



A Brief History of Chicken Flocks in the US and Some Useful Tips on Raising Them

In the early 1920's to the late 50's we had large chicken farms. Before that chickens were not considered a necessary livestock to produce and eggs were considered a luxury food. This was because chickens didn't do very well in the winter. In 1922 Vitamin D was discovered and that made it possible to keep chickens healthy year round. Almost everyone had a flock of chickens in their backyard.

By the 1950's, because of so many eggs being produced, prices fell. The response by growers was to increase the flock size. This resulted in saturation of the market which drove prices down even more. Many producers went out of business and operations, mostly in excess of 25000 birds, became the norm. In the mean time people had become accustomed to buying cheap eggs instead of raising their own backyard flocks. The rest, as they say, is history.

The scientific name for chicken is *Gallus gallus*. The current chicken population worldwide is estimated to be in excess of 24 billion. The species as a whole used to be called fowl.

Chicken terms

- "Roosters" are males, one year or older
- "Cockerels" are males, less than one year
- "Capon" is a castrated male
- "Hens" are females one year or older
- "Pullets" are female less than one year
- Meat is called chicken

Chickens will eat just about anything including insects, lizards, mice, and anything else that moves. They are omnivores.

Chickens are not capable of long distance flight.

Chickens are gregarious and practice communal incubation, which is why only a few nest boxes are used. You often find another hen on top of one already in the box because of this natural instinct to lay in one place.

Chickens don't like new comers to the flock and segregation is common. Introduction must be done at night and you should watch for severe picking. A flock will kill a stranger.

Roosters crow anytime of day or night if disturbed, crowing is also a territorial response.

In commercial operations, after 12 months, egg laying ability is said to decline, birds are slaughtered, and the flock is replaced. That meat is used for dog food, baby food, pies and other processed foods.

A chicken comes into this world with anywhere from 2000 to 5000 eggs in her. She starts laying eggs at 21 weeks of age and produces an egg every 25 hours. She can live anywhere from 5 to 11 years. She will lay approximately 300 eggs a year depending on her breed.

A Leghorn hen will consume 5 pounds of food to produce one dozen eggs, where as a medium size bird, like a barred rock, will consume 10 pounds of food to produce a dozen eggs. That's why Leghorns are the bird of choice in commercial egg operations.

Chickens with white ear lobes produce white eggs and chickens with red ear lobes produce brown eggs. There are exceptions to this rule of thumb.

Housing and Management Practices

You will need 3 square feet of space for each bird.

(See the fact sheet [UNHCE Housing and Space Guidelines for Livestock](#)).

You don't need a rooster to get eggs.

You do need a rooster to get fertile eggs.

You do need to check local ordinances to make sure chickens are allowed. Even in a rural setting because of protective covenants.

See the web site <http://www.backyardchickens.com/raising-chickens-basics.php> for some really cool chicken coop ideas and instructions.

Suitable housing, fresh air, sunshine, sanitation and proper nutrition are the key to a healthy problem free flock.

- Hang feeders and waterers so they can't be soiled.
- Keep waterer clean and full. 1 cup of water per day per bird is required, year round.
- Keep bedding and nest boxes clean and dry.
- Provide a dusting site to prevent body lice.
- Don't overcrowd birds, it will cause cannibalism. To help minimize cannibalism provide green feeds to confined birds and things for them to peck instead of each other. A cabbage or a bunch of kale on a rope birdshead high works well.
- Close the chicken house door at night or when no one is around to discourage predation.
- Garbage is garbage and shouldn't be confused with food scraps from the kitchen.
If it's bad don't feed it to the chickens!
- Keep grains dry and don't feed more wet grains than can be consumed by the flock in an hour. (Rule of thumb; two handfuls of grain per bird per feeding). If it smells sour throw it out.
- Heat process legumes before feeding them to chickens.
- Grit is a must for confined birds.

To be properly fed, it is best to purchase poultry feed formulated for the type and age of bird kept (i.e. broiler starter, grower and finishing rations for meat birds and Pullet/layer diets for egg producers). A well balanced poultry feed formulated for appropriate age and type of bird will assure that the flock is receiving the necessary nutrients to maintain feather growth and maintenance.

Care of Eggs

Plenty of clean litter in the nests and on the floor of the hen house reduces the number of dirty or cracked eggs.

A freshly laid egg loses quality rapidly if it is not handled properly. The eggs should be gathered daily in mild weather and at least two times daily in hot or cold weather. They should be placed in a cooler immediately after gathering and stored at 50 to 55 degrees F. Do not store eggs with foods or products that give off pungent odors since eggs may absorb the odors.

Eggs saved for hatching purposes **should not be washed**. Only clean and slightly soiled eggs should be saved for hatching. Dirty eggs should not be incubated. Eggs for hatching should be stored in a cool place with the large ends up. It is not advisable to store the eggs longer than one week before starting the incubation process.

