

With interest in locally produced food and a desire to become more self-sufficient, more people are raising chickens as a hobby. Every flock needs housing, and anyone who has searched for a plan knows, there are as many options as there are breeds of chickens.

Some designs are simple, relatively inexpensive, and easy to build. Others look good but are not all that functional. The worst designs fail to consider the most important criteria—the health and safety of the birds. In evaluating plans, here's what you need to consider to keep your flock safe, healthy, and productive.

Keep predators out

First, how well does the structure keep predators out? This is even more important than keeping birds in. Neighborhood dogs have probably killed more chickens in suburban areas than any other predator. Coyotes, skunks, foxes, raccoons, and hawks may try to steal an easy meal eventually. Lightweight cotton or plastic netting may hold birds, but it won't keep predators from chewing through the fence. You may need to install wire overhead or bury it along the perimeter if predators are a serious threat. Some bird owners wouldn't dream of keeping chickens without an electric fence.

Sooner or later, every housing system fails. Escapees are vulnerable to predators until birds are caught and returned to the pen. Avoid this problem by installing a safety trap outside the pen. The enclosure, which operates like a minnow trap, should be placed at the base of the fence so the bird wanders in trying to find its way back into the pen.





Features to reduce hazards

The poultry house should be easy to clean, or chores may not get done as often as they should. In a well-designed house, manure collects in an area where it cannot be disturbed. It can be removed on trays or scraped out from a panel underneath and easily placed in a compost bin. Select a plan that features an egg box that opens from the outside. Not having to enter the pen each time reduces the risk of contamination. Also look for an egg collection box that can be moved from one side of the pen to the other, where it is not directly exposed to sun. When you move the coop, move the egg box to the shady side. Another nice feature is a feeder or waterer you can fill from outside the pen.

Protection from weather extremes

Keeping heat out of the coop is more important than keeping heat inside. In Kansas, more birds have been killed by extreme summer heat than extreme winter cold. A basic rule in cold weather is to give birds protection from the wind. Combs and wattles freeze easily in high winds but survive at temperatures well below freezing when air is calm. Locate the exterior door so it does not face the prevailing winter wind. Place an air deflector between windows and doors to protect the roost from high winds. Give birds a place to stay dry. Feathers only retain body heat when dry. When birds are unable to escape wet and windy conditions, they are less likely to survive winter.

Summer heat is an issue for birds in Kansas, especially heavy birds. Toward the end of the growth cycle, a Cornish-Rock Cross meat chicken may experience stress at 80° F. Most heat enters through the roof and is where many designs are weak. With exposure to the sun, heat can build up rapidly underneath the roofing material. The worst coop designs feature a low roof covered only with metal sheeting. The coop should also include a layer of rigid foam between the trusses and the roof. Adding aluminum to the exterior deflects heat to keep the coop cooler all summer long. Beware of poultry house designs with a low roof that traps heat near the birds. Look for one with passive vents in the peak to allow heated air to rise and exit the coop. Avoid "chicken tractors." These movable coops are typically not good for modern broilers. They are too low to the ground and retain excessive heat that can harm birds.

Looks matter, ask your neighbors

Your birds may not care what their coop looks like, but your neighbors might. Studies show that how nice a farm looks and how well it is kept affects how others view odor and noises coming from the farm. A well-kept, attractive farm receives fewer complaints. Housing authorities and other local governing authorities may want to review your ideas before you build, so check regulations. Besides making it look good, painting the house an attractive, light color helps to reflect heat. And who doesn't appreciate good building skills or a nice display of folk art? This is your chance to build something other people find attractive.

Benefits of portability

You can move your small poultry flock easily from place to place by installing skids or wheels on your coop or placing the house on a small trailer so it is easier to move. Chickens are destructive to their range area. Even a few birds can dig holes and scratch grass out quickly. Consider an outdoor run that can be moved with the house. Moving the pen keeps parasites from building up in the soil and exposing birds to harm. A moveable coop can be moved to to a shady area during the summer or protected from harsh winter conditions. Flock owners also may use portable coops and pens to help control weeds in the garden. Birds turn the soil and eat weed seeds. Another type of system is one in which the coop is permanent but birds are rotated from one run to another. Some poultry growers alternate pens every year, moving birds from one end of the coop to the other. They plant a garden on the side that is vacant, where there are fewer weeds, bugs, and free fertilizer.

Don't overbuild

Many small-flock housing designs are complicated. While there are many formal designs and precise drawings available, it may be just as easy to build a small coop by trial and error. It should be an unwritten rule to use salvaged materials left over from larger building projects. Put old doors, windows pulled from a house, vents, and so forth to good use for poultry housing. Make sure salvaged items are free of lead paint and asbestos. And remember, you are housing little birds, not the meanest bull in the county. You will probably need fewer 6' x 6' posts than you do 2' x 4' posts to construct small-flock housing.

Simplify chores with automation

A small solar panel will produce enough energy for good lighting. Solar holiday lights may also work in a coop. Set lights on a timer to make sure birds receive the exact amount of artificial and natural light needed to sustain egg production-about 16 hours per day in Kansas. Choose a timer that monitors sunlight, turns lights on as the sun goes down, and then turns them off again at the prescribed time. To keep predators out, add a light sensor to open and close the door automatically. There is even a 12-volt, solar-powered version. You can mount a solar-powered electric fence on the coop for portability. One of the most useful automated devices is a nipple-type drinker that drips when birds touch it. There are no tubs to fill or bowls to clean because there is no open water pan to get dirty. Pressure dispenses water without the need for electricity. The drawback to nipple drinkers is that they freeze easily. Switch to a heated base during the winter to keep water from freezing.

Be realistic about space needs

Don't get hung up on space requirements. Chickens are gregarious and like being in a group or flock. If you build a big building for just a trio of hens, you are likely to find them standing side by side whether they are eating, roosting, or scratching in the dirt. Regulations that call for a minimum floor space for each bird may not take into account breed, age, time of year, temperature, nest boxes, roosting space, and other features of your hen house. If you raise broilers, you will see they have very little interest in roaming outdoors more than a few minutes. In fact, there is little peer-reviewed research on coop or yard space for small flocks. Knowing how much space your birds need is part of learning good management skills, bird behavior, and other things that are hard to pinpoint.

The amount of yard space required is also frequently misunderstood. You could give your flock of 10 hens a pen that goes a mile in each direction, but you would still look out and see a big bare area around the coop. Birds want to be near food, water, and shelter. Yard space is dictated by season, ground cover, shade, pen rotation, type of hen feed, soil type, rainfall, and other factors. Try to maintain a balance of open area and ground cover to give birds a chance to forage.

Focus on bird safety

When choosing a coop plan for small poultry flocks, the most important consideration is the safety and welfare of the flock. It is easy to get caught up in ease of construction, building costs, regulation requirements, or looks and forget that what the birds need is the most important. There are no "official" requirements for coop design, so purchase or build something that suits you and your birds. Most of all, have fun.

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