



# Keeping Chickens in the City

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## Why Chickens?

Chickens are the **new black** in Green Urban Living. In case you're not sold yet on chickens, here are thirteen really good reasons to get some.

### *Willing Workers to do all your Vegetable gardening*

If you set up your vegetable garden in a particular way chickens will do all your weeding, fertilising, pest control and mulching. You only do the fun bits such as seed raising, planting and harvesting and of course eating! Gone are the days when you need to wheelbarrow expensive compost into your vegetable garden, let the chickens do it for you.

### *Every Chook Has a Personality !*

Each chicken has their own personality. Most are adorable and lovable, the odd one not so! They're also eye-candy, parading around in a variety of colors, patterns, stripes shapes and sizes.

### *Live a more sustainable urban lifestyle*

Chickens help us to reconnect with nature even when we are in the middle of a city. Keeping a few chickens in your backyard allows you to live a more green lifestyle.

### *A Healthy Lawn with maintenance or nasty chemicals*

Chickens LOVE to range free. They'll eat any garden pest they can get their beaks on (earwigs, grubs, beetles, even cockroaches) and they'll turn it all into treasure in the form of little parcels of fertiliser. Chickens will even cut down on the amount of mowing you do because they love to eat grass. Sit in a lounge chair with a good book and your cold Chardonnay while they do the hard work for you. If you use a chicken tractor move the chooks every 3-4 days, rake up their droppings and throw it on the garden.

### *Kitchen leftovers become free food.*

Chickens can eat almost anything people can, in fact my chooks much prefer our leftovers to their grain. Chickens are the Labradors of the chicken world. Get a small lidded bucket for the kitchen and throw those unwanted leftovers into it. No more feeling guilty about letting them rot in the fridge or throwing them out! Watch out for the garlic and onion, though, unless you want your eggs tasting funny.

### *Tasty, Rich, Healthy, orange yolked eggs.*

Cats and dogs make great pets but do they produce anything that is edible? Chickens earn their keep, and once you've dined on their eggs you'll never buy from the supermarket again. They're so much more tasty, no doubt because you can eat them when they are still warm. Your chicken yolks will be a rich orange colour because of the varied diet and all the greens they eat.



Research shows that chickens allowed to free range and eat grass lay eggs that are higher in Omega-3 fatty acids and Vitamin E and at the same time lower in cholesterol than store-bought, too.

#### *Great Compost Makers*

Composting is a wonderful way to reduce your ecological footprint, and make free fertiliser for your garden. Chicken poo is nitrogen rich and is a great addition. Egg shells are a great addition to your compost or worm farm, adding vital calcium

#### *Leaf, Weed, and Grass Clipping on-site disposal*

Forget having to pay for expensive green waste collection. Leaves, weeds and grass clippings are a treat for chickens. They'll happily dig through whatever you give them, eat what they can, and mulch the rest. Give a small flock a heap of lawn clippings and garden debris and a week later it will be turned into rich mulch..

#### *Save a Chicken from an A4 sized cage!*

If you're aware of conditions in factory farms, even in some of the so-called "free range" farms, I needn't say more. If you're not, please research it. Factory farming is terrifyingly cruel. Each chicken has an allotted A4 size to live their short, miserable life in! Reduce the demand for supermarket eggs and send a message to those factory farms that you don't want what they're selling.

#### *Chickens are the low maintenance pet*

Chickens don't need to be walked, brushed, or fed twice a day. They don't require yearly registrations or costly vet bills. Essentially all you have to do is gather eggs daily, fill their food and water containers a couple of times a week and change their bedding once a month!

#### *Be the Coolest Kid on the Block*

Despite their many merits, backyard chickens are still relatively uncommon. Surprise neighbours, friends and family by being the first person they know to have chickens. Entice them all your lovely home baking, gift them a few eggs. Soon they will be fellow chicken keepers.

