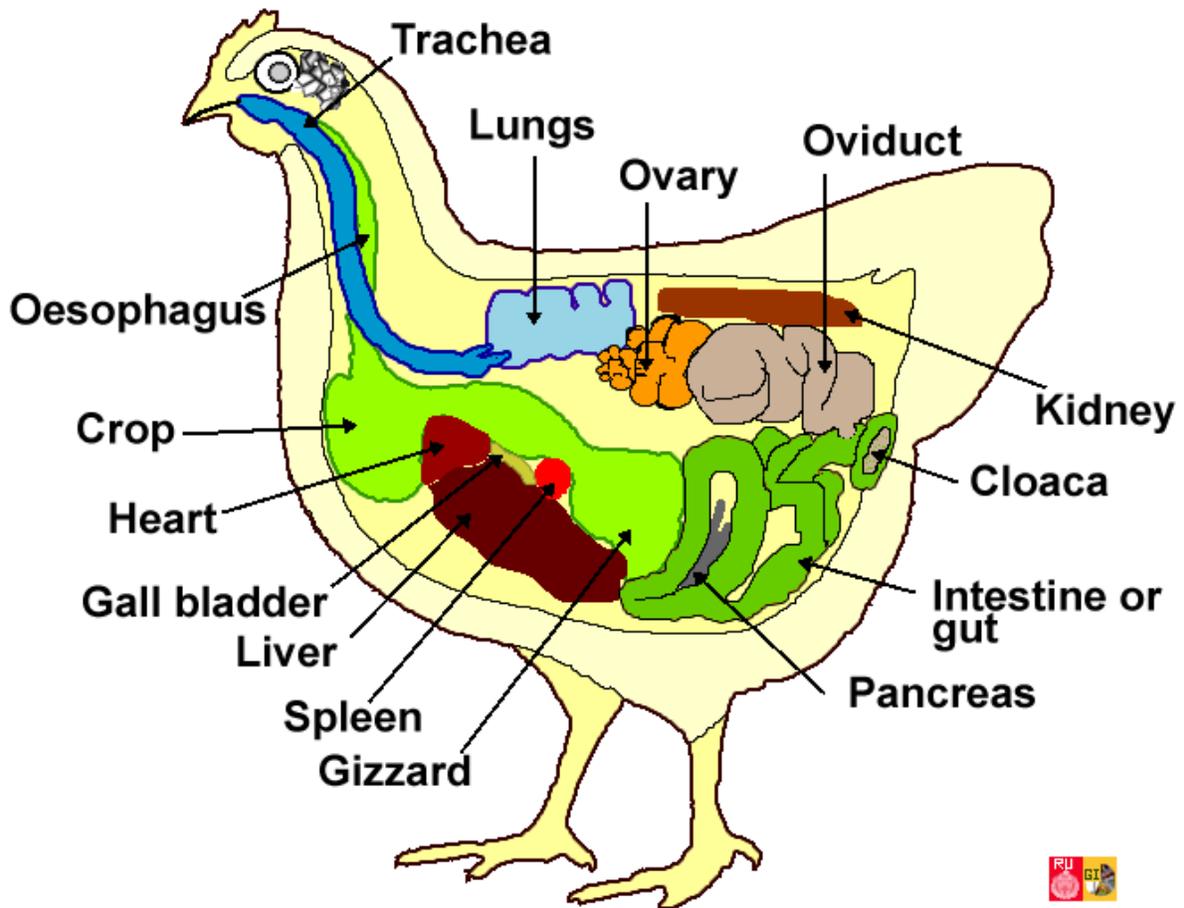




Garden Guru Series presents
Backyard Chicken Workshop



Where can you buy chickens?

Chickens can be purchased from a variety of locations

- Online ads like kijiji
- Through dedicated Facebook groups and small sale hatcheries - i.e. FTK – Kootenay Hatcheries’, ‘Fluster Cluck Farm Hatchery’, or www.truenorthfarms.ca
- Through large scale hatcheries i.e. Rochester Hatchery or Miller Hatchery
- Buckerfields in Salmon Arm orders bulk baby chicks every spring through the large hatcheries.

When buying from chicken hatcheries, they will ship boxes of day-old chicks however when buying older birds you have to pick them up.

What should I look for when buying chickens?

