# CHICKENS

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Design and Layout
www.soaringtortoise.ca
Soaring Tortoise

Illustration
www.alisonmccreesh.com
Alison McCreesh
Why Raise Chickens?

Chicken or the egg?

In the NWT food must be shipped long distances to reach our homes. By raising chickens you can have a reliable, local supply of eggs and meat!

Fresh local eggs and meat taste better and can be more nutritious than those produced on an industrial scale. Growing your own food is rewarding and can also save you money. Enjoy meals with fresh and healthy ingredients!

Chickens are fun

Raising chickens is fun. It’s a great way to introduce kids to animal care, where their food comes from and to learn together.

Nervous to try it on your own? Consider forming a co-operative or joining with several of your friends or extended family members so that multiple people can share in the work and joys of keeping chickens.
Where to Find Chickens

Layers or broilers

There are two general categories of chickens people raise. Some breeds are better suited to be raised as meat birds; this category of chickens is called broilers. Broilers are chickens that are raised for meat.

Other chicken breeds are better for laying eggs; these are called layers.

Some breeds of chicken are suitable for both eggs and meat, but specialized breeds often used in larger commercial operations were bred to have better meat or lay more eggs.

There are many breeds of chicken to choose from, each with their own benefits. In the NWT you should consider a breed that can withstand cold weather!

Cock a doodle doo!

A rooster is not necessary for hens to lay eggs.

You will need a rooster if you hope to have fertilized eggs and hatch your own chicks.

Roosters like to crow and make noise, which might bother your neighbours! Plus some NWT communities may have bylaws against keeping roosters.

Some roosters are more aggressive than others and may not be suitable to be around young children.
Ready to lay or chicks?

One of the simplest methods for getting started raising backyard chickens is to purchase ready-to-lay or young broilers.

Buying the chickens when they are more mature is simpler because you will have fewer issues with keeping the chicks warm and healthy. It is difficult to identify which chicks are roosters or hens, so buying older chickens will ensure that you have only hens.

Another way to get started is to purchase chicks as day-olds from a hatchery or local farm. Newborn chicks live for over 72 hours without food or water, which means they can be shipped safely to your home!

If you plan to raise newborn chicks, you will need a foster hen or special equipment called a brooder. Chicks need to be kept warm. They also grow better with special chick feed.

Incubating eggs

A more ambitious way to get started is to incubate and hatch chicks from fertilized eggs. You can often purchase fertilized eggs from a local farm, although this can be a challenge in some communities.

The easiest way to hatch chicks is to use a commercial incubator. This machine will maintain the ideal temperature and humidity for the eggs and will turn them regularly.

There are many things to consider when incubating, hatching and raising chicks. Be sure to do plenty of research and planning before you start!
Shelter

The chicken coop

Foxes are clever so you need to make sure your defenses are adequate!

Take the time to think about where you would like to locate your coop and chicken run. Choose a site with good drainage to avoid puddles and muddy conditions.

Your coop should be sized for the number of chickens you plan to keep and should include an outdoor area called a ‘run’. The minimum size depends on a number of factors and can range from one square foot to five square feet per bird.

Consider laying good quality chicken wire underneath the bedding of the coop and run, as foxes have been known to dig underneath walls to get to the chickens!

The top of the run should also be enclosed with chicken wire to prevent predators and birds of prey from entering.

Chilly chickens?

Before designing and building your coop you need to decide whether you will keep your chickens over the winter or cull them in fall.

If you decide to keep chickens through the winter your coop will need to be designed with enough insulation to keep the temperature in the coop above freezing. The chickens can tolerate low temperatures, but it is important to prevent their water and eggs from freezing.

You will need a heat source to keep the coop warm. A heat lamp in an appropriate fixture with protective cage is often adequate. You may consider a ceramic heat lamp which screws into a traditional light bulb fixture, but does not emit any light.

Chickens produce the most eggs when exposed to 14 hours of light. In the fall and winter you can supplement natural light with a light connected to a timer.
Bedding

What to use

The bedding material that you use for the floor of the coop is another important consideration.