#### *On-site Pest Disposal Units*

Your chickens will eat all your green vegetable bugs, slugs, snails, flies, centipedes and spiders. In fact all manner of other creepy crawlies will be consumed hungrily avoiding the need for any nasty, noxious chemicals in your garden.

#### *Chickens make great kids Pets*

Chickens are gentle but robust. Importantly they help us teach the little ones about responsibility and nurturing,



Chickens are, after all, the most "eco green" pet you could possibly have and at Green Urban Living, we think it's time everyone knew.

### **By-laws Regarding Keeping Chickens in an Urban Environment.**

Generally speaking you are allowed between 6-12 hens in the city. No roosters. Permanent runs need to be 2 to 3 metres off the boundary and 10 metres from a dwelling. The coop needs to have a concrete floor. If you choose to keep your chooks in a movable run you do not strictly have to comply with these distances.

Most councils are very "pro" people having poultry and do prefer the movable chicken run system as this avoids a build up of smells and flies.

To check your councils regulations go to your councils web site and search on *by-laws-poultry*.

### **Do You Have Enough Space?**

Chickens do not require a lot of space if you house them in a movable run. A good rule of thumb is 1 square metre for every chicken in a run or 3 square metres per chicken in a permanent enclosure. Smaller for bantams. Chickens need to be part of a flock. You must keep at least 2-3 birds to be kind. Three to four layers will keep a family well supplied in eggs; have 6-8 hens if you are a baker!

### **Which Breed?**

Did you know there are over 400 varieties of chickens? With all those options it can be tough to choose!

### **Standard vs. Bantam**

The first decision is to decide whether to keep chickens or bantams. Bantams are around a third the size of a normal hen. Being cute and docile, they make great pets, especially for kids. But they lay less frequently and their eggs are small. Bantams make great mums and will happily hatch any eggs they can find. They are also more susceptible to predators - for instance, Crows, Hawkes or Magpies will take your bantams but wouldn't dare to go after your large chickens. Cats may also prey on small bantams but won't take on a full sized hen. They can be quieter than many standard chicken breeds. If you like the idea of letting them free range I find they don't do as much damage to precious plants as larger footed hens.

Still with all these great reasons I personally prefer Standards because of their larger eggs and reduced susceptibility to predators and they make better gardeners.



Some breeds such as Silkies and Sebrights are only available as Bantams; others only as Standards; many as both. The good news is that you can combine them in a flock, so if you want both types, you're free to mix and match!



*A Pekin bantam hen*

#### Cold Weather

If you live in a cold climate (regularly gets below freezing during part or all of the year), there are certain breeds to avoid. In general, Standards are hardier than Bantams and heavier breeds fare better than lighter breeds. Combs and wattles also come into play: the smaller they are, the less susceptible they are to frostbite. Chickens can handle the cold as long as they can get out of the rain and away from cold winds. My chickens happily live in their dome year round.

Especially cold-hardy breeds include:

- Plymouth Rocks
- Wyandottes,
- Orpingtons
- Barnevelders
- Sussex's







*Silver Laced Wyandotte*

### Egg Production

Some breeds are valued mainly for meat, some for laying eggs, and others, called "dual purpose", for both. Still others are kept primarily for ornamental purposes, including all Bantams. If you want the best possible egg production, limit your search to the laying breeds. Some of the best layers (like White Leghorns) have a tendency to be more flighty and nervous and avoid human contact. We have brown Leghorns that have been hand raised but they are still not very tame. The brown Hylines can't be beaten for egg production but their egg laying career is short at only two years.

### *Great egg-producing breeds:*

- White Leghorns, Brown Leghorns
- Rhode Island Reds



*Brown Leghorn*

### *Dual-purpose breeds that also lay well:*

- Plymouth Rocks
- Wyandottes
- Cuckoo Marans



- Australorps
- Orpingtons
- Barnevelders
- White Sussex



*White Sussex*

### Egg Color

Not every egg is created equal! Many people think a brown egg is more healthy for you but this is untrue. Some breeds lay blue eggs, others green, others deep chocolate brown, cream-colored and almost everything in between! If you would like a rainbow of eggs keep some of these breeds.

