

## How to Raise Chicks for Small Flocks For 4-H Projects and Backyard Poultry

## Basic requirements are shelter, heat, feed, water, and a clean environment.

**Shelter** – a brooder of some type, this can be commercial or homemade. For a small number of chicks a cardboard box with sides at least 18" high or an extra large plastic tote can be used. The size of the container will be determined by the number of birds to be brooded for two weeks. Chicks require about 1/2 a square foot of space per bird for the first three weeks. Do not crowd the birds. As they grow, increase the amount of space available. Adult chickens require about 3-4 square feet per bird. Shavings can be used for bedding and should be 1-2" deep when chicks are young. Another option is to have the chicks on wire mesh that has ½" square openings and is raised from the bottom of the brooder. The brooder bottom can be lined with newspapers then have T shaped pieces of wood to support the wire mesh in the center and narrow wood strips to hold it up at the sides of the brooder. Droppings fall through the mesh and keep the chicks cleaner. This also prevents chicks from eating shavings instead of feed. There should be enough ventilation to keep the brooder from overheating, but high sides are necessary to prevent cold drafts from blowing on the chicks and to maintain an even temperature. Chicks should also be protected from predators such as cats and dogs. Chicks can be raised in the house for the first two weeks then transferred outside to larger accommodations.

**Heat** – a source of heat is essential. Day old birds need a temperature of 95 °F the first week. Each subsequent week the temperature should be decreased by 5 degrees. Use a thermometer to check the temperature and adjust the location of the lights as needed. If the brooder is large enough, one 250 watt heat lamp with a reflector can be used. Set or hang it high enough above the bedding that it will not start a fire, at least 18" above the bedding. If a cardboard box is used as a brooder, the light fixture will need to be supported so it will not fall into the box. The birds need enough space in the brooder to be able to move away from the heat. Another alternative is to use either several 40 watt bulbs spaced around a smaller brooder or 1-2 100 watt bulbs in one area. If using a plastic tote, be very careful that the lights do not over heat the interior and the chicks. Red or blue bulbs are easier on the young birds' eyes. During the day regular room lights should be on to accustom the chicks to day and night. Young half grown birds may require lights at night even if the days are warm. Keep heat lamps away from waterers. If water splashes on a hot bulb it will explode and break.

**Feed** – chicks should be started on small crumbles rather than pellets or whole grains. A 20 % protein starter feed can be fed the first six weeks. Then switch to a 16% protein grower feed which can be either crumbles or pellets. There is less wasted feed if pellets are used. Make the feed transition gradual by mixing some of each to start then change the ratio to more of the new feed. Small numbers of healthy chicks do not need medicated feed. Don't buy a large quantity of feed for a small number of birds. Chicks should not be fed laying rations intended for laying hens until at least 4 months old. The excess calcium can be deposited in the growing leg joints and cripple the birds; it is also bad for their kidneys. The baby birds should have free access to feed and water day and night for the first four weeks, after that remove at night. Never have feed available without water; the birds can choke. If daytime temperatures are warm enough, access to green grass and dirt (for grit) will provide balanced growth. If the birds can not be outside, grit should be provided to help grind up the feed in the gizzard. Chickens for egg laying will take approximately five months to reach maturity.

**Health tips** – Check each chick as you put it in the brooder. If it is injured isolate from the other chicks or they may peck it and kill it. Check all chicks for dirty bottoms each day for several days. Droppings can dry and cake around the vent. If severe enough this will completely block the vent and the chick will not be able to eliminate its waste and will die. Wash the vent area gently with warm water and a soft cloth until the feces soften and can be wiped away. Also clean the chicks' feet if they are dirty to prevent other chicks from pecking. Chicks will peck at anything that is bloody. Chicks will peck each other if they are too hot, too crowded, without fresh air, or where lighting is too bright. To reduce pecking, darken the lights, and/or add fresh green grass clippings or finely chopped vegetables to attract their attention.

**Water** – start with waterers that limit access to the water. Baby birds should be able to drink freely, but not get wet. Depending on the number of birds, pop bottle or one quart waterers attached to a shallow tray are adequate; for a larger number of birds, one or two gallon galvanized waterers can be used. The waterers should be cleaned and refilled at least once a day, even if they are not empty. The crumble feed and warm temperatures promote the growth of bacteria. Chicks that have been hatched from an incubator do not start to produce natural oils until 6 weeks of age. If they get soaking wet, they will chill and could die. If they are trapped in a bucket or tub that they can't get out of, their down or feathers will get saturated and they can drown.

How to start food and water – When chicks are first placed in the brooder, dunk their bills in water to make sure they drink. Baby chicks can go for up to 48 hours after hatching without food or water, but will thrive better if given water as soon as possible. After they are drinking, introduce them to feed. Chicks are curious and like to peck at almost everything. Spread some crumbles on a paper towel. Put each chick down on paper towel individually until they learn that crumbles are food. Once they are eating put feed in a shallow container such as a small shoe box lid for a few days then switch to a regular chick feeder. Chicks don't eat a lot the first few days because they are still absorbing the remaining yolk from their egg which is inside their abdomen.

Clean environment – the brooders should be cleaned as often as necessary depending on what type of bedding or wire is used. A good rule of thumb is – if it stinks, change it. If the chicks are raised in the house, two weeks is about the maximum length of time humans can stand the increasing smell. Then they need to move to outside quarters with shavings or straw for bedding with heat lamps to maintain adequate temperatures, especially at night. It is helpful to put the waterers inside low tubs or trays that the birds can access, but restrict the water from getting the bedding wet. Young birds should have enough room to exercise properly to promote good muscle and bone development. If possible they should be able to be outside in sunshine. Fenced pens have to have small diameter mesh for young birds. They can get through very small holes or spaces.

Enjoy raising your birds. It is a joy to watch them grow rapidly and a challenge to provide excellent care. They are totally dependent on you.

Prepared by Clare Shier Boulder County 4-H Poultry Superintendent 2012