

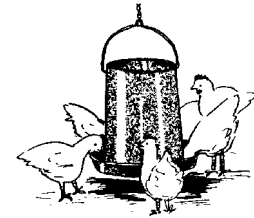


*The University of Georgia*

**Cooperative Extension Service**

*College of Agricultural and Environmental Sciences / Athens, Georgia 30602-4356*

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## ***BACKYARD FLOCK TIP...***

### **GET MORE HEALTHY CHICKS THROUGH BASIC SANITATION PROCEDURES**

The following are some basic sanitation recommendations for various aspects of hobby flock management

#### **House or Pen**

Keep the floor of the house or pen dry. Hens will track mud and feces from wet floors into the nests, which will contaminate eggs. An excellent idea is to purchase nipple drinkers. They are relatively inexpensive and will tend to keep your pen floors drier than other types of drinkers.

#### **Nests**

Have at least one nest for every three to four hens. This is an important sanitation issue because hens will lay their eggs on the floor or ground if there are not enough nests. Place clean nest litter (fresh, dry pine shavings are ideal) in the bottom of each nest. This will prevent the eggs from becoming soiled or broken.

#### **Egg Collection**

Always wash your hands before collecting eggs. Collect nest eggs first, put them in storage, then go back to collect floor eggs. When an egg is very dirty, do not incubate it. Collect eggs at least twice per day.

#### **Egg Sanitation**

Bacteria are always present on the eggshell surface. An apparently clean egg collected from the nest with clean hands can have 1,000 or more bacteria on the shell surface. Eggs that have dirt or fecal matter should be wiped with a clean, dry cloth or scraped with a pocketknife. When an egg requires a lot of wiping or scraping, do not incubate it. Some producers may want to go the extra mile and wash their hatching eggs. When done correctly, this is an excellent procedure that will result in less contamination and healthier chicks. When done improperly it can result in severe contamination.

To wash eggs correctly, use a vat with a heating element. The vat should be large enough to wash about 50 eggs at a time. Maintain the temperature of the water in the vat between 110o and 120oF. Do not leave the eggs in the vat more than three minutes to prevent temperature shock to the embryo. While the eggs are in the vat, wash each egg with a clean cloth. Use gloves to prevent your skin from becoming irritated by the disinfectant. A quaternary ammonia disinfectant, such as Lysol, is a pretty good disinfectant to use for this procedure. Ideally, the eggs should be washed after each collection. However, washing all the eggs that have been collected

#### **PUTTING KNOWLEDGE TO WORK**

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in a day is generally sufficient. Each day throw out the disinfectant solution from the vat and start with a fresh solution the next day or change the disinfectant solution after 300 eggs have been washed in one day's time.

### **Egg Storage**

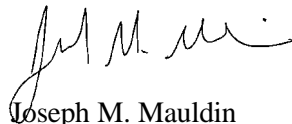
Backyard flock producers generally do not have good egg storage facilities. However, by understanding ideal storage conditions the producer can strive to at least come close to ideal storage conditions. An ideal storage environment is one that is clean and maintained at the proper temperature and humidity (60 to 68°F and 75 to 80% relative humidity). The storage room should not have any birds or animals present. Remember, after five days of storage, hatchability will begin to drop. When the storage environment is not ideal, hatchability may begin to drop even before five days of storage.

### **Incubation**

When you want to incubate eggs continuously, you need at least two incubators, one for incubating until the time of pipping and another to transfer eggs into when they are about three days from hatching. Never have eggs hatching in an incubator which also contains eggs that require more days or weeks of incubation time. This is one of the worst errors that can be made in terms of sanitation. Transfer the eggs from the incubator (setter) to a separate hatching incubator (hatcher) about the time the first egg pips. Pipping and hatching eggs provide conditions for very rapid microbial growth, and it is best to have this occur in the hatcher. Always set and hatch eggs in clean and sanitized incubators. The temperature and humidity which are ideal for hatching eggs are also ideal for rapid microbial growth. If you are setting eggs every few days or each week, a third incubator should be considered. The third incubator is used for transferring the eggs into so that the setting incubator can be cleaned and sanitized. Cleaning and sanitizing the setting incubators should be done once per month. This should be done after every hatch in the hatching incubator.

One other suggestion that will improve sanitation greatly is to keep the setters and hatchers in separate rooms, if possible. Isolating setters from hatchers greatly reduces the potential for contamination during incubation. During the hatching process eggs are exposed to blood, excrement, fluff and chick down. As stated earlier microbial population grow very fast under these conditions and bacteria can easily be transferred from hatcher to setter by the airborne fluff particles.

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**\*\*Consult with your poultry company representative before making management changes.\*\***

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