It is the colour of the chickens ears that shows what colour egg that breed will lay. If the chicken has white ears they lay white eggs. If they have brown or red ears they lay brown eggs. The ears are below and behind their eyes.

These are the breeds to look at if you want a rainbow egg basket:

- For blue or green eggs- Araucanas
- For deep reddish-brown eggs- Welsummers
- For very dark terracotta brown eggs- Barnvelders, Cuckoo Marans
- For light brown eggs: Plymouth Rocks, Salmon Faverolles
- For cream-colored eggs: Polish, Sussex's, Dorking
- For white eggs- White Leghorns, Anconas, Minorcas, Andalusians, Campines
- For brown eggs- Rhode Island Reds, Australorps, New Hampshire Reds, Plymouth Rocks, Wyandottes

### Save a Rare Breed

There are more options than just the Hyline Brown! With the development of the mass egg farms and the commercial breeds, old fashioned breeds are becoming rare. Their survival depends on backyard flock owners.



Endangered breeds include:

- Purebred Araucanas
- Dominiques
- Dorkings
- Spanish (a.k.a. White Faced Black Spanish)

*My pick of the Best Chickens breeds to keep in an Urban Environment*

These breeds are relatively quite and docile but make great gardeners and still produce good amounts of tasty fresh eggs. They are long lived, so are good if kept as pets.

- White Sussex
- Orpington
- Barnevelders
- Wyandottes
- Barred Plymouth Rock

**Buying Chickens**

You can buy “point of lay” chickens (teenagers about to start laying) from many battery chicken farms, Trademe, or ask around to find local breeders. The price of purebred chickens will start at around \$20 and go upwards of \$50. Hyline Browns normally can be bought for around \$18. Remember Hyline Browns will lay well for two years and then they are basically ‘spent’, purebreds will keep laying, well into old age.

- To find chickens in Trademe look under farming and then poultry.
- The magazine *Lifestyle Block* sometimes advertises breeders.
- [www.rarebreeds.co.nz](http://www.rarebreeds.co.nz) is a website worth looking on for particular breeds.

**Starting with day old Chicks**

Chicks are very cute and hatching or obtaining day old chicks is a great experience for kids to enjoy. They require much more tender loving care than full-grown hens and it'll take 4-5 months before they start laying. Some battery farms will sell day old chicks at around \$6 each. The good thing is they have already been sexed so you are guaranteed hens.

You can keep young chicks almost anywhere: their small size makes them easy to handle! A large cardboard box will suffice for the first few weeks. They grow quickly, though, and by the time they're three or four weeks old they'll be taking up a lot of space and making a big mess, so preparing a living space for them is actually quite important.





Baby chicks need to be protected from drafts but still have adequate ventilation. This can be in the form of a cardboard box with holes for ventilation or a plastic box. Fit a chicken wire lid if you have a cat or else the cat will think you have had KFC delivered! They can create a certain amount of odour so I recommend you keep your brood in the garage or laundry.

#### *A heat source*

Baby chicks need to be kept pretty hot. Think sauna! A 250-watt infrared heat lamp is the best way to achieve this, placed right in the middle of their living area and suspended off the ground. I bought a heat lamp bulb from Mitre 10 for around \$15. You can buy expensive red lights from pet shops too. Pay close attention to how your chicks behave. If they're all crowded together directly under the heat source, they're cold. Lower the heat lamp or add another one. If they're around the edges of the brooder, avoiding the heat and each other like the plague, they're too hot! Raise the heat lamp. A happy flock will happily be exploring all around the brooder.

And please do not listen to anyone that tells you a regular old 60 watt bulb will suffice! They really need a lamp intended to produce heat. When young they require this heat source twenty four hours a day.

