through our kitchen scraps, they love pellets, seeds, and all sorts of vegetables. They are also foragers, they eat grass, weeds, and other plants and get their protein from other food like bugs and slugs. In spite of this, they still know what to avoid.

If possible, it's best to let the chickens roam around or free-range. Being cooped up in a cage will limit their diet to what is being fed to them. Having a wide variety of food lets them have access to all sorts of macronutrients they need to stay healthy.

Next let's talk about chicken feed, it is divided into two categories; corn mixed with seeds, and pellets.

Pellets are further divided into three groups; mashed, crumbled, and formed. Even with the variation in form, pellets have a similar composition. They are given different names to easily identify their grade after being milled. Mashed pellets, for example, are crushed into an almost powder-like consistency which makes it easy for chicks to peck. Crumbled pellets on the other hand, are milled to a rough consistency and is most ideal for young chickens. Whereas formed pellets are best for full-grown birds.

When mixing both types of feed, do so with an equal ratio of corn mix and pellets. For example, if you add one cup of corn mix, you must equally add one cup of pellets too. You can also add other food items with their feed, and they'll eat that also.

Chickens need grit. Grit helps them digest food better. If grit is not provided in their feeders, they will start looking for pebbles on their own while they are foraging. You can either purchase a sack of grit, or make some on your own.

To make your own grit, you just need to roast some eggshells until they are brown, and roughly crush them but make sure it isn't too powdery. You can also use oyster shells and prepare them in the same way you've prepared the egg shells. All you need to do now is add it to your feed.

Feeding chickens is not a complicated task. By knowing these simple techniques, you will get more than enough fresh eggs in the morning. If there is a scarcity of eggs, there could be something wrong with the process, but you don't have to worry because it is quite simple to correct.

## Chicken Fencing That Will Save You Money

In urban areas, raising hens may be a challenge, you can't have more than a few pullet to start with, and it would be best to keep your population small. If you are in a more rural location with ample space, keeping a larger number is a great idea. But, no matter how small your population may be, chicken fencing is important.

The price of chicken fencing varies and will eventually add up to the overhead cost of raising them. The types of chicken fencing ranges from simple design to high-end types with electrical features that give you ease of access and control. The very purpose of having fencing is to keep your chickens safe from predators and to limit the places they will go to. After all, you wouldn't want them digging into your garden and getting to your flower bed. Now, the price will be highly dependent on the type you buy or decide to build. If you're working on a budget, you can definitely get more affordable options but it won't be as fancy. You can even choose the more frugal route and build one on your own.

If you have decided to build one on your own, here's what you need for a simple fence; galvanized iron sheets, chicken wire, planks, nails, screws, and the basic tools to put everything together. The idea is to keep all your hens in one space, and keep predators out. Aside from choosing durable material, you need to take extra precaution in assuring that your girls don't scratch their way out of the space.

To prevent an escape, or worse; predator entry, tuck a portion of your fencing at least 10" to 20" deep into the ground and secure it with soil. Make sure that it is stable enough that larger predators like foxes can't topple it or dig under to get to the birds. If this is not possible you place 8" planks along the perimeter of the fencing. In addition, it is important to get good quality chicken wire. Large predators have sharp teeth that can cut through cheap material.

The height of your fencing should be enough to keep predators from jumping in, and enough to keep your girls from flying out. You also need to take extra precautions during cold seasons when predators are desperate and will be more aggressive. What you could do is keep the top-portion of your fence exposed instead of trimming it down.

Use the galvanized iron sheets for further protection in between the posts where the nails or screws secure the chicken wire. This will discourage predators from chewing down the wooden posts and prolong its life as well.

This may not be the most glamorous chicken fencing, but one thing is for sure - it's the most affordable that will do the job.

## Chicken Parasites: Causes and Treatments

Chicken are hardy animals, but they are not immune to illnesses. In fact, they are susceptible to a variety of diseases if they are not given proper care. This can easily be avoided by recognizing the symptoms, acquiring the right form of treatment, and choosing to act swiftly. Choosing to ignore the signs, especially for parasitic cases, can cause an infestation that will affect the entire flock.

### Common Causes of Parasitic Infestation in Chickens

#### 1. **Overcrowding**

Ideally, a single chicken needs at least 2 to 3 square feet of space. When you start keeping more hens in a small space, they become stressed. This, in turn, affects their immune response and will make them more prone to parasitic diseases and infections.

