

With the increasing cost of food and concern about animal welfare, more people are now keeping backyard chooks. This hand-out is designed as an introduction, to provide people with basic information.

Chickens are delightful creatures, with real personality. They are surprising low-maintenance.

You will need to provide for their basic needs: Food, housing, protection from predators and an area for them to scratch and exercise and engage in natural behaviour.

Food

Chickens need a balanced diet. Contrary to common belief chickens are not vegetarian, they are omnivores. Worms, insects and scavenged meat would have formed part of a natural diet before the advent of modern poultry feeds. For most backyard chickens grazing in the backyard will not provide a total diet and supplementary feeding is required.

Commercial Feed

Pellets are readily available and come in a variety of different types.



Chick Starter: A feed designed for newly hatched chicks. Often eaten by the mother as well. It will often be medicated, although non-medicated are available. The medication is a coccidiostat, to prevent coccidiosis. Warning: It will not necessarily be listed in the ingredient list on the back. If in doubt, ask.

There is a withholding period of 10-14 day for the eggs if laying birds have eaten this feed.

Warning: Dogs like eating chicken pellets, however it is dangerous to let your dog eat medicated pellets as it can be fatal, or cause long term health problems.



Grower Pellets: Designed to encourage growth in birds that will end up on the kitchen table. Also useful if you run out of starter but the chicks are not ready for layer pellets.



Layer Pellets: Designed as a feed for laying hens. Has a high calcium level for shell formation and strength. For this reason it is important not to feed layer pellets to growing chicks as the excess calcium can damage their kidneys.

I Don't Want to Feed Pellets

Pellets are a relatively new innovation in domestic chicken keeping. Many people prefer to know exactly what they are feeding their chooks. There are grain mixes that you can purchase. A common mixture is kibbled corn, wheat, split peas and barley. You will need to grind this down if you are feeding it to chicks (I have used my coffee grinder to do this).

Chickens will also appreciate fresh vegetables, especially leafy greens. They will be more than happy to turn over your compost heap in their search for food, including insects.

Remember to include a source of protein - milk (yoghurt and kefir included), meat (mince, offal, mice) are a few easy sources. You can even grow mealworms or other insects - your chooks will love you for this.

With a more natural diet you will need to provide a source of calcium. You can use oyster shell or grind up some dried eggshells in the kitchen whizz (important so your chickens don't start eating eggs). Provide this in a small container for the chickens to feed ad-lib. A small amount will go a long way.

For more information on feeding chickens with limited or no grain see January 2013 issue of Organics NZ, or look online. Geoff Lawton has a video about feeding chickens and utilising their natural instincts to create compost.

Common Misconceptions About Chickens

Chickens can't fly

False: Chickens have wings and can fly. Some will be able to fly up to roost in a tree. Light breeds are more likely to fly.

You can limit a chicken's ability to fly by trimming the feathers on one wing. This does not hurt the chicken. By trimming the wing you alter the balance of the chicken which will affect their ability to control their flight.

You will need to repeat the trimming process after each moult.

If you want eggs you need a rooster

False: A pullet or hen will lay eggs without a rooster. The eggs will not be fertile so you will not be able to hatch chicks from the eggs.

Hens will go broody (sit on eggs to hatch chicks) without the presence of a rooster as well. You can purchase fertile eggs for your hen to hatch if you want chicks. If you leave infertile eggs under your hen they will go rotten.

Chickens attract pests

Pests like mice or rats occur in residential areas with or without chickens, however they will more than happily take advantage of any food source they can find. If you leave food out sparrows and rodents will join the feast, especially in winter when food sources are scarce.

To prevent this from happening put enough feed out to feed your chickens at one time. If they are leaving food behind you are feeding too much.

Alternatively, you can use a treadle operated feeder which has a lever the chickens step on to open the lid so they can feed. If you have bantams get the smaller version they can use.