#### *Absorbent bedding*

Baby chicks are big poohers, so make sure to line the floor of their housing unit with a thick layer of newspaper and then some absorbent material such as sawdust or straw.

Chicks need to be fed special chick starter mash ( buy at any seed merchant) and have access to clean drinking water at all times. Make sure you use a shallow water container to prevent chicks drowning. I put a large stone in the water container to stop it being turned over.

Don't forget that your baby chicks need less and less heat as time goes by. This is because they are developing their adult plumage. Make sure your heating set-up gives each chick the choice of how much heat is comfortable to them. It is best to place the heat lamp at one end of the run.

If you have an old mop you can hang this inside the run to mimic the hens plumage. The chicks will happily sit under it as if it was their mother.

#### *Outside playtime*

After the chicks are 2-3 weeks old, if it's warm outside and sunny, let them have a little "outdoor time"! Being outside encourages the baby chickens to produce adult feathers more quickly. Put them in a wire cage or erect some other temporary housing and place it in the sun, making sure they have access to water and shade and protection from chilly



winds. They'll absolutely love running around around in the grass. They happy cheeps will be deafening. I use a redundant rabbit run.

By 4-5 weeks of age your chickens are ready to move outside full-time. In the middle of summer, I move the chicks permanently outside at around 3 weeks.

### **Housing your Chickens**

A mobile pen allows you to put your chickens to work within your vegetable garden or keep your grass short on your lawn. A mobile pen also prevents the build up of smells, flies and chicken manure.

The more traditional permanent enclosed chicken coop and attached run can be put to good use by creating a 'deep litter' system for the chooks to work through. Throw straw, grass clippings, leaves, weeds, coffee grounds and any other organic waste into run. The chickens will happily dig and scratch through it creating rich compost. Every six months wheelbarrow out this compost and spread on garden and start whole process again.



*A traditional coop in an enclosed run. A deep litter is slowly building up and being converted to rich compost by the clever chooks.*

### **Feeding your Chickens**

It's easiest to purchase "complete" feeds that have exactly the right mix of vitamins, minerals, proteins, carbohydrates and fat. Feeds come in both organic and conventional varieties. If your chickens have started laying eggs or are 20 weeks or older, purchase a complete "layer" feed. If they're younger than that, you'll need a complete "starter" feed. Chickens are like a factory, to produce eggs they require good quality food. Being fed on only kitchen scraps will not produce a high number of eggs. A hen will eat around 1.5 cups of grain each day, less if they are fed weeds and kitchen leftovers.



I feed the pellets, not mash, as they pellets stay in their crop longer so they feel satisfied longer.

Buy layers pellets from shops such as Farmlands, RD1 or Williams and Kettle. You may need to travel to the fringe of large cities to find these shops. Some supermarkets stock chicken food in the pet food aisle. Some pet shops will also stock chicken pellets. Buying 35kg bulk sacks is the cheapest option.

It is really difficult to find organic poultry pellets but if you do want to go totally organic buy organic wheat. Sprouted wheat is more nutritious, so what you can do is set up a system of lidded buckets. Half full a bucket with wheat and enough water to dampen. The wheat will sprout in 3-4 days. Feed to chooks when sprouting. Have the next wheat bucket ready to go when that one is finished.

#### *Foods Chickens Shouldn't Eat*

As already mentioned, one of the great benefits of having chickens is they take care of your unwanted leftovers! There are a few foods they shouldn't eat, though:

- Citrus fruits/peels.
- Bones as they will only attract rodents.
- Any large serving of meat, or meat that has gone bad
- Garlic and onion (unless you want your eggs tasting like them)
- Morning Glories and Daffodils are poisonous to chickens, and even though chickens will generally know to avoid them, you might just want to keep an eye on them around these plants (remember their brain is pea sized).

#### *Grit*

Chickens don't have teeth! Grit takes their place. It consists of small rocks or shells that chickens store in their crop, which is where they break down food before it enters their stomach. Grit also replaces calcium that hens lose daily when producing eggs. Keep a small container of oyster grit accessible to your chickens or mix a small amount in with their food.