#### 2. **Introducing New Birds**

If you decide to bring in new birds, it's very important that they are placed under quarantine for 2 weeks or until such a time that you are sure that these new birds aren't carrying any parasites or harboring any disease. This way, you are minimizing your chicken's exposure to parasites.

#### 3. **Poor Sanitation**

Keeping your coop clean is equally important as feeding your chicken. Bacteria breeds in filth, and having your hens sit in a damp space with manure, dirt, and food waste is not good for them. Leaving your hens in poorly kept coop will cause all sorts of diseases.

### Common Chicken Parasites and Treatment

#### 1. **Lice**

Unlike with humans and other mammals, the lice found on chicken don't really bite them. Instead, they eat dead skin. However, this causes discomfort and will result in chickens

pecking themselves which can cause irritation and wounds. When other chickens see the wound and blood, this compels them to start pecking the already injured hen. Not only will it worsen the open wound, the affected chicken may get depressed and eventually die. Lice are usually transmitted whenever you introduce new birds, who may be infected, to the flock. To treat lice, spray the infected bird with a sulfur-based dust spray. You may also use a malathion bath solution, as it is equally effective.

## **2. Red Mites**

These mites multiply quickly in damp and dark spaces. When a chicken is infected with red mites, and is not quarantined as soon as possible - the mites will soon spread to the other birds and will reach a monumental population in a matter of days. Red mites also affect other animals and can even breed on your bedding. These mites feed on blood and are fatal on chickens when not addressed. Chickens can acquire these mites when they encounter wild birds or rodents who carry these parasites. These mites are blackish red in color and will often hide from light. If you notice the presence of red mites in one of your birds. A malathion bath is an effective cure. But you need to be wary of the other places these parasites may be hiding in. Disinfect your coop thoroughly.

## **3. Scaly-Leg Mites**

These kinds of mites are present in between the scales of the chicken's legs or feet. Once they have penetrated the scales, these scales lift and will cause discomfort to your bird. Scaly-leg mites come from infested ground, and if your hen is positive for this parasite, you need to treat the soil or move your coop. To treat the infected hen, all you need to do is brush her leg with soapy water to get rid of the mites. To prevent further infestation, apply a solution made up of 1 part methyl, 1 part olive oil, and ½ part kerosine. Make sure that the solution penetrates through the scale to kill mites that might have been left after soaping.

## **4. Fowl Ticks**

The nature and course of treatment for fowl ticks is quite similar to that of red mites. The major difference is; fowl ticks are much more dangerous since they can cause tick fever, paralysis, and death when left untreated.

# Chicken Sour Crop: Prevention and Treatment

Unlike humans and other animals, birds do not have teeth that will aid in the process of chewing food. A chicken in particular is equipped with a crop which is located just below its neck and at the center of its chest. The first process of digestion starts here, it also acts as a temporary storage. When a chicken overeats, or consumes more food than it can digest - it develops a sour crop.

## Signs and Symptoms

You will know if the chicken is suffering from sour crop if there is a prominent bulge, as big as a golf ball, at the center of their chest. Your hen will be very uncomfortable, and start moving their head in a very peculiar way. When you open their beaks, you will notice a rather sour and foul odor. When you touch the area where the crop is, it will feel solid but tender - if it has not yet been impacted. When neglected, this starts to give rise to other complications since the chicken will still eat even if their crops are full.

## Prevention

The chicken's crop is a vital organ and as a chicken owner, you need to keep a close eye on this. Chickens love to eat, and they will practically eat anything and everything. This is how sour crop starts. But if your chicken is healthy, and their crops are working well, it will be emptied overnight. Otherwise, there is a looming problem with their digestive process. To help your birds, you need to add grit to their feed. You can easily purchase grit from any farm and poultry supply store.

If you plan to free range your birds, they will know well enough to swallow tiny pebbles to help with digestion. However, if you don't plan to let your chickens out of their coop, they will not be able to gather these digestion aids.

Animals in general tend to consume grass whenever they find themselves on the verge of being sick. The problem with this is, when chickens have sour crop, eating grass can cause more complications, since long strands of grass are harder to digest. You can have them eat grass, just be sure to chop them up into smaller pieces.

To prevent the onset of sour crop, it is important that you check on your birds every now and then. Be sure that their crops are empty every morning right before feeding. You may also administer a teaspoon of apple cider vinegar to their water at least once a month.

