

Care of the Backyard Chicken

Many backyard chickens live between 6-10 years, although bantams can live 8-12 years. Layers typically produce the most eggs during their first year of sexual maturity. Fewer eggs are laid during the second year of life, and there is a significant decrease during years 3 and 4. Most hens do not produce eggs after year 5.

Housing

Adequate shelter is essential to keep chickens healthy and happy. Even if chickens are free range, a chicken coop should be provided for secure, nighttime housing. Ideally, the coop will be attached to an outdoor pen to permit exercise in a clean, safe environment. While chickens do not need to be free range, adequate space is crucial.

SPACE

The square footage of the habitat is dictated by the number of birds and their age. Space requirements for each bird should be based on their adult size. Larger, heavier adult birds need a minimum of 4 square feet (0.37 sq. meter) per bird, while smaller bantams require 2 sq ft (0.19 sq. m) per bird. Take every effort to prevent crowding as this increases stress and leads to fighting.

SUBSTRATE

Select an absorbent, low-dust material that dries quickly and does not promote the growth of mold. Wood shavings (from other than hardwoods), shredded paper, sand, and even recycled paper products designed for litter pans are all acceptable. Avoid straw and hay as they can harbor fungal spores.

TEMPERATURE

Chicks are incapable of maintaining a steady body temperature at hatch. Depending on breed, body temperature regulation gradually develops between Day 10-14. A hanging heat bulb can be provided for hatchlings, with an initial target range of 32.2-35°C (90-95°F). Reduce this temperature by 5 degrees each week until a temperature of 21°C (70°F) is reached by the time birds have significant plumage, which insulates the body.

Most adult birds can withstand changes in climate exception during extreme weather events. A temperature inside the coop of 10-24°C (50–75°F) is considered ideal, with the humidity being as low as possible. In hot climates, fans and misters may be necessary to reduce heat. In cold climates, the combined heat from the birds is often sufficient to keep them warm. Except during extreme weather periods, healthy birds that are not molting do not require supplemental heat, although some breeds are more cold resistant than others. Meat breeds are usually more hardy than egg layers. Many show breeds are less hardy and may require heated or cooled housing. Additional heat can be provided by a red heat lamp or heated floor mats. Take care not to create a fire hazard or overheat birds. Overheated birds may crowd away from the heat source and instead stand near exits, windows, and outside walls.

Cold Tolerant Breeds			Heat Resistant Breeds	
• American Game Bantam	• Dominique	• Orloff	• Bearded d'	• Plymouth Rock
• Americauna	• Dorking	• Orpington	• Uccle	• Polish
• Australorp	• Hamburg	• Plymouth Rock	• Hamburg	• Sicilian Buttercup
• Barnvelder	• Jersey Giant	• Rhode Island Red	• La Fleche	• Silkie
• Barred Rock	• Langshan Leghorn	• Salmon Favorelle	• Lakenvelder	• Welsummer
• Brahma	• Maran	• Silkie	• Leghorn	
• Cochin	• Naked Neck("Turken")	• Sussex	• Modern Game	
• Cornish	• New Hampshire Red	• Welsummer		
• Delaware	• Old English Game	• Wyandotte		

VENTILATION

A commonly overlooked aspect of chicken coop design is ventilation. Chicken coops are often sealed too tightly, which can result in inadequate ventilation. Adequate ventilation is important to overall health, and particularly respiratory health. Air flow is essential to reduce humidity and eliminate gases, such as ammonia, produced by the breakdown of droppings in litter.

PREDATOR PROOFING

The chicken coop/pen needs to be sturdy and covered to keep out potential neighborhood predators, such as dogs, foxes, raccoons, and hawks. Set fencing and walls into the ground at least 0.3 m (1 foot).

NEST BOXES

If birds are nesting, provide at least two nest boxes for three to five hens. To reduce fighting, provide one additional nest box for every two to three hens. Nest boxes should be just large enough to fit one “seated” hen. Place nest boxes in the lowest, darkest part of the chicken coop.

Broodiness describes the period when egg laying halts and instead the hen sits on her eggs. Broodiness is desirable if one is trying to raise chicks but undesirable if one wants to collect the eggs. Without intervention, hens may remain broody for 3-4 weeks. Broodiness is breed dependent, with Silkies having the highest incidence. Most laying breeds, like the Leghorn are not broody, but some are, such as the Welsummer. If you plan to collect eggs for consumption, then make every effort to limit broodiness in the hen. As soon as broody behavior is observed, move the hen to a wire cage. Take care when handling broody hens as they can be aggressive. Broodiness will resolve in most hens managed this way within 2-3 days.