To stop the chooks kicking over the grit container I make a hopper out of an old child's gumboot. Cut the toe out of the gumboot, fill boot with grit and then suspend in run. The hens can peck at as needed, but can not waste the grit.

You can buy this at the same place you buy their food. Collect some sand and small pieces of shell from the beach. If you eat any oysters or mussels save the shells, dry in the sun and smash into small pieces with a hammer.

*Bedding for the laying boxes.*



There are many bedding materials to choose from, pine wood shavings, straw, pine needles to name a few. Pine needles, lavender, tansy, rue, wormwood and rosemary stalks will all deter mites and lice.

### *Dust Baths*

Chickens love to take dust baths! On any sunny day they will dig a shallow hole, loosen up all the dirt, and proceed to get themselves absolutely as dirty as they possibly can. Dust baths are absolutely necessary: they prevent parasites such as mites and lice.

If your chickens aren't free-range or their run area doesn't have a dry patch of ground where they can dig a hole, you'll need to provide them with an artificial dust bath. Place a box on the floor of their coop and fill it with 20cm of a homemade dusting powder.

Ingredients:

- 1 part fireplace ashes
- 1 part sand
- 1 part diatomaceous earth. (You can buy diatomaceous earth from pool shops)

*Egg Tip: Your eggs may have some slight traces of dirt or chicken feces on them. Resist the urge to scrub them clean!. Eggs are very porous and you risk forcing any bacteria into the egg. If you're one of those Type A people that needs perfect-looking eggs, rub them with your fingers very gently under warm water. Then, wash your hands thoroughly.*

### **Broodiness**

Your hens may go "broody" at any time in their life. This is when they stubbornly insist on sitting on eggs in order to hatch them into baby chicks. It doesn't matter if the eggs are fertilised or not; some hens will even go broody on golf balls or wooden eggs!

If you have a rooster and want baby chicks, great! Place fertile eggs under the hen and in 21 days, "bobs your uncle"! But if you don't have a rooster, a broody hen is just a pain for a number of reasons. A broody hen will sit and sit and sit and do nothing but be grumpy if you try and disturb her. If she is doing this, she is not eating or laying eggs. If she is allowed to sit on fresh eggs, the heat of her body can decompose the eggs there are several reasons why you won't want broodiness. Also she will not allow the other hens to use the laying box.

To prevent this habit from forming, collect eggs every day. Hens are more likely to go broody on a nest full of eggs. The Hyline Brown ( Brown Shaver) rarely goes broody, that trait has been breed out.

If a hen becomes broody, there are several tricks you can use to break her of this habit. Start by repeatedly removing her from the nest. When Bluey, our Blue Orpington, goes broody, we'd remove her and carry her around for 10 minutes or so, five times a day. We



had to do this for two days before she stopped. For birds that are more determined to be mums, ice cubes or an ice pack in the nest will usually do the trick. In rare cases, more extreme measures are necessary. Putting the hen in a wire cage and hanging her in the shade in a tree can work. The air under her nether-regions cures her.



### **Molting**

Once per year, every year, chickens will shed and re-grow some of their feathers. This process is called "molting". This usually happens in autumn. During this time they may look a little ratty, and they definitely won't lay eggs. Not to worry. This isn't a sign of illness! The feathers will grow back and your bird will look better than ever. Nettles, comfrey, sunflower seeds all provide natural minerals to help grow beautiful glossy plumage.. Remember you will need to clip your chooks wings after their moult.

Interestingly a sign of a good layer is the hen who molts the fastest. Those of your flock that take forever to finally get rid of the old feathers and grow new ones are probably not the best layers.

### **Clipping Wings**

Wings are clipped to prevent chickens flying over fences or boundaries. To do this spread out one wing and with a pair of sharp scissors cut along the stiff flight feathers at the tip of the wing about 5cm from where they come out of the skin. This does not hurt a chicken. Only do one wing as this will unbalance the chook when she tries to fly. You need to do this once a year after each moult.