## Treatment

One sure fire way to treat sour crop is to induce vomiting. You can hold your chicken upside down and massage its crop to release the food that is stuck in the crop. This should be done in intervals to prevent choking and the possibility of liquid or food particles from entering the respiratory system. You can then feed your chickens with live yoghurt mixed with chopped grass, pellets, and apple cider vinegar. Continue this process until your bird is completely relieved.

## Getting Started: The Pecking Order

Keeping hens has been practiced for centuries. These birds are fun to have around, they are a great source of food, and are very low maintenance. If you have enough space in your backyard, you can definitely have your own little flock, but you need to know a bit more before getting started.

### Hens & Roosters

One thing most people are not aware of is that you don't really need to have a rooster to have fresh eggs from your hens. Keeping a rooster is a choice, and not a necessity. While having these larger, noisier, and more aggressive birds in your backyard may seem like a good idea at first, your hens will be perfectly fine without them. Chickens are sociable animals, and they'd prefer to be around other chickens. Having two or three hens in a coop is ideal for a small backyard farm.

### The Hen House

Although allowing your flock to free range is ideal, they still need a safe and secure place to live in. Whether you live in the country or in urbanity, there are all kinds of predators that can get to them if they are left exposed. Having a hen house or a chicken coop is a good form of shelter for chickens. There are dozens of designs, sizes, and types you can choose from. When choosing your hen house you must take into consideration the comfort of your flock, the ease-of-access on your end in terms of cleaning and maintenance, and the overall durability of the hen house against the elements and predators.

### The Bigger, The Better

Chickens are not typically territorial animals, however they do need their space. Overcrowding them in a small area will cause them to start pecking on each other, which can lead to the death of a chicken. This behavior is common especially when they feel that their space is being invaded or their food source is being taken. Ideally, each chicken should have 2 to 3 square feet of space.

### Settling Down

You can buy chickens at any age. Some people prefer chicks or pullets, while some prefer to start with hens. No matter which you prefer, they will need to be brought to their hen house and allowed to acclimate. Once they're in their space, allow them to explore and roam around. Keep them in there for some time to get familiar with their new home.

## Keeping Chickens as Pets

Like most animals chickens are not too fond of being constantly touched. Typically, chickens will come running to you when you have a treat in your hand but that's as far as it goes. However, chickens that have been raised as pets are more likely to bond with you since they have already established some level of trust with you. When they are used to it, they don't mind cuddles too!

Even if they have been raised as pets, chickens will still want to have their own space and will not appreciate being crowded by humans. Even in the best care, they will still prefer to steer clear of people. If you want to have your chicken follow you around, take a nap with you, or basically act like a toddler around you, it is important to start as soon as they are hatched. When a chick is handled gently and is treated well, it will be bonded to you.

Chicks are quite adorable and they are fun to have around. They are easy to care for and feed, and you can start giving them food as soon as they step out of their eggs. Newly hatched chicks would need a good source of heat, which is why the mother hen would keep them under her wings. If you plan to wean them early, it's best to have a heat lamp.

With their small size, you can keep them comfortable in a small box. Just be sure to have an opening for ventilation. By adding some form of bedding in the box, you can easily clean it out daily. Hook up your heat lamp but regulate the heat so that it does not go above 90 degrees Fahrenheit.

For food, chicks will need starter mash inside their box as well as clean water. Place the water in a weighted dish with pebbles to keep the water from spilling as the chicks run around in the box. When your chicks start to get uncomfortable, they get really noisy. Otherwise, you will hear soft chirps. As the days go by the chick's food consistency will change. From starter mash, they will move on to crumbles and then pellets. All these feeds are made-up of the same ingredients, it just varies in the way it is milled. The different degrees aid in the digestion process especially with younger birds. As they get older, they start to eat anything that sparks their interest including kitchen scraps, and garden weed.

You will also need to provide your birds with a dirt run that is set in a rather sunny space. They enjoy taking dust baths and this helps maintain their feathers ensuring that excess oil is removed. This also helps take off external parasites. Dust bathing is essential to keep your chickens healthy and clean.

Chickens make great pets, and they are quite lovable and social in nature.

## Keeping Chickens for Egg Production

There isn't a sliver of doubt that having fresh eggs in the morning is the most fulfilling part of keeping chickens. If this has ever crossed your mind, you need to plan everything well before buying your first flock of birds. You need to prepare their living space, think about the quality of food you provide them, figure out what breed you want, and even consider stress management. All these factors affect egg production.