Rats have also been known to burrow under and into chicken coops and steal eggs or kill small chicks. To prevent that from occurring keep an eye out for any changes in the coop.

If you lay out bait for rats or mice ensure that the chickens can not access it. Kill traps are also useful but should be positioned so your chickens do not get caught in them. Mice caught in traps can actually be fed to the chickens.

Chickens can be divided into three generalised groups. There are advantages and disadvantages to each type of bird. There is no wrong breed.

Commercial	
Meat Birds (Broiler) - Cobb and Ross are the main boiler birds in NZ	
Pros	Hybrids that are bred to grow extremely quickly with large chests (i.e. lots of breast meat). Will look and taste like the chicken you are used to from the supermarket.
Cons	Optimal growth is based on commercial foods and culling at a young age - (6-8 weeks). If left to grow older, they have been known to drop dead for no apparent reason. Prone to obesity which requires careful monitoring of food. Are hybrids so will not breed true.
Layer Birds - Hyline and Shaver	
Pros	Readily available, often well handled. Will lay an egg a day for 80 weeks (if sufficient lighting is provided). Will probably be immunised against Marek's disease. (Vaccination of backyard chooks is not an option). If bought as Point Of Lay pullet or earlier, you will save a hen from a life in a cage.
Cons	They are hybrids so will not breed true. Have a shorter lifespan - 1-8 years. When culled, meat is only suitable for soup. Rescue birds may need to be taught how to be chickens. Rescue birds will be unused to free-range conditions and stress can cause health problems and possibly death.
Heritage	
Purebred birds, some of which have been bred for thousands of years. There are three main types: Heavy (good meat birds), Light (smaller, often layers or ornamental) and Bantam (mini chickens - some heavy and light breeds are also available in bantam sizes). Some heavy breeds are known as dual purpose - good meat birds but also lay well.	
Pros	You know what you are getting. You are helping keep the breeding lines alive. Heavy and dual purpose breeds are good eating, so if you are breeding the birds the roosters are useful too. You will get a wider variety of egg colours and sizes - colour will depend on the breed.
Cons	Harder to get hold of. Some are very rare. If you want specific breeds you may need to purchase eggs and incubate them. Not all chickens seen online are available in New Zealand. They cost more than other chickens. Be prepared to travel to pick them up. They are slower to grow than commercial birds. Some lines may have been bred for form over function. Some breeds are known to not lay well. These ones may only lay three or four eggs per week. Egg size will vary depending on the breed. Bantams will lay much smaller eggs.
Backyard Specials	
Backyard specials are mixed breed birds depending on what is in the backyard of the breeder.	
Pros	Easier to get hold of than heritage breeds. Cheaper. You will get a wider variety of egg colours.
Cons	You don't know what you are going to get. You don't know what colour the eggs will be.

Keeping Your Flock Healthy

Keeping a chicken healthy is important. An unwell chicken will not be productive and the illness can easily spread among the rest of the flock.

Because prevention is better than cure, the first step is to prevent illness from entering in the first place. If a chicken does not look well, do not take it home.

Despite all precautions, some chickens will hide signs of illness. It is wise to quarantine new birds for a few weeks before introducing them to any existing flock.

If you notice one of your birds has any symptoms in the adjacent box, or loss of appetite, it is a good idea to quarantine them just in case.

Don't be afraid to follow your instinct. If a bird seems off, quarantine it. It will not hurt the bird to be in quarantine for a few days and isolation may help identify the source of the problem, as it will be easier to check the poop and pick up any deterioration in the condition of the bird.

Worms, Lice and Mites

These are common pests that can afflict chickens. There are many chemical solutions to these pests, however regular applications of these medications to your flock you may inadvertently help these pests build up resistance to these chemicals.

Worms: There are a number of varieties of worms that can infect a flock. Some are visible to the naked eye, others are not.