### **Introducing new birds to the flock**

Adding new stock to an established flock can be stressful. Your established flock all know their pecking order. When some newbies arrive every hen will once again have to fight for her spot on the pecking ladder. All out war may reign but it is normally only for 3-4 days.



If you have a run, put the new birds in the run with your old-timers but separating them with chicken wire, shade cloth, or something else that'll do the same job. This lets them eyeball each other without having physical contact. Do this for a week before introducing them to the flock.

Distract them and you'll find they're much less mean. Tried and true distraction techniques (think human two year olds!) include:

- introduce new hens at night.
- It is always a good idea to introduce at least two new hens at a time. Safety in numbers.
- Hang a head of cauliflower or cabbage just out of reach so the chickens have to jump to get at it
- Adding large branches or rolls of chicken wire to the run and even inside the coop if possible, makes pursuit more difficult and gives the new hens a place to hide
- Adding dead leaves, grass clippings, pulled weeds and/or table scraps to their run, gives them plenty to dig through and helps them forget the new hens.

An even better distraction is letting them free range! Your flock will be far too interested in the prospect of all the worms, bugs and weeds. They won't go back in the coop until dusk, at which point they'll be settling in for a night's sleep and won't be so motivated to harass one another. (Though I don't recommend you do this until any newcomers have spent at least 2 days inside the coop, so they know it's "home" and to return there every night. Otherwise you may have a runaway bird on your hands!)

### *Winter Egg Production*

Due to fewer daylight hours in the winter, your chickens' egg production will decrease. If you wish for more eggs, provide your girls supplemental light during the otherwise dark morning and early evening hours. Chooks need 12 hours of daylight per day to keep laying. I use a solar powered light and turn it on in the late afternoon. Aim to provide a light the strength of a 60 watt bulb.

### *Life span*

It's common for a hen to live 8-10 years. The older they get, of course, the fewer eggs they lay, but think of all their other valuable functions besides being a loved member of the family: insect-eating, mosquito-eating, and fly-eating, not to mention they're still fertiliser machines!





## Diseases and Illnesses in Chickens

The following symptoms indicate illness:

- Mangy appearance
- quite and huddled away from the flock
- Visible mites
- Abnormal droppings, including blood, visible worms, diarrhea, droppings that are all white. (Normal stool is brown with a white cap.)
- Sneezing
- Loss of energy or depression
- Sudden, drastic reduction in position in pecking order
- Loss of appetite
- Stunted growth

A few things NOT to worry about:

- Your chickens' first eggs will be pretty pathetic! They'll be small, shells will be weak and some won't even have shells at all. Don't worry! This is not a sign of sickness.
- A doubled yolk egg- think yourself lucky.
- Your chickens will lose and re-grow their feathers once a year. This is called "molting" and is perfectly normal. They won't lay eggs during this time and will look half naked.
- A tiny speck of blood in an egg. This is normal.

### Lice and Mites

- A really bad infestation can cause anemia due to loss of blood.
- Decreases egg production.
- To check, turn the bird gently upside down and pull back the feathers around her bottom. Lice look like little brown grains of moving rice!
- Clean the perches every 6 months with a pyrethrum solution
- Can use bird lice powder bought from pet shop, derris dust from garden centre or diatomaceous earth.
- Provide flock with a place to dust bath

Marek's Disease- Cancer of the chicken; NOT contagious to humans.

- Cause tumors in nerves (paralysis), in liver, ovaries, testicles, muscles and skin - sudden death.
- Mortality can go to 20%.



- No treatment; prevention by day old vaccination at hatchery (Hyline Browns will be vaccinated but probably not purebreds)

### Coccidiosis

Coccidiosis is one of the oldest and most widely known diseases of poultry. Although there are good effective treatments and preventive medications (coccidiostats) for coccidiosis, it still occurs quite frequently in chickens today.