Let's talk about the basics - choosing the right breed. When it comes to breeds, the leghorns are the pioneers of egg layers and they have been quite popular for centuries. It just takes 5 months for them to start laying eggs which is quite fast compared to others. Bantams and Silkies start laying eggs after 8 months. But you need to know that hens don't just lay eggs haphazardly, they need to be comfortable and secure within the space they are in.

Commercial farmers would replace their hens every two years. Backyard farmers, on the other hand, have their flock laying well into the last years of their lives. Albeit, at a slower pace compared to when they were younger.

### Factors That May Affect Egg Production

There are also factors that can cause your birds to stop laying eggs. As a chicken owner you need to be aware of the signs to address the concern accordingly and have your chickens back to laying.

#### **1. Molting**

Molting is the process when chickens start shedding their feathers to grow out new ones. This is a normal process for them and it usually occurs during fall. Molting takes about a month to happen, and once their feathers grow, egg production will be back to normal.

#### **2. Brooding**

There will be times when you notice your hens isolating themselves by sitting in their nesting boxes all day. There isn't a scientific explanation for this, but brooding can last for 2 to 3 weeks before they snap out of their catatonia and go back to their normal routine.

#### **3. Stress**

There have been several studies that prove that healthy and happy hens produce more and better tasting eggs. Therefore, stressed hens will be producing less eggs. You can easily alleviate stress by placing your hens in a comfortable environment and providing them all their needs.

During colder climates, it is important to keep the flock warm. Chickens have an internal mechanism to keep themselves warm and the energy they use to do so affects egg production since they are exerting more effort to regulate their temperature as opposed to laying eggs. During winter, learn how to winterize your coop. You can easily add heating lamps or even minimize the amount of draft that gets in.

Egg production depreciates as hens age. They stop laying eggs by the fifth year, and this is normal. At this point, you can just have them around till the last days of their lives. After all, it's the least we can do for all their service.

## Keeping Chickens for Meat

Chicken meat is the most popular food choice for consumers around the globe. While it is easily accessible to us in any supermarket, you can also start raising these kinds of chicken on your own. The good thing is, you don't have to live outside the city to do so. Imagine having access to fresh eggs every morning, and also having home-grown chicken. You basically control the flock's diet and will know that your birds are devoid of any harmful chemicals.

Before you start, it is important that you choose the right breed of chicken for the task. You will also need to take into consideration the cost of feeding and how fast they grow. If you are looking for a stockier chicken, you can opt for the Sussex and Plymouth Rocks. You can even go for hybrids that may suit your preference. There are hundreds of choices out there, the key is to do your research. With the amount of information we readily have available to us, you'll be able to figure out the best breed for you in no time!

Unlike layer hens, you only have two options for broilers; either you get the full-grown chickens or newly hatched chicks. If you do choose the full-grown birds, be sure to check their vaccination records to ensure that they are less likely to get sick while in your care. It's best to acquire your birds from a reputable source. In just 8 weeks of care, these birds will be ready for slaughter. If you plan on doing this long-term, it would be best to invest in a few roosters. This way the hens you already have can start laying fertilized eggs and bring new chicks to the farm. This makes it a lot easier for you, since the ones that are consumed will easily be replaced by a newer generation.

Just like layers, you will also need to set up a coop for your flock. For broilers, it is best to have a mobile coop that's easier to move around, this allows you to move them to wherever they can feed on weed. But if you have limited space, you can opt for a stationary coop, just be sure to give them access to some weeds and other greens that will help with their growth.

Hens love to perch, it's best to install roosts in your hen house if it doesn't have some yet. Be sure there is enough for all your birds. If the place you live in is susceptible to snow, be sure to winterize your coop and keep the place warm and dry for them. Regularly sanitizing your coop is

also recommended to take away disease-causing bacteria. Be sure to keep their space clear of dirt, rotting food, and too much manure.

Chickens require a lot of water. These birds like to stay hydrated, and it is of utmost importance that you provide them with enough water throughout the day. Having an automatic watering device is great for distributing water. You can set the timer to refill their waterer to ensure that it doesn't get contaminated with any gunk and it's extra easy to clean up. This device is also adjustable, which makes it great for growing birds.

