



HOW TO MANAGE AND PREVENT FLOOR EGGS IN CONVENTIONAL BREEDERS?

Floor eggs are both one of the most common and important issues to manage in broiler breeder production. Whatever the type of nests (manual or automatic) or the type of house, this risk should be reduced as soon as possible to keep losses to a minimum. The prevention of floor eggs starts before the onset of lay. During the production period, respecting technical recommendations and applying management best practices can reduce the risk of floor eggs both before the peak of lay and until depletion.

REARING PERIOD

Objectives

- ✓ Develop a good frame size
- ✓ Create and keep an active flock
- ✓ Stimulate jumping and perching activity
- ✓ Promote and maintain natural behavior

Management points

- ✓ Light duration and intensity should decrease according to the age and bird behaviour (respecting bodyweight targets and risks of injurious pecking).
- ✓ A correct light intensity (10 lux*) should be used. This will promote activity in the house.
- ✓ The use of perches and/or platforms are advised (3-5cm/bird or 500 birds/m², respectively).
- ✓ If slats are used, place drinkers on them to encourage birds to jump onto the slats.
- ✓ Try to use the same equipment (feeders and drinkers) in both rear and lay.
- ✓ Do not use electric wires on feeders or drinkers that discourage jumping.



Fig. 1 & 2 – Difference of light intensity in the same house (3 lux – left picture & 10 lux – right picture).



Fig. 3 & 4 – Platforms and perches can be used to stimulate activity and to train birds jump onto the slats and manual nests.

TRANSFER INTO THE PRODUCTION HOUSE

All equipment (drinkers, feeders and nests) should be installed in the laying house and be operational prior to transfer.

Automatic nest / Manual nest

- ✓ Transfer birds directly on slats and provide water and feed (if feeders are on the slats).
- ✓ After transfer, nests belt can be turned-on twice during the day to familiarise birds with the noise.

Males

- ✓ They should be mature and active to interact with and disturb females to help push them into the nests.
- ✓ Sex-ratio: 9.5% - 10% at the transfer.

* Where local regulations stipulate minimum light intensity then these should be respected at all times. It should be used if all technical recommendations are respected and floor eggs are a regular issue in the house.



PRODUCTION PERIOD

Objectives

- ✓ Stimulate birds to use the nests after transfer and before the onset of lay.
- ✓ Avoid too early onset of lay → Objective: 5% weekly lay at 25 weeks of age.
- ✓ Floor eggs objective: stabilised at the lowest possible level after peak egg production.

Manual nest – Management points

- ✓ Get the hens used the nests: where possible, introduce nests a minimum of 4 weeks before the onset of lay.
- ✓ Put clean bedding material in the nests to make them attractive and comfortable.
- ✓ Perches must be large enough to allow each bird to have easy access to the 2nd nest level.
- ✓ Ensure the correct nest box ratio in the house (4 hens/nest).
- ✓ Bright light (60-80 lux*) in the mating area and a lower light intensity level on the nests.
- ✓ If egg collections are made at a time when birds are laying most of the eggs, avoid too many egg collections and disturbing hens in the nests.

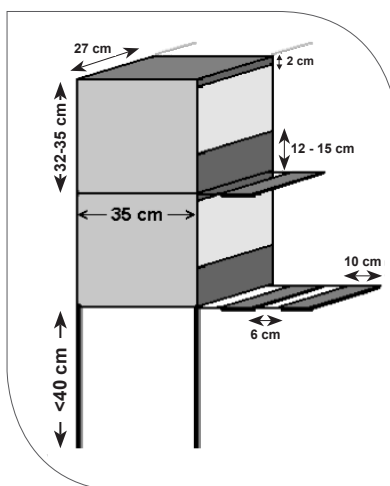


Fig. 5 – Nest dimensions



Fig. 6 – Block the access to the bottom area of the nest.

Automatic nest – Management points

- ✓ Install nests as soon after transfer as possible and open them during the day at least 2 weeks before first egg to stimulate birds to explore the nests.
- ✓ Turn the nest egg belt on twice during the day to adapt birds to the noise in the days after transfer.
- ✓ Turn-on lights inside nests one hour before lights in the house are switched on to help early laying birds find their way to the nests.
- ✓ Control slat height. If >40cm, place steps to help birds jump onto the slats. Slat slope should not exceed 5-8°.
- ✓ Bright light (60-80 lux*) in the mating area and a lower light intensity level on the nests.
- ✓ Ensure the correct nest ratio in the house (80-90 hens/linear meter of nest).
- ✓ Nipple flow must be adequate (100-120 ml/min) to avoid a fence effect in front of the entrance to the nests.