PERCHES

Place perches for roosting above nest box height. The perches should be easy for birds to access, but not so high to cause birds to land heavily, causing bruising and eventually bumblefoot, particularly in heavier meat breeds. Select broad, natural branch perches or 5 cm square dowelling with the top edges rounded. Covering wooden dowels with artificial turf will serve a purpose similar to bark, providing roughness to remove excess keratin from the bottoms of the feet. Perches should allow about 15 cm (6 in) length for bantams and 23–25 cm (9-10 in) for large chickens. When planning a length of perch for a group of birds, a good rule of thumb is to allow 15 cm of perch per bird as the recommended minimum.

SANITATION

Poultry create a tremendous amount of dust and feather debris and are a magnet for flies and other insects.

- Clean waterers and feeders daily, especially if waterers are placed on the ground and can be contaminated with feces. Disinfect these items at least every 2-3 days
- Spot clean litter daily and change the bedding entirely every 1–2 weeks depending on the number of birds. Alternatively, a deep litter system can be used and removed once a year.
- Clean nest boxes weekly.

OUTDOORS

Backyard poultry are best maintained in a combination indoor-outdoor enclosure so that birds have some protection from sun, wind, and rain. If birds are housed entirely outdoors, a source of shade is necessary. Shrubs and bushes can also provide cover from an aerial hawk attack.

MIXING SPECIES

Mixing species is a common practice, but can be risky. Different types of poultry have different behavioral needs and different housing needs. Also, some species can carry diseases that do not affect them but will be harmful to others. For example, turkeys, quail, grouse, and chukars cannot be raised in the same areas as chickens or pheasants due to risk of a serious disease called blackhead or histomoniasis.

Nutrition

There are over a hundred years of research into poultry nutrition and commercial diets are readily available. Different life stages and different purposes, such as meat versus layer, each demand specific diets. Start chicks on a chick ration from hatch until approximately Week 10. Chick feed is higher in protein and lower in energy than rations designed for older birds. Transition birds that are being raised for meat to a broiler grower ration. Transition birds raised for egg production to pullet feed (1% calcium) until they start to lay eggs around Weeks 20–24. Once birds begin laying, an adult lay ration (3.5% calcium) should be fed. Breeding hens should be on a breeder ration to ensure adequate nutrition.

<p><i>BEWARE:</i> Young birds should never have access to layer feed as the high calcium will damage the kidneys and can cause death.</p>

Free-range birds that are allowed access to worms, slugs, insects, small frogs, and plants, should still be provided a complete and balanced formulated diet to ensure they are receiving all the required nutrients. Offer grit to all life stages. Grit is important to maintain normal gizzard function and promote normal egg shell formation.

WATER

A constant supply of clean, fresh drinking water is essential. Waterers should ideally be placed above the ground at the bird's shoulder level to prevent fecal contamination. If birds are housed outdoors during cold weather, change the water frequently (3-4 times per day) or use a water heater.

TREATS

Household scraps may offered occasionally, but it is easy to create an unbalanced diet so use caution. If you do offer people food, green vegetables are a good choice.

STORAGE

Store poultry feed in rodent-proof containers in a cool, dry environment. Direct exposure to the sun can promote condensation at night and lead to mold growth. Also, many vitamins decay over time, therefore long-term storage can also adversely affect feed quality.

Keep your chickens healthy

Losses from disease can be substantially reduced through regular cleaning and disinfecting. It is also important to remove anything that can attract other animals like rodents to the chicken coop, however, the single most important way that disease enters a flock is through the introduction of other birds. Exposure to other birds can be indirect. No person or animal (including cats and dogs) should be allowed to visit the flock if they have recently been around other birds as they can transmit disease. By the same token, do not borrow or share bird supplies. If you must use borrowed supplies, thoroughly clean and disinfect the items before using them in your flock. Clean and disinfect any equipment used at shows before storage and reuse.

It is not a good idea to have visitors that own poultry come into contact with your flock

If new birds are added, they should ideally be purchased from a reputable supplier, preferably one that is the National Poultry Improvement Plan (NPIP) certified. Never purchase birds from auctions or sale barns as these individuals are often sold because of problems and they are exposed to many other species, increasing the risk of infectious disease.

Quarantine newly purchased birds for at least 4 weeks before introduction to the rest of the flock. Have your avian veterinarian examine new birds before introducing them into the flock to ensure they are healthy. Also quarantine individuals that have left the premises and encountered other birds (i.e. shows).

- DO house quarantined birds in a separate building.
- DO feed and care for quarantined birds last.
- DO NOT use medicated feed during quarantine.

If your chicken gets sick...

All poultry are considered food animals and very few antibiotics are licensed for use in these birds, even when they are consumed just by the owner. For example, enrofloxacin should not be used in birds capable of producing eggs for human consumption. Studies have confirmed that use of many important antibiotics in food animals, leads to the shedding of bacteria into the environment that increase the risk of multidrug resistance in people, a serious global health problem.

If a chicken should suddenly die, it is very important for the health and safety of your flock to try to determine exactly why this happened. Your avian veterinarian will want to perform a postmortem exam or make use of the state diagnostic laboratory, which frequently offers free services to poultry owners.

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