If you are raising chickens for their meat, you need to keep in mind their dietary needs. Now, for broilers you would want to give them a lot of protein. Store-bought feed is primarily made-up of grains like oats, barley, soybean meals, canola, or corn. But it does also include oilseed meals and grain legumes. If you want to make sure that your birds have the right balance of nutrients, you can add nutribalancers from your local farm store.

## Keeping Chickens Healthy

You know what they always say, "health is wealth", which brings us to the very importance of keeping our bipedal companions free from diseases. After all, we will be directly consuming the eggs and meat they give, having a healthy flock, is important in sustaining our own health. Here's what you can do as owners to keep your birds strong and healthy.

### Provide Them with The Perfect Environment

The general well-being of a chicken begins with its environment. While it is true that chickens can adapt to practically any type of climate, constant exposure to extreme weather conditions can still get to them. Which is exactly why your coop should be designed according to the type of weather you have in your region. Make sure it is free from direct draft while ensuring that it has good ventilation. Provide your birds with enough perches to rest on at night, and install them at the right height to prevent any injuries. Keep your hen house free of moisture and always remember to keep it clean by regularly changing the bedding. Ammonia-poisoning is quite common with chicken farms especially when their feces is all over the floor of the coop.

In addition to keeping your coop clean, you must also make sure the environment is equally clean as well. Be on the lookout for mites, lice, and other pests that can cause serious health problems if neglected. Regular sanitizing with clean water and disinfectant is essential in maintaining a healthy environment for your chickens.

### Protect Them From Predators

Chickens are delectable treats to all kinds of predators prowling around. To ensure the safety of your hens, you need to fence them in and check if it is sturdy enough to keep the predators out, and your birds in. Don't settle for make-shift barriers that can easily be destroyed. The fence

should be high enough that foxes larger predators can't go over it, and it must be placed in deep enough (at least 10" deep), to be sure that others can dig under it. Bottomline, you need to keep your birds safe when you are not around to shoo away possible predators.

## Follow The Proper Feeding and Watering Techniques

Just like any pet or livestock, chickens need a well-balanced diet and enough water to survive. Give your hens a formulated diet that is appropriate for their age and type. Doing your research on what's best the best feed for them will definitely pay off in the end. In addition, if you don't let your girls free-range, be sure to provide them with grits to aid in their digestion. With water, allow your hens to have all the clean, fresh water they want. It is ideal to have a watering device that is easy for you to maintain. During harsh winters, you would either need to have a heater for your waterer, or spend your time refilling their supply every now and then since it will freeze over when the temperatures drop below zero.

## Give Them Space to Move

Chickens need their space. We highly recommend that you allow your girls to free-range to relieve the stress they might be feeling. If you don't really have the time to watch them while they are free-ranging, it's best to give them their own run where they can roam during the day. Do not keep them locked up in the coop. This will make your chickens anxious and they will start stressing out. If you don't have that much space in your backyard, choose a small flock of 2 or 3 birds. Don't overcrowd them as this will lead to fighting, and serious injuries.

## Keeping Chickens in the City

It may be a surprise to some, but you can actually raise chickens in urban areas. However, it would be best to check with your municipality on the standard protocol you city may have for raising chickens. There have been lots of people raising them in their backyards as pets, and this has already become an accepted practice. Your local animal control office, will be able to advise you on the population limit, the regulations you need to follow to steer away from noise complaints. One thing you should be aware of is that you don't need a license to raise chickens.

Now that you've got the legalities out of the way, it's time to decide on what breed you should get. The breed of your hens would be dependent on their purpose. If you're looking to have them as pets, bantams would be a great option. They are quite small and can be comparable to toy dog breeds. They are typically the miniature versions of regular-sized chickens, and there are about 400 varieties under this category. If you are looking for mild-tempered birds that will be great pets, go for the Plymouth Rocks or the Rhode Island Reds. If you need a good layer, the Cochin variety would do great. These are just some of the excellent varieties you can choose from.

You can certainly have your chicken around the house and even sleep with them, but they would prefer its own coop with a roost and nesting box as opposed to your bed. You can easily build your own coop with materials you already have, or simply take a trip through your local farming supply store or hardware. You can even order easy-to-build coops online! Just bear in mind that each chicken would need at least 2 to 3 square feet of space. In addition to that, you would need to provide them with a place to roam if you don't plan on free ranging. Keeping your hens locked up in the coop will only get them irritable.

