

Why is nest and egg belt management critical?

- Proper management of nests and egg belts can positively influence labor costs by reducing the number of floor eggs required to be manually collected.
- Reducing the bacterial load in the nests and on egg belts lowers the risk of contaminated eggs, potentially leading to bangers.
- Maintaining an adequate frequency of egg collections reduces pre-incubation of eggs.
- Eggs laid in a good nesting environment are less susceptible to bacterial contamination, cracks and other factors which could reduce hatching egg quality.



Managing nests in pre- and early production

Before the first egg arrives, egg belts should be run several times per day after transfer to familiarize the birds with the changes in vibration and sound within their environment. Nests should be opened and made available for use when the first egg is anticipated through palpation. Walking in the scratch area multiple times per day will help to encourage slat and nest utilization early in the flock. Floor eggs should be collected more frequently in the early stages of lay to encourage nest use and any birds observed to be laying in the floor should gently be placed in the nest.

Introduce perches and/or slats in the rearing (transfer) or production (day-old to depletion) house. The introduction of elevated structures at 28 days of age is essential to stimulate female nesting behavior and vertical movement. For more information on the use of perches, please see ***How To...Stimulate Nesting Behavior using Perches and Slat in Pre- and Early Production.***

Equipment

1. Automatic nests or manual nests (always follow local legislation regarding stocking densities)
2. Nest box bottoms
3. Nest mats or nesting material such as wood shavings, paper or straw
4. Elevated structures such as slats or perches
5. Approved cleaning solution
6. Cloth towel
7. Protective clothing- gloves, coveralls, face masks

Procedure: Routine Cleaning and Management of Automatic and Manual Nests



Step 1

Step 1 Automatic and manual nests should be visually monitored for cleanliness daily. Any fecal or organic material should be removed from the nests by simply scraping or brushing it away by hand, cloth or brush.



Step 2

Step 2 Automatic nests should be checked before the first egg collection for any remaining eggs within the nests, or obstructions to the belt that may result in the accumulation or damage of eggs on the belt.



Step 3

Step 3 Egg collection frequency should be adequate to prevent belts from becoming full and to minimize the number of cracked and dirty eggs. Manual collection should be between 4-6 times per day. The final daily egg collection should be as late as practically possible in the day to minimize the number of eggs held in the nests or belts overnight. After the final egg collection each day, all hens in manual nests should be removed to prevent territorial or "broody" behavior.



Step 4

Step 4 Automatic egg belts should be cleaned or sanitized weekly, and nest mats should be removed and cleaned or sanitized at least every 6 weeks. Water and approved sanitizers can be used for cleaning, but always follow manufacturer's instructions for mixing and/or dilution, as well as local legislation. Have a second set of nesting mats available as part of a regular rotation, and discard worn or structurally compromised mats. Based on daily observations, a routine schedule should be in place for replenishing or "topping off" the nesting material within manual nest boxes.

Results

If an adequate nest maintenance and egg collection schedule is established:

- Eggs are visually clean and free from cracks, checks, or organic material.
- The percentage of nest eggs should remain greater than 98.5% of total eggs collected for the life of the flock.
- ✓ No action required.

If cleaning, egg collection frequency and management are not adequate:

- More than 30% of the total eggs laid on a daily basis will be collected at one time.
- The percentage of eggs laid on the floor will be higher.
- An increased percentage of cracked and dirty eggs are found on the egg belt or collected from the nests.

Corrective Actions:

- Ensure that an adequate number of nests are available, and increase the number of egg collections per day to reduce the number of eggs in the nests and on egg belts at one time.
- Schedule feeding times for either 30 minutes after lights on or 6 hours after lights on to avoid feeding during peak lay.
- Check the nests and belts just before lights off to ensure that the number of egg left in the nest is minimum.
- Remove any litter or droppings from nests daily.
- Increase the frequency in which nest mats are rotated, and ensure that they are in good condition.
- Have a routine schedule for replenishing or “topping off” manual nest material.
- Check any area of transition on the egg belt to ensure the belt is level and there are no rough areas or obstructions in the path of the eggs.