Coccidiosis is a disease caused by the invasion of the intestinal wall with coccidia, a type of microscopic protozoa. A mild coccidiosis infection is not very harmful and is actually necessary to create immunity in the future laying hen, if she is to live on the floor.

Coccidiosis organisms develop little eggs (oocysts) in the intestine that are passed in the droppings and can then infect other chickens in the same pen. If chickens are held on wire floor, they cannot get in contact with droppings and will generally remain free of coccidiosis.

Wet litter and warm temperatures induce a heavy coccidiosis infection in the litter. That's why many coccidiosis outbreaks occur in the springtime.

Preventively, drugs are given in the chicks starter and grower feed, from day-old until 12-15 weeks of age.

Severe infections of coccidiosis will result in young chickens being sleepy and sitting with ruffled feathers. In cases of cecal coccidiosis, dropping will contain blood.

Heavy mortality can result if treatment is not started immediately.

If you suspect it contact your vet.

### **Worms in Backyard Flocks**

Free-ranging birds enjoy many benefits and privileges over those kept in coops and cages. However, these lucky chickens can suffer from a few extra illnesses.

Coccidiosis is an obvious potential problem, although cocci outbreaks have been known to occur inside a secured coop. Threats to a free range flock include predation, possible consumption of poisonous plants, and accidental poisoning from the use of fertilizers, insecticides, and herbicides. The most under-diagnosed problem is an infestation of worms.

Intestinal parasites are very common in backyard poultry flocks. The presence of a few parasites is not usually a problem. However, large numbers can have a devastating effect on over-all health.



Clinical signs of parasitism are poor growth and feed conversion, decreased egg production, and even death in severe infections. Furthermore, parasites can make the flock less resistant to diseases and exacerbate existing disease conditions. If your flock free ranges then most likely they will have intestinal worms.

### **Organic Treatment for Worms**

Garlic – it is said that many mites will not feast on a bird with garlic in their skin

The method I use is to crush 4 large garlic cloves and add to drinking water with a splash of cider vinegar. Make this the only water available to the chickens for three days. Do this every three months.

You can also feed finely chopped garlic tops to your poultry. The birds will generally eat only what they need. Remember, however, that garlic is rich in sulphur; excessive garlic should not be given to hens that are laying, or the smell will taint the eggs

#### **Anti-worm recipe**

A mash to rid one average sized fowl of worms can be made using:

1 handful of wormwood and tansy tips

1 leaf of comfrey

1 cup of crushed layers pellets

1 clove of garlic

Water

Chop up the wormwood and tansy tips, and the comfrey leaf. Add the chopped leaves and the clove of crushed garlic to a cup of pellets. Mix with a little water to make a gluggy porridge and feed the mixture as the only food every second day, for 3 days. Give a little grain on alternate days

*Nasturtium seeds* are also a good wormer, as well as having a tonic, antiseptic and medicinal action. The birds will eat only what they need so you can experiment to determine how much is needed; observe amounts left over and adjust rations accordingly. The seeds can be preserved in vinegar. In fact, a little apple cider vinegar in the drinking water will also help repel worms.

*Pumpkin seeds* will also expel worms from the chickens gut.

#### **Scaly Legs**

This is caused by mites living under the scales of the chicken's legs. Scrub legs with Pyrethrum solution to kill mites. An old toothbrush is perfect for this.



## Useful Web sites

[www.mypetchicken.com](http://www.mypetchicken.com)

[www.urbanchickens.org](http://www.urbanchickens.org)

[www.omlet.co.uk](http://www.omlet.co.uk) - ideas for some funky chicken runs

[www.heslipshatcheries.co.nz](http://www.heslipshatcheries.co.nz)- South Island hatchery who sells day old chicks and hen houses country wide.

[www.rarebreeds.co.nz](http://www.rarebreeds.co.nz) – great site to find breeders of pure breed chickens