Good bedding material should be inexpensive, absorbent, resistant to compaction and of compostable material. The material you use will depend on what is available in your community. Below are a few examples of suitable materials:

- Wood shavings (avoid pressure treated wood)
- Shredded newspaper
- Straw (chopped to avoid matting)
- Dry leaves

Well-managed bedding will have very little odour, making the coop pleasant for you, the chickens and your neighbours!

‘Deep litter’ method

Piling bedding materials quite deep in the floor is known as ‘deep litter’. Deep litter is a great solution that provides a healthy environment for birds, generates moderate heat and can be a valuable addition to your soil after use in the coop.

Starting with a clean bare floor, add about ten centimeters of bedding. Add new bedding material regularly and rake up areas which are compacted.

Try to keep the bedding material reasonably dry to avoid the growth of molds. The smell of ammonia is an indication that you need to add more bedding material.

After about a year you can remove the bedding and add it to your compost bin, this will make a valuable soil additive with another year of composting.

Retain some of the original bedding and mix it with the new fresh bedding after cleaning the coop. This will ensure that the healthy microbes that decompose the manure will be present.
Roosting & Nesting

Rule the roost

Provide chickens with roosts made of wood (plastic and metal are too slippery) about five centimeters wide and about 20 centimeters above the floor. Each chicken will need about 20 centimeters of perching space.

You should mount droppings boards below the roosts to catch the feces and clean them daily.

You can put this manure into a pile or composter and mix it with wood shavings or newspaper to make compost.

Nest boxes provide a cozy place for hens to lay eggs and help ensure that the eggs are clean and unbroken.

A nest box should be about 20 centimeters above the floor, about 30x30x30 centimeters, with a ten centimeters sill to keep litter and eggs from falling out of the box.

Final word on coops

Provide a nesting box for every four or five hens.

Designing and building a coop is a fun and creative activity. You can make your coop as simple or elaborate as you like. Plenty of resources are available to inspire you!

If you have a large enough area, you may also consider a movable coop. When combined with a portable fence this system can be used to pasture your chickens in your yard.

With a movable coop your chickens will enjoy feasting on weeds, grass and insects and their manure will do a great job of fertilizing the soil!
Food

What they eat

You can purchase commercial feed online, or from the south. There are different kinds of feed for layers and broilers and it is important that you use the right type.

Bird seed can be used as a backup food source.

You can buy a commercial feeder or build your own. Hang or elevate the feeder so that the feed is the height of the chickens’ backs, which will make it difficult for them to scatter and waste feed.

Chickens love to eat vegetable trimmings from the garden or from the kitchen. Providing your chickens with fresh vegetable scraps will diversify their diet and provide them with some mental stimulation!

Additional needs

Chickens need to consume small amounts of grit to help them digest their food. If they don’t have a readily available source of grit you can provide some crushed granite in a bowl.

Crushed oyster shells give layers the extra calcium they need to make eggshells. You can purchase oyster meal and either mix it in with their feed or provide it in a bowl. An alternative to oyster meal is to provide crushed eggshells.

Some people prefer to crush and bake the eggshells before feeding these to the chickens so they do not develop a ‘taste’ for any eggs that accidentally break in the coop.
Choosing a waterer

Chickens need clean fresh water every day.

Giving your chickens a reliable source of clean water is critical to the health and productivity of the flock.

There are several kinds of commercial waterers available. Make sure that the model you choose can hold ‘one days’ worth of water for the entire flock, about four litres per 12-15 birds in moderate temperatures and more when the weather is warm.

If you use a plastic waterer with a cap on top you should be careful to ensure that the waterer is placed on a level surface and that the cap is fully sealed. Otherwise the water will continue to flow until the waterer is empty, depriving the flock and adding unwanted moisture to the bedding!

Water tips

Freezing water can deprive the flock when the temperature falls. To avoid this, consider placing the waterer near a heat source or purchasing a model that has a built in heater.

Clean the waterer regularly to keep the water clean enough that you would drink it yourself!

