

BACKYARD FLOCK TIP . . .

MAINTAINING HATCHING EGG QUALITY

Many small flock owners like to reproduce their own flocks. Maintaining the hatching potential of the newly produced egg is of vital importance to producing new chicks. A lot can happen to a hatching egg between the time it is laid and the time it enters the incubator. Improper egg handling or storage after the egg is laid can reduce the eggs ability to hatch and to produce a quality chick. The following egg handling practices should be employed by individuals wishing to achieve maximum hatch in incubators for their flocks:

Nesting Material. Eggs can be broken as the result of inadequate nesting material. A good nesting material will provide a soft place for the eggs to rest until collection. In addition, appropriate nesting materials will have the ability to absorb moisture and keep the eggs cleaner. Some common nesting materials are:

- Pine shavings
- Peat moss
- Rice hulls
- Chopped corn cobs
- Straw
- Excelsior nest pads
- Peanut hulls
- Shredded paper

Train Layers to Use the Nest. Layers should be trained to use the nest rather than allowed to lay eggs on the ground, in grass or weeds. The following steps will help train layers to use the nests:

1. Place the nest in a sheltered area before the birds begin to lay.
2. Put nesting material in the nest when the nests are placed in the pens. Keep the nesting material clean. Hens will refuse to use nests if the nesting material is dirty.
3. Provide one nest for every four hens. If birds can not get into the nest to lay, they will be forced to lay them somewhere else.
4. When pullets first start to lay, pick up eggs laid outside the nest frequently. Other layers will lay more eggs outside the nest if they see eggs on the ground.

PUTTING KNOWLEDGE TO WORK

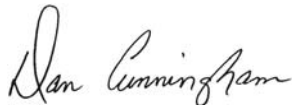
Collect Eggs Frequently. For best hatchability, it is recommended that hatching eggs be collected at least four times a day. The longer eggs remain in the nests, the more likely they are to be broken or soiled. In addition, leaving the eggs in the nest for extended periods will result in some preincubation which can result in reduced hatch and chick quality. For these reasons, eggs laid late in the day should be collected the same day rather than waiting until the next morning.

Cleaning Eggs. If the hatching eggs are dirty, remove the debris with a dry towel. Never use a wet towel or sandpaper. A wet towel will only spread disease organisms while sandpaper removes the protective cuticle of the shell. It is not a good idea to set dirty eggs in the incubator as the bacteria will penetrate the egg and result in dead embryos or exploding eggs before hatching.

Egg Holding. After hatching eggs are laid, they should be cooled to a temperature well below the threshold for embryonic development. Placing them in a refrigerator with a temperature below 65 degrees F will prevent embryonic development until the eggs are placed in the incubator. Eggs can be held in the refrigerator for up to a week without reducing hatchability. After about seven days in holding, eggs will begin to lose their ability to hatch for each day held.

Age of Hens. Young, first year layers will have the best egg production and shell quality. As a result, they will also have the best hatch of their eggs. The older a hen becomes, the lower the rate of egg production and the thinner the egg shell that is produced. Thus, for best flock reproduction, it is recommended to use young hens whenever possible.

Reproducing your own flock can be fun and economically beneficial. Keeping these hatching egg practices in mind can help to achieve better hatchability and a more viable flock.



Dan L. Cunningham
Extension Poultry Coordinator

Extension County Coordinator/Agent

“Your local County Extension Agent is a source of more information on this subject.”