Fig. 7 – Slat height is crucial to maximise nest access. Steps help birds go up on the slats → Pay attention to isolate the area below the slat.



Fig. 8 – The height (beak level) and the flow of nipples are essential to avoid fence effect on the slats.

* Where local regulations stipulate minimum light intensity then these should be respected at all times. It should be used if all technical recommendations are respected and floor eggs are a regular issue in the house.



GENERAL MANAGEMENT POINTS

Light stimulation

- ✓ Ensure the birds receive at least 14 to 15 hours of light according to the recommendations in the Breeder Management Guide. Typically, this light duration will be provided around 25 weeks of age according to the level of sexual maturity and the age at first light stimulation.
- ✓ Light intensity can be increased two times during the same week after making reference to the Breeder Management Guide.

How to identify lighting program issues?

- ✓ If there are too many eggs before lights are switched on.
- ✓ If there is a high percentage of eggs laid in the afternoon.

Litter

- ✓ A low litter level after transfer can help reduce the risk of floor eggs.
- ✓ The depth could be around 1-3 cm in hot conditions and up to 4-6 cm in cold weather.

Feeding

- ✓ Fast feed distribution (<4 minutes).
- ✓ Increase feed daily after 5% daily production until peak of feed.
- ✓ Peak of feed between 65 and 70% daily production.
- ✓ Feed consumption time may be around 3 hours but may vary according to feed and environment.
- ✓ Avoid feed distribution during the laying period preferably within 30 minutes of lights on.

Nest

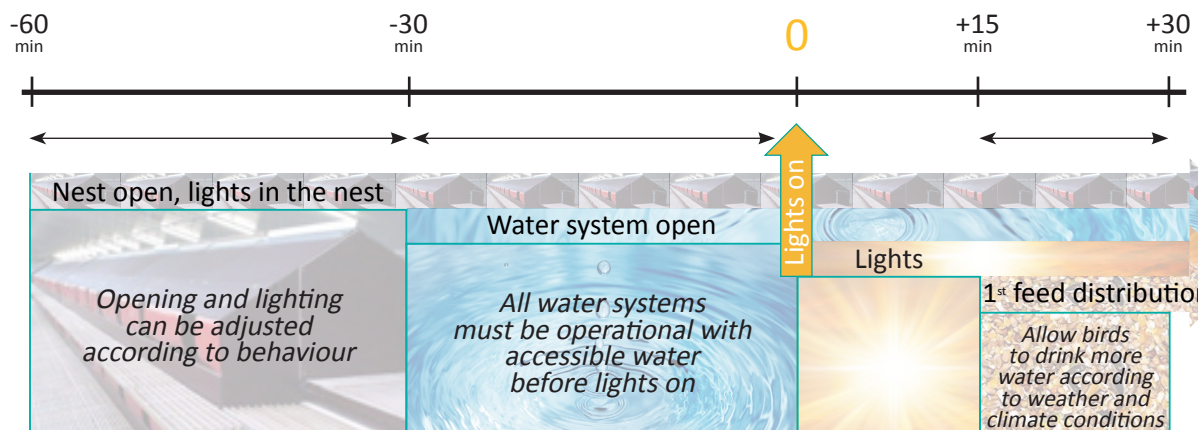
- ✓ Add decoy dummy eggs or marked eggs to attract birds into the nests until the peak of lay.
- ✓ Nests must be positioned in order to avoid draughts of cold air inside the nests.
- ✓ During hot weather it is recommended to have manual nests perpendicular to the air flow to prevent still air inside the nest.
- ✓ High light intensity (natural light) inside the nests may deter hens from the nest.



Fig. 9 & 10 – Positioning of male feeders as far as possible from the nests (in the centre of the house or close to the wall)



MANAGEMENT OF NESTS, DRINKERS & FEEDERS, IN RELATION TO WHEN THE LIGHTS ARE SWITCHED ON