Chickens are very sociable animals, they like huddling with their coop-mates. It is important to have at least two chickens so they don't get lonely. If so, factor in the space you would be needing to avoid overcrowding. Even if they are sociable animals, they like their space and would start getting cranky if it is invaded, they will start to peck other hens if they feel cramped. If you're looking to have chicks on your little farm, you would need a rooster to fertilize the eggs, otherwise, you can just have the hens and you'll still be having eggs for breakfast.

Living in urbanity, you might think your hens are completely safe from predators, but this isn't so. Chickens are living prey, and will easily attract predators to your home. Feral cats are pretty common in the city, and bantams do not have any way of defending themselves when a cat attacks them. When you build your coop, you must make sure that it is completely safe and secure for your hens; it keeps the predators out, and keeps the hens in.

## Keeping Chickens Warm in Winter

If you worry about your hens getting cold during freezing temperatures in winter, don't. With the right precautions and minor provisions, you'll be sure to keep them warm. Chickens, in general, acclimatize themselves to cold weather. They're hardy animals that can easily adjust to different temperatures, but they definitely can adapt better to the cold than to warm climates. Even so, this doesn't mean that you should neglect their needs. Winterizing your coop is essential to your flock.

The property of heat conduction plays a critical role in the winterizing of your coop. And here's how you can use heat conduction to your advantage. Place a bed of sawdust or straw on the floor of your coop. This helps in keeping the chickens warm if they don't want to huddle with each other. In more harsh temperatures, setting up a heat lamp is a must. This provides your chickens with direct heat, which helps your girls warm up faster in spite of the extremely low temperature. Just be sure that the lamp is placed in a secure space, preferably elevated, where your hens won't be able to get too close and burn themselves.

In cold months, keeping your coop dry and free of draft is very important. But take note to maintain the ventilation to allow fresh air to circulate within the coop. The last thing you would want is your birds to be suffering with a respiratory infection due to ammonia toxicity. In addition, you can still allow your hens to go out and stretch their legs. Just be sure to clear the snow from their space if you do so.

Feeding during winter is just as important. You need to pick the right feed that will help keep them warm. Take corn for example, it's a great supplementary diet that provides internal warmth. Water is equally important as well and needs to be provided daily to prevent dehydration. If you don't have a waterer with a heater, you can opt to use a rubber dish that will be easier to break the ice when it freezes and you need to replace it.

During winter, the material of the coop's roost is essential. Having a metal roost will get cold, and will cause your hens' toes to freeze. In worse cases, this can cause frostbite. The roost should be wide enough too. This way, the chicken can use their feathers to cover their feet and keep them warm while they're asleep at night.

Speaking of the extreme cold, chicken's wattles and combs are the most susceptible to frostbite. Rubbing Vaseline on them is a great way to alleviate this particular problem. But you can also resort to *dubbing*. Dubbing is the process of removing the wattles and combs to prevent the possibility of frostbite and the complications that go with it.

If you have chicks during wintertime, you need to take extra precautions, on top of the ones you are already doing. As mentioned, chicks are much more sensitive to temperature changes, it is important that you maintain the right temperature with their living space by keeping them away from drafts and maintaining a heat lamp over their box. If possible, it is best to put off having chicks until the climate gets warmer.

## Keeping Chickens from Eating or Breaking Their Eggs

Chickens have a habit of pecking, though they don't normally peck their own eggs, it happens and when it does, it's very difficult to stop them. Once they have acquired the taste for their own eggs, this could become a habit. Here's how you can prevent it from happening:

Give your chickens grits. You can easily purchase sacks of these from any local farm supply store or you can even make some on your own. It's not that complicated to do so! To make grits, all you need to do is roast some eggshells until they become brown and crunchy. The reason you are roasting the shells is to dry them out. Crush them further and mix it in with the chicken feed. Most of the time, the hen starts pecking on their eggs to get a supply of calcium, with eggshells in their feed they wouldn't need to find an alternate source.

When an eggshell is weak and can easily break, the chicken will start pecking on it. When your chickens are producing eggs with weak shells, it may be a sign that your hen has an infection or is malnourished and would need supplements like Vitamin D3, protein, or calcium.

If there is no sign of malnourishment, and the feed has enough nutritional value. One of the reasons their eggs might be breaking could be because the nest box is too hard. Make sure that you provide them with enough padding to prevent any accidents from happening after all hens

like to shuffle and scratch around. Another tip is to keep the nesting box dark. Chickens are less likely to move around in dark spaces. This keeps them relaxed, and when they are less agitated they won't trample on their eggs. Each nesting box should be good for 3 to 5 hens. Should there be more, you need to add more boxes. The lower the hen to nesting box ratio, the better.