As a preventative measure you can add a tablespoon of coarsely chopped pumpkin seeds (available in the bulk food department at supermarkets or bulk food shops) to their feed 2-3 times per year. You can also add a teaspoon of garlic powder to the feed as well. The pumpkin seeds paralyse any worms they have and are excreted the natural way. If the pumpkin seeds are fed in the evening and the chickens do have worms, you may see them in the droppings underneath the roost the next morning. Some will also add a teaspoon of garlic powder to the feed as well.

If your chicken has worms it probably has runny, watery poop. Other symptoms also include loss of appetite, isolating itself and ceasing to lay eggs. In this case you will need to bring in a conventional wormer, as a bad infestation can be fatal. Flubenol is available from some vets (it may pay to ring around as not all vets stock it). It is also advisable to move your chickens to fresh ground, if possible, and recondition the soil by spreading garden lime.

Lice: Lice live on the birds and are usually noticed when inspecting the vent. If lice are present in sufficient numbers, the egg parcels that are attached to the shafts of the feathers just below the vent are visible. On close inspection tiny lice can be seen crawling among the feathers. Poultry lice don't suck blood - they live from the feather dander. To treat, hold the bird firmly by the legs and liberally cover it with Diatomaceous Earth (DE). Don't inhale the powder.

Mites: Mites live in the cracks and joints of a chicken coop. They come out at night, when the birds are roosting, and suck the blood from the chickens, then return to their hiding places. Mites are smaller than a pinhead and don't walk fast.

Mites, like lice, can be killed with Diatomaceous Earth (DE). Dust the corners and crevices of the coop with DE, or mix the DE with enough water to make a slurry and paint it in every corner and crevice you can find. You can also add DE to your chicken's dust bath.

If you get a particularly bad infestation, you may need to take further action. Clean out the coop removing all litter, dust etc. Scrub the coop floors, walls, roosting perches, nests with solution of hot water and washing soda. You may also need to spray an insecticide as well as applying DE 8-10 days apart.

Bad Things Happen.

Sometimes, despite all your best efforts, one or more of your chickens will die. This can happen to even the most experienced of poultry owners. Please don't feel discouraged. This is especially important if you are very new to chickens.

As you become more experienced in keeping chickens you will get to know your chickens and will be able to identify potential problems earlier.

Join forums like Poultry Central www.poultrycentral.co.nz or Lifestyle Block www.lifestyleblock.co.nz. On both forums there are experienced poultry owners who will be more than happy to offer advice and troubleshoot problems that crop up. They will also be there to celebrate successes and commiserate when things don't work out as planned.

Basic Checklist for Buying Chickens

- Is there discharge from its nose or eyes?
- Does it have a poeey, smelly bum?
- Are the legs thick and rough?
- Is the comb pale?
- Does the chicken feel boney?
- Are the tail or wings droopy?

If you can answer yes to any of these questions, don't take it home (even if it is free).



What is Diatomaceous Earth

Diatomaceous Earth is a white powder that consists of the remains of tiny, fossilised organisms called diatoms. They consist primarily of silica. The razor sharp edges cut into the exo-skeleton of bugs and dehydrate them, causing them to die. They will not hurt humans or chickens (or other mammals)

Laying Eggs

Hens need 14 hours of daylight to lay eggs. In commercial situations they are provided with artificial light to keep them laying. As daylight hours lessen over winter the hens will stop laying. You can provide artificial lighting, or you can choose to let your chickens have the winter off. During this time they usually moult and will not lay during that period.

Hens will seek out a cosy, protected location to lay their eggs. Most commercially built coops will have one or more nesting boxes. You should aim for one nesting box per 3 or 4 hens, and it should be easily accessible so you can collect the eggs. A nesting box can be as simple as a bucket on its side with some woodchips in for nesting material.