Broody hens are rare in purebred stock. It was bred out of them so egg laying would not be interrupted. Once a hen gets broody she stops laying to sit on a clutch which usually consists of about 12 eggs. Incubation triggers development which is why all eggs hatch within 2 days of each other even though the clutch has twelve days of eggs in it.

Brooding (hatching eggs) takes 21 days. The hen will turn them (and so should you if using an incubator) for two weeks and then will stop the third week. If not turned during the first 2 weeks, the embryo may stick to the shell and can result in deformed chicks. On the third week the chick orients itself so that its head is in the blunt end of the egg for hatching, turning the egg at this time may disorient them.

Chicks talk to mom from inside the eggs. No one knows why.

Pipping is the pecking of a breathing hole at the blunt end of the egg. Once that has been done the chick rests and absorbs the yolk and blood from the membranes. This is used for energy to hatch and sustain them for a couple of days after hatching while they wait for their siblings to hatch. The hen takes them out into the world on day 2 or 3.

One day old chicks are vaccinated for Marek's disease at the hatchery before shipment.

Deep **dry** bedding discourages coccidiosis and salmonella as long as it is cleaned out regularly and composted. Coccidiosis is caused by protozoans that like warm, moist conditions. The pathogens "eggs" (oocysts) are destroyed by frost. To prevent outbreaks of coccidiosis, pullets should be provided a ration containing an effective coccidiostat until they reach 14-20 weeks of age. Coccidiosis is the most common disease found in young, **unmedicated** flocks. This protozoan disease, characterized by diarrhea, unthriftiness, and some mortality, is transmitted by the hens eating coccidia oocysts from contaminated droppings. The disease can be prevented by feeding rations containing a coccidiostat. A good coccidiostat is designed to prevent outbreaks of coccidiosis while allowing the birds to develop a natural immunity. If feeds containing a coccidiostat are not fed then chicks should be vaccinated in the hatchery against the disease. **It should be noted that under the Organic Standards Rules and Regulations, animals that are vaccinated can be certified, but animals fed medicated feeds cannot.**

Laying hens will not require a feed that contains a coccidiostat. However, layers especially young layers on dirty floors may experience coccidiosis outbreaks. If coccidiosis is diagnosed, treatment is normally given through the drinking water. In case of an outbreak, treatment measures should be started immediately.

Diarrhea can be caused by digestive upset, inflamed intestines (enteritis), worms, and other diseases.

Marek's disease is essentially cancer of chickens. It is caused by a virus and can show up any time after 2 months of age. There is no cure. Some symptoms can include frailness "unthrifty" appearance, paralysis, and the birds may go off their feed. Internally the liver may enlarge, and tumors will develop. Any of

the other organs can be affected. Prevention is the best medicine; vaccinations at the hatchery are generally done or available.

Several other diseases may be seen, such as aspergillosis, infectious bronchitis, Newcastle, fowl pox, epidemic tremors, Gumboro, necrotic enteritis, fatty liver syndrome, and blackhead. A well managed backyard flock does not usually experience disease outbreaks. A best management practice, which translates into prevention, is the best tool to use to combat disease outbreaks.

Watch for external and internal parasites such as intestinal roundworms, mites, ticks and lice. Your local feed store can provide you with products to treat these problems. Practice a rigid sanitation and pasture rotation program to break the parasites life cycle. Medications alone are not the best solution to worm problems.

Neem oil on the roosts can help combat mites, ticks and lice. It can also be sprayed in the nest boxes. Using cedar shavings in nest boxes may also combat the problem but there is some question as to its effect on birds. Daily access to fine sand or diatomaceous earth for bathing is the best preventative measure to combat these pests on the birds. The insect's waxy cuticle will be scored by the sand and they will dehydrate and die.

Chick Sources

<http://www.strombergschickens.com/>
<http://www.mcmurrayhatchery.com>

Hall Brothers Hatchery

PO Box 1026
Norwich, CT 06360
860-886-2421

Chicken Information

www.backyardchickens.com/raising-chickens-basics.php
www.thepoultrysite.com
web.uconn.edu/poultry/poultrypages/
www.ext.vt.edu/pubs/poultry/factsheets/10.html
www.backyardpoultrymag.com
UNH Cooperative Extension www.extension.unh.edu

Good Books About Poultry

Backyard Poultry Naturally-A complete guide to raising chickens and ducks naturally.
By Alanna Moore, Acres USA www.acresusa.com

*Fact sheet by Dot Perkins, UNH Cooperative Extension Agricultural Resources Educator .
4/2009, updated 3/2010.*

Visit our website: extension.unh.edu

UNH Cooperative Extension programs and policies are consistent with pertinent Federal and State laws and regulations on non-discrimination regarding age, color, handicap, national origin, race, religion, sex, sexual orientation, or veterans status.