Collecting the eggs as often as you can help as well. This way, you are able to monitor the production and you would discourage overcrowding in the nesting box.

Should one of your hens have started pecking on the eggs, it is best to isolate her and feed her with liquid milk for a certain time. If the behaviour is still not corrected, you may want to trim their upper beak. Another method to prevent pecking is adding fake ceramic eggs or golf balls in the nesting box. After pecking the fake egg and golf ball, the hen will be discouraged and this stops the habit from forming.

## Producing High-Quality Chickens

One of the major concerns of all sectors in the food industry is to be able to produce high-quality food from wholesome sources and quality farms. For the average working man in the poultry industry, this has been a challenge with the changes, complexities in technology, and best practices in producing high standard poultry products. This has been quite a concern especially for small-time farms that focus on the quality rather than the number of their products. Moreso, what happens on the farm directly affects the overall output.

In egg production, farms will focus on quality control and consumer safety. One of the major concerns in this particular line of business would be pathogenic bacteria like salmonella. These farms ensure that their chicks and pullets are free from disease by keeping their feed free from bacteria, conducting regular vaccinations, and observing proper sanitation from farm to market.

To make sure that you are producing high-quality poultry products, all you need to do is keep your chickens healthy and happy. Here are some things you may want to do in order to achieve that:

- Reduce the amount of stress in your coop. Chickens that are relaxed are more resistant to infections and other health problems. Try to keep contact with them as minimal as possible. Chickens tend to be uncomfortable when constantly pestered by humans, especially by those they are unfamiliar with. They may be sociable animals, but they also need their space. Avoid overcrowding the coop with too many birds, this will cause fights and other stressful situations. At least have 2 to 3 square feet per hen.
- The supply of water and feed should be on a consistent schedule. It is always best to have an automatic feeder or waterer around, this way your hen's source will always be fresh. Don't forget to clean them out from time-to-time to prevent any

cross-contamination.

- Do not feed broken eggs to a chicken. By doing so, you are teaching them to start pecking on their eggs. Make sure you clean out your coop and remove all broken eggs if there is any. Once a hen starts pecking on their own eggs, this is very difficult to correct. If you want to add calcium to their diet, you can collect eggshells and roast them then add them to their feed.
- Keep your coop clean. Remove all the cobwebs, dust, dirt, grime, and other possible sources of bacteria. Likewise, all accessories used in the coop must be cleaned as well. It's best to disinfect your coop at least every 6 months to ensure there are no pathogens that will infect your birds.
- Collect your eggs promptly. Leaving the eggs in the nesting box for too long may cause the chicken to peck on it. For small farms, you may need to collect eggs twice a day with a small flock. But this may be more frequent for bigger farms.
- Handle the eggs with care to prevent cracks and breakages. It's also important to wash the eggs before packaging. If the eggs are not to be consumed yet, place them in the refrigerator.
- Pesticides are often used in crop production, but they can also aid in sanitation with your flock. If needed, use pesticides that are approved for egg production but if possible, try to use chemicals when necessary.
- If you want to test how good your eggs are, place them against the light and make an ocular assessment. If the yolk is translucent, it is of high quality. If it appears cloudy, they might be stale.

These tips are some of the best practices we can share to help you produce high-quality chicken eggs.

## Protecting Chickens from Predators

Chickens are natural prey to a lot of animals on higher ranks in the food chain. They are not able to defend themselves, they are slow, meaty, and quite tasty, which makes them an easy target. This is precisely why, as their owners, you must take it upon yourself to provide your hens with the security they need against predators. Here are some things you may want to try:

### 1. Introduce Human Scent

There have been claims that the mere scent of a human is repulsive to some animals. Though there is not much research to prove this, the fact is, man will be the last living creature preyed when a predator is starving and there is nothing else to eat. To ward

away predators you can opt to keep sacks or bags of hair around a coop. This way the predators will be fooled into thinking there are humans around constantly.

## **2. Discourage Predators from Your Premises**

There are different kinds of predators with various ways of discouraging them. To get a better picture of what you are up against, you can consult with the local animal control in your area. This way you are more prepared to defend your birds. You may opt for chemical deterrents, physical barriers, electric-shock fences, or even having bigger animals trained to guard your coop at all costs. When predators realize their disadvantage, they will learn to steer clear from your chickens.