Inevitably, if you have free range chickens they will find somewhere to hide their eggs. If your egg count has reduced, start looking around the garden for hiding places. Check clumps of long grass, under shrubs or low growing bushes, in pot plants or other containers, under the deck etc. If the area is easily accessible you may wish to continue to let them lay there. Replace their eggs with one or two fake ones to encourage them to continue to lay there.

Going Broody

Some hens will go broody - that is 'sit on a nest to hatch chicks'. Some breeds are more prone to going broody than others. Pekins and Silkies are known for this. Some broodies have been known to sit on an empty nest. This is not so good if you want them to continue to lay eggs. If you have an unwanted broody remove her from the nest and remove any eggs. If she goes back you will need to put her in a cage for a few days. Remember to provide food and water. The aim is to make her uncomfortable so she will not sit and will have to stand. After a few days let her out. If she returns to the nest repeat the process.

If you want more chickens a broody hen is a good opportunity to increase your flock. If you do not have a rooster you can purchase fertile eggs to place under your hen. They can be sent by post or courier.

It is best to remove the infertile eggs and replace them with fertile ones in the evening when the hen is sleepy. Gently place the eggs underneath the hen. A leather glove may be of value here to protect you from a well aimed peck. Chicks will hatch after 21 days. Leave some food and water near the hen as they will only leave the nest for a few minutes at a time.

If an egg is not fertile the hen will often boot it out of the nest. Carefully dispose of these eggs trying not to break them. The smell is disgusting.

It is wonderful to watch a mother hen raise her chicks. You will need to provide an enclosed run for mum and her chicks as larger hens will not hesitate to steal their food. Provide food several times per day. Chicks are messy and will stand in their food and water, so be prepared to change it on a regular basis. The water dish should be shallow so the chicks do not get wet.

As chicks are growing they need more protein than adult chickens. You can add mince, mashed boiled egg or other protein to their diet to cater for this. Remember that chicks need their food in small particles. Add some small grit (not oyster shell) so they can grind the food in their gizzards.

As chicks grow older they will get adventurous and may escape the run. They may not know how to get back in - so if you hear some high-pitched cheeping, it is worth investigating.

Roosters

If you hatch chicks, plan for half of them to be roosters. Have a plan for what you will do with them when they are old enough to crow. Not all Councils allow roosters in a residential area. Going to the country and releasing them into the wild is **not** an acceptable solution. It is cruel to the rooster and unfair to rural residents.

If you can not bring yourself to kill and eat your rooster, ask around and find someone who is.

Boxing a Rooster

Contrary to popular opinion, roosters do not just crow at sunrise. They are just as happy to crow at 2am, and also during the day. They may also crow in response to neighbourhood dogs barking.

If Council regulations allow you to keep roosters and you live in a residential area, your neighbours will probably appreciate if you prevent your rooster from crowing at unearthly hours. You can make your neighbours happy and muffle the noise by boxing your rooster at night.

- Get a box - cardboard is fine. (Plastic can fill with condensation, not a good idea). The box should be low enough to prevent the rooster from extending his neck.
- Cut ventilation holes into the box so the rooster can continue to breathe.
- Put some bedding material into the box. Chickens poop during the night and bedding makes it easier to keep clean.
- Place the rooster in the box and close the lid. If using a cardboard box with folding lid, place a piece of cardboard over the top to keep the rooster from pushing through. A strap around the box will help keep the box closed.
- Place the box in a garage, shed or coop.
- The rooster will still be able to crow, but the box will muffle it.



This tip sheet is available from <http://recap.org.nz>.

© 2014 RECAP: Society for the Resilience and Engagement of the Communities of Ashhurst and Pohangina, Inc.

It may be copied for personal and educational use. Please attribute authorship to RECAP: The Society for the Resilience and Engagement of the Community of Ashhurst and Pohangina Inc. Produced with funding from Palmerston North City Council. Content and design by Llyvonne Barber. Information in "Keeping your Flock Healthy" provided, with thanks, by Marina Steinke. Used with permission. Photo supplied by Marina Steinke.