- Determine what breed you want to get – there are egg-laying varieties breed for high egg production, or dual purpose breeds that are good for both meat and eggs. There are also many fancy breeds that offer unique characteristics such as blue or green eggs, or beautiful feathers.
- You typically will want to get chickens that are at least 8 weeks old. At this age their sex can be determined, and they are old enough to live outside (they have their first set of adult feathers so they won't be cold)

Good chicken coop design

- Poop-catching boards are key! Chickens do a lot of digesting and pooping at night while they sleep, so having a board to catch their droppings while they sleep will make for a much cleaner coop. Plus you can scrape and add to your chosen compost pile.
- Chickens can handle cold, but they can't handle drafts. Your coop needs to be well-ventilated to allow any ammonia to escape (ammonia can harm the bird's delicate lungs), but needs to be draft free.
- Chickens overheat easily! With all those feathers, it makes sense, so make sure your coop and chicken run has lots of shade for the chickens to hang out in. Ideally some amount of 'deep shade' is best, which is really just an area that is shaded all day long so that the sun does not have a chance to heat it up.
- Depending on your chosen chicken breed, you will probably need ladders so that your hens can get up onto and off of their roosting (sleeping) spot. My older bigger hens can't jump 2 feet, while my younger smaller ones can jump or fly up to the roost.
- Hens need a spot to lay their eggs, so create 1 nest box for every 2 hens. Ensure that the nest boxes are easy to get to, low to the ground, and lower than your lowest roosting pole.
- See Page 6 for sample designs and tips

Basic hen health and what to do if your hen gets sick

- Chickens need a few things to stay healthy;
 - o Poultry (chicken) feed that matches their age and stage of life. So if you have laying hens, you will want to be feeding a 'layer feed' that is right for their nutritional needs.
 - o Laying hens also need extra calcium available in a separate bowl - either oyster shells or ground up egg shells – to replace the calcium that is lost when creating a new egg. Calcium is added to layer feed, however some hens have different calcium needs to having a separate bowl allows them to self-regulate.
 - o Grit – really just small stones – that act as 'teeth' in their gizzard and grind up their feed, grasses, or other snacks they may eat. Without grit, they can't digest grasses or snacks and things can get stuck in their digestive tract.
 - o Water – lots of fresh, clean water. We re-fill our waterers every day.

- Areas to dust bathe. Chickens love to take daily bathes, so they will need access to an area that allows them to do this. Sometimes they will even make their own, so you'll find dusty holes around their yard. The dusting helps keep their feathers clean and it important for killing any pests or lice your birds might get from neighbourhood crows. I use a combination of wood ash and dirt or sand, in a plastic box, and place somewhere out of the rain. A wet dust bathing area doesn't work!
 - Shade. Your chickens are prone to overheating with all those feathers, so they will need places to keep cool.
 - Roosts to sleep on at night. Chickens will sleep on the highest spot. Provide roosting poles that the birds can access, either by ladders or by flying, and allow for 1 foot per bird of roosting space. If you find some of your birds are sleeping on the ground at night, it means you don't have enough roosting space.
- Fermenting chicken feed
 - Fermenting your chicken feed before you feed it to the hens is an excellent tool for preventative maintenance. The chickens' digestive tract is acidic, and the fermentation process produces good digestive bacteria, pre-digests some of the feed, and produces an acidic environment. Your hens will eat less food and have better overall health.
 - Here is a great article on how to do it: <http://www.the-chicken-chick.com/2015/03/fermented-chicken-feed-why-how-in-3.html>
 - I add 1 'glug' of Apple Cidar Vinegar (maybe ¼ cup) to my large fermenting feed bucket when I make it.
 - Your hen is sick
 - Adding crushed garlic to the chickens' water is a great way to promote health of your chickens. Don't do it every day – once a month is fine unless one of your hens is sick. If you do have a sick hen – noticeable by their droopy appearance, lack of interest in food, etc – then crushed garlic in their water every day is advised until the bird is better.
 - The conventional wisdom is to separate a sick bird from its flock, however I don't typically do that as birds are highly social and the stress of being alone will not help the bird heal. Only in situations where it is apparent that the sickness is due to a contagion (i.e. bird is sneezing or has respiratory distress) or where the bird is being picked on will I separate the sick bird from the flock. In those cases I pick a buddy and separate 2 birds together, away from the others.

