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Nest Training to Avoid Floor Egg Production

Eggs that are laid outside the nest, on the floor or nest ramps, will often have a dirty or soiled appearance. Dirty floor eggs pose a higher risk of bacterial contamination and may explode after several days in the incubator. Previous work has shown that dirty floor eggs account for about 0.5% of all eggs produced, but the incidence may be higher during the first few weeks of egg production. Dirty or soiled floor eggs should always be culled. Proper pre-lay conditioning of hens and nest training in the first weeks should hold total floor eggs below 4% for manual nests and less than 8% with mechanical nests. If higher levels are experienced these guidelines may be helpful.

The production of clean turkey hatching eggs must begin with proper nest training. Nest training begins immediately after hens are moved to the laying barn and continues during the first few weeks of lay. The most critical period is between the tenth day after light stimulation and the end of the first week of egg production. The objective during this period is to orient the turkey hen with proper nesting behavior. She needs to be encouraged to seek out the nest as a place to lay her eggs, become comfortable entering the nest, and finally leave the nest available for the next hen once she has laid her egg (whether ejected manually, mechanically or leaving voluntarily).

Hens that have been grown from brooding through darkout in a favorable environment will invariably respond better to proper nest training. Fundamental factors for proper nest training include:

1. Avoid overcrowding
2. Provide clean, high quality litter
3. Feed proper nutrients to attain breed standard body weight curves
4. Maintain good health status.

Many flocks respond well to pre-lay ration for 1 or 2 weeks prior to light stimulation, particularly if they are held slightly under standard weight up to 28 weeks of age. Calcium, phosphorous, and protein levels in pre-lay diets are typically intermediate to holding and laying feeds. Alternately, if scheduling and facilities permit, transferring a few days prior to light stimulation can be advantageous in avoiding stress. Flocks should not be moved and photostimulated while still on a low density holding feed. They should always receive laying ration from the onset of stimulation.

For both manual and mechanical nesting systems, the nests should be closed when hens are moved to the breeding facility. Hens benefit from a few days to acclimate to their new environment. Changes in feeders, drinkers, bedding, lighting, stress of moving to the laying barn, and the stress of lighting; all

compound with the physical and hormonal changes occurring as an immature female is transformed to a laying hen in the span of 2 weeks. Around 7 to 10 days post lighting (10 to 12 days for heavy breeds), most flocks begin to squat and also begin searching for a place to lay their eggs. This is the best time to open nests for the first time. Placing a moderate amount of clean bedding in the nest helps to entice hens to enter the nest. Nest traps should be left open throughout the day, but closed at night. If nests are left open at night, first ejections must start very early in the morning. It is beneficial to walk the floors periodically during the day to move the hens and help them acclimate to human activity in the barn. Using mechanical or manual ejection 2 to 4 times a day allows every hen equal access to nests and prevents some hens from developing the habit of sleeping on the nest. Injured hens will often occupy nests to avoid harassment. These hens should be removed to a hospital pen with nests. Then, as they recover these hens can be returned to the pen as nest layers.

As egg production begins, all eggs should be removed from the nest regularly. Gathering eggs and ejecting the hens should be done at least 4 times a day and increased to at least 2 gatherings per 10% production. By 50% production gathering/ejection should be at least every hour during peak of lay. Nest traps should always be closed at night, but opened early in the morning before any significant lay begins. With mechanical nests, it is necessary to chase hens off the nest

ramps while the nests are closed for the first 2 weeks of lay. This ramp ejection can be continued as part of the floor collection routine for the duration of lay. If this is done routinely from the onset of lay, this practice is not stressful or damaging. If it is not done properly in the first 2 weeks of lay, some hens will become inclined to return immediately to the nest. Hens that never vacate the nest will ultimately force others to lay their egg on the floor and will themselves be the first hens to become broody. Hens that are denied access to nests when they are ready to lay their egg are destined to become floor layers.

There are many theories about how to train floor layers to lay their egg in a nest. Fencing off corners and eliminating dark areas in the barn will also discourage hens from laying eggs on the floor and encourage them to search for a nest. However, no method works as well as proper nest training to prevent floor layers from occurring. Floor layers also become floor broodies, which are very difficult to treat effectively. Flocks that lay well in the nests produce more sanitary eggs, are less likely to become broody, and are more likely to persist well in lay.

This info sheet is intended as a reference and supplement to your own flock management skills so that you can apply your knowledge and judgment to obtain constantly good results with all hybrid products.

While every attempt has been made to ensure the accuracy and reliability of the recommendations provided, Hybrid Turkeys accepts no liability for the consequences of implementing these recommendations.