## **3. Build Your Chickens a Sturdy Coop**

If you plan to build your coop from scratch, make sure that you secure the structure well. You can add a mesh under the flooring to prevent predators from slipping through the spaces in the slats. Cover weak posts with wire to prevent breakage if the predator decides to bite through it. Attach a proper lock on the hutch or door of your coop to keep your hens in during the night when predators are prowling about.

## **4. Create Barriers and Prevent Access**

Having a fence around your coop is very important especially if you live in an area with larger predators like foxes. When you build the fence around your coop be sure to bury planks along with a portion of the chicken wire to prevent predators from digging and getting to your birds from underneath. You must also keep your fence tall enough to prevent access through jumping.

## **5. High-Tech Systems**

If all else fails, you can easily purchase electrical fences that will shock the predators should they come near your coop. It may be costly, but to protect your hens, it is definitely a cost-effective option.

Another thing you can do is talk to more experienced farmers in your area. Ask them what their predator problem was, and how they resolved the issue. This way you can tailor your method according to where you live.

# **What Do Chickens Need to Survive and Thrive**

Did you know that before we started domesticating chickens, they were actually jungle birds? They used to live in tall trees and are able to easily adapt to varying conditions. Today, we know that the modern chicken is quite low-maintenance and we can easily provide them with their needs to keep them happy and healthy. They are quite the simple bunch, and they would only need the following:

## **1. Housing**

Like any other pet, chickens need their own home to live in. This is the first among all their basic needs. Since they are quite easy to hunt down by bigger predators, having a coop to keep them safe is a must. You also need to protect your flock from the elements like rain, heat, sleet, and snow. The key is, keep them safe, dry, and comfortable. Here are some tips you can follow when setting up your coop:

- Elevate your coop. This will keep your hen house away from water and prevent any bacterial growth that may cause disease. Though they are hardy birds, they can easily get infected with bacteria that has grown from a damp space.
- If you plan to build the coop on your own, use quality materials that are weatherproof. If not, add a layer of protection on the material to make it last longer.
- Make sure that your coop has enough ventilation that allows the cool air to enter and the warm air to escape. This is not only to keep your coop comfortable, but to prevent ammonia toxicity from the birds' feces.

## **2. Space**

Ideally, hens should have at least 2 to 3 square feet of space in between each other. Anything less can incite a quarrel and that can lead to bigger problems. It is actually better to have a bigger coop than a smaller one. If you already have a smaller coop, think of purchasing fewer birds.

Your coop needs three specific spaces to keep your hens happy:

- The living space is the inside part of the chicken coop where you install the roosts. This is the area where your hens will go if they want to rest. It's vital to have enough roosts for all your birds.
- Hens need a space to lay their eggs, having a nesting box whether you are raising layers or broilers is important. Each nesting box can accommodate 3 to 4 hens. They don't lay eggs all at the same time, so this shouldn't be a problem. Just have the right number of nesting boxes for your flock.
- Outdoor runs are important if you don't plan to free range your birds. Just like any other animal they too need exercise and the freedom to graze through different food sources. Just be sure that you secure their runs with sturdy fencing that will keep predators out when you are not watching.

## **3. Food & Water**

Nutrition and hydration play a vital role in your overall poultry production. If you don't provide them with good food and clean water, chances are your birds will get sick and will also lay bad eggs or even none at all.

- If you don't have an automatic watering system, be sure to replace their water daily. A consistent and steady supply of water is important to ensure your birds are hydrated. You can also add immune boosters like vitamins and minerals through their water to improve their resistance to diseases.
- For feeds, you have two options; corn and pellets. The corn feed is usually mixed with other seeds and this may vary from one manufacturer to another. Pellets on the other hand are often a mixture of a variety of grains and seeds that provide your hens with enough sustenance.
- Chicken feed comes in different levels; starter mash for chicks. Crumbles for pullets and pellets for full-grown hens. In terms of nutrition, all three types contain the same amount of nutrients. Their coarseness varies pending on the capability of your chicken to feed.
- Chickens love to roam and graze through a variety of weeds, grass and plants. They also like to dig through the soil for protein sources like mealworms, and insects. You can also give your chickens fruit and vegetable scraps from your kitchen for added nutrition.
- To aid in digestion, adding grits to your feed is important. Since chickens do not have teeth, they need these to help process the food in their crop.

With the basics all covered, you are now ready to take care of your own flock!