How to maximize egg production and minimize feed costs

- Supplemental lighting during the winter
 - Hens need 12-14 hours of daylight in order to trigger egg production, so without any supplemental light in the winter time, your hens are likely to slow down their laying.
 - Adding a light on a timer will lengthen their daylight and promote winter laying.
 - Set the additional light to come on in the morning, rather than the night time. The hens won't be able to find their roost at night if the light suddenly goes off, so only add additional light in the morning.

What can go wrong?

Some common (or uncommon but serious) things that can happen

- Lice and mites: chickens are likely to pick up external parasites from migratory birds, so **ensure that you have a dust bathe area with wood ash** and check your birds regularly for lice and mites. Both live on their skin, around their vent (i.e. bum) area. External parasites can eventually kill your bird as they draw nutrients from your bird. Lice eat feathers, mites eat blood.

- Egg-bound: this means your hen has an egg stuck inside her. If it happens, it will be very obvious – the hen walks around like a penguin – and is fatal unless she can pass the egg. Typically they advise to soak the hen in luke warm water to help her try and pass the egg. Search online for more details.
- Feather eating/egg eating: if your hens are eating their own eggs or picking their feathers, this is typically a sign that they are not getting enough protein in their diet (feathers and eggs are mostly protein). Improve their diet and increase their amount of protein
- Pecking and/or mean chickens: your hens will have a pecking order, meaning there is a ‘top chicken’ and a bottom chicken, whom all the other chickens dislike. If your chickens are getting pecked on, wounded, or losing feathers, your enclosure might not be big enough. The hens need a place to run or escape to if they are lower on the pecking order.

Predators

There are a few animals that like to eat chickens or chicken feed:

- **Bears** are attracted to the chicken feed, but will eat both chickens or feed if they can get access to it. Once bears find out your home is a snacking ground, you are going to have a lot of troubles, so your best approach is to prevent any encounters from happening. Keep all feed inside a building (garage, shed, house) that is bear proof, and ideally install an electric fence. The electric fence will keep out not only bears, but also dogs or coyotes that may wander into your yard.
- Neighbourhood **dogs** are probably your biggest worry. A sturdy fence, or electrified fence will keep them out. Chicken wire only really keeps chickens in – a persistent bear or dog may be able to get through, so consider reinforcing it or using hardware cloth if you are not using an electric fence.
- Overhead predators (I.e. **hawks**) are not that common in town, but they do come around, so consider netting overtop of your run to keep out flying birds.
- We don’t have raccoons or other small animals in town that are likely to eat your chickens for dinner.

Permitting and bylaw requirements

The City of Revelstoke allows 5 hens in their recent (2015) bylaw changes. Please read through the bylaw and the Chicken Guidelines to ensure you know what is allowed. Details in the bylaw include the size of your coop and run and how far from your neighbours’ property or buildings the coop needs to be.

Backyard Chicken Guidelines and Bylaw - <http://www.cityofrevelstoke.com/index.aspx?NID=176>

Other Resources

There are many great resources online or in book format!

Websites

The Chicken Chick - <http://www.the-chicken-chick.com/>

Facebook groups

Poultry Natural Living and Care: <https://www.facebook.com/groups/herbalpoultrycare/>

Revy Mother Cluckers: <https://www.facebook.com/groups/723191741136822/>

Farm the Kootenays: <https://www.facebook.com/groups/farmthekootenays/>

Books

Storey’s Guide to Raising Chickens - https://www.chapters.indigo.ca/en-ca/books/product/9781603424691-item.html?mkwid=sKLCrs73h_dc&pcrid=44154474422&pkw=&pmt=&s_campaign=goo-Shopping_Books&gclid=CJKKyIPh-MwCFRSPfgodtgkMJw

Total Cost of Ownership

What will it cost me to keep chickens?
(worst case scenario)

Start up costs

\$15 per hen (5 hens)	\$75
Construction Materials for Coop *	\$500
Electric fencing (poultry netting + electrifier)	\$300

Total Start-up Costs	\$875
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Recurring costs (monthly)

20 kg bag of feed	\$20.0
Bag of grit **	\$1.7
Bag of oyster shells **	\$1.5
Bedding materials for coop (straw, shavings, etc)	\$10.0

Total Monthly Expenses	\$33
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Egg Production (monthly)

Monthly Summer Egg production (4 eggs/day)	121
Monthly Winter Egg production (2 eggs/day) ***	60
Average Monthly Egg production	91

Total Eggs (yearly)	1092
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Revenues

Dozen eggs per month	7.6
Revenue monthly estimate (\$5 a dozen)	\$38
Dozen eggs per year	91

Revenue yearly estimate (\$5 a dozen) ****	\$455
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Net Gain (Revenue - Expenses)	\$57
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Payback Period for initial investment ($\$875/\57)***** 15 years

* The construction material costs vary widely depending on what materials you can access for free. We built ours from scrap wood and tin, so our only costs were the electric fencing.