Place the waterer on a platform at the height of the chickens’ backs. This will help to keep the trough clear of droppings and litter.
Egg Production

Fill your egg carton

Fewer hours of daylight in the winter leads to a decrease in egg production. Consider adding a light and a simple dial timer to the coop to provide morning light to the flock for a total of 14 hours of light each day. Avoid providing artificial lighting in the evening, as the chickens will have difficulty getting to their roosts when the light turns off suddenly.

In the fall don’t be surprised to find that your chickens are losing feathers! This is known as molting, when each and every feather is replaced by a new one. Growing new feathers requires a lot of protein and energy, so molting chickens will lay fewer eggs. The flock may molt at slightly different times and the whole process will take one to three months.

Collect the eggs every day – this will encourage the hens to continue laying.

Brooding

Why so broody?

A hen is considered broody when her instincts cause her to sit on a clutch of eggs for several days or weeks, rarely leaving the nest for food or water. If you are trying to hatch fertilized eggs this is useful (although you still need a rooster)!

In most cases broodiness is considered undesirable behavior that prevents the hen from laying more eggs.

You can break up a broody hen by isolating her in a broody box with food and water and with a mesh floor with no litter. After about a week she should stop being broody. You will know for sure that you have been successful when she lays an egg.

Daily egg collection will prevent hens from becoming broody.
Poultry Health

Winter tips and tricks

Maintaining poultry health is more challenging in the winter when the birds spend all of their time in the coop. Here are a few things you can do to provide your flock with a healthy environment:

- Keep the litter dry to prevent mold
- Ventilate the coop to improve air quality
- Add new litter regularly to prevent ammonia
- Remove manure every day
- Provide a dust bath box inside the coop
- Check daily to ensure water doesn’t freeze

Year-round health

Thoroughly clean the chicken coop once or twice a year.

If a bird in your flock dies, do not eat it or feed it to other animals as it may have been diseased.

If a bird in your flock appears to be seriously ill you should consider culling / removing it to protect the other chickens from infectious disease.

Chickens need regular dust baths to control lice. A short container filled with a shovel full of soil from your yard mixed with some wood ash works fine.

If you suspect your chicken died of disease, contact local authorities immediately. Your actions will ensure personal safety, public safety and food safety.
Resources

**Books**

- **The Small-Scale Poultry Flock**  
  Harvey Ussery, 2011
- **The Encyclopedia of Country Living**  
  Carla Emery, 2003
- **Building Chicken Coops**  
  Gail Damerow, 1999
- **Keeping Chickens**  
  Jeremy Hobson & Celia Lewis, 2010
- **Chick Days**  
  Jenna Woginrich, 2010

**Web resources**

- **Backyard Chickens**  
  [www.backyardchickens.com](http://www.backyardchickens.com)  
  Information on breeds, coops health and a useful online forum!
- **Territorial Farmers Association**  
  [www.farmnwt.com/producing-food](http://www.farmnwt.com/producing-food)  
  The Territorial Farmers Association has several good articles on backyard chickens in the NWT.
- **Urban Agriculture: Livestock and Poultry**  
  [www.omafra.gov.on.ca/english/livestock/urbanagricul.htm](http://www.omafra.gov.on.ca/english/livestock/urbanagricul.htm)  
  The Ontario Ministry of Agriculture has lots of useful chicken raising information on its site.
- **Composting Chicken Manure**  
  [seattletilth.org/learn/resources-1/city-chickens/compostingchickenmanure](http://seattletilth.org/learn/resources-1/city-chickens/compostingchickenmanure)  
  The Seattle Tilth produced this useful page on Composting Chicken Manure.
- **Poultry Health**  
  Yukon government has this pamphlet that deals with poultry health.
About this book

More and more people are waking up to the joys of growing their own food. This guide is intended to illustrate the basics of raising chickens in your backyard. Chickens are fun, entertaining, great with kids and provide nutritious eggs and meat. This guide is the first in a series of booklets that Ecology North has developed about food in the NWT. Pick it up and give it a read; maybe chickens are your next step to eating more local healthy food grown right here in the NWT.

For additional books in the series or for more information, please contact Ecology North.
(867) 873-6019 www.ecologynorth.ca