** You will only need 1 bag of grit and 1 bag of oyster shells per year. Or to save the cost on the oyster shells, you can save the chicken eggs, bake them, grind them up and feed them back to the hens. Calcium lost must be replaced, otherwise the hens will lay soft shelled eggs that *could* burst inside their body.

*** Egg production in the winter time depends on whether or not you supplement with a light bulb. If you opt to do this – putting a light bulb in their coop – they will lay almost like it is summer time (14 to 16 hours light needed). Chickens that are older than 1 year also take a month or so off from laying every fall as their go through a 'molt', which is when they loose and regrow their feathers.

**** This is the estimated cost of the eggs that you would have bought from the store, but are instead producing yourself.

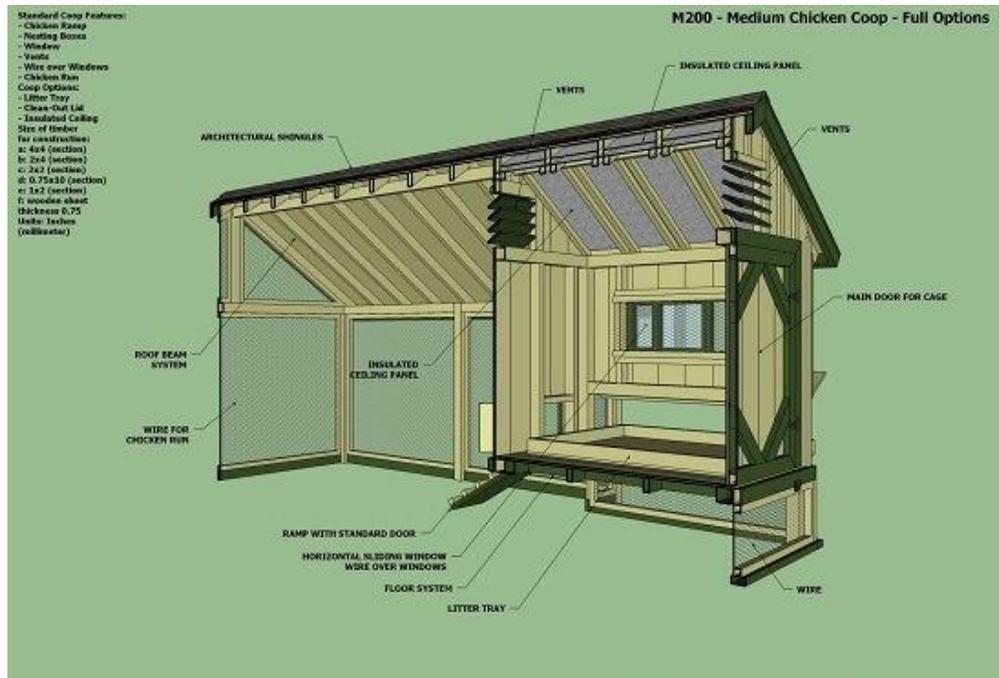
***** This assumes you purchased all materials new, rather than salvaging.

Sample Coop Designs

Things to consider:

- Snow! You will need a roof that sheds snow, and a covered run so that the chickens have somewhere to get outside in the winter time. Chickens will not walk in snow, so will stay inside all winter unless you create a covered run for them.
- Size of run – you will want to make sure your chicken run is big enough to give chickens room to roam and get away from others if they are being picked on.
- Movable? Some people like to move their coop and run around their yard to allow the chickens access to fresh grass. A chicken coop of this type is called a ‘chicken tractor’. Look online for design ideas.

Design Idea 1: I like this design because it has a covered area built into it for shedding the snow in winter time. I would build a ‘summer’ chicken run that was bigger and attached on to this one.



Design Idea 2: The A-frame. This is a popular design if you only have 2 or 3 chickens, or if you want to make a movable chicken tracker. We started out with a similar design, and covered the whole thing with plastic in the winter time so that the snow does not fall through the chicken wire bottom. You can raise it above the ground in the winter so that accumulating snow does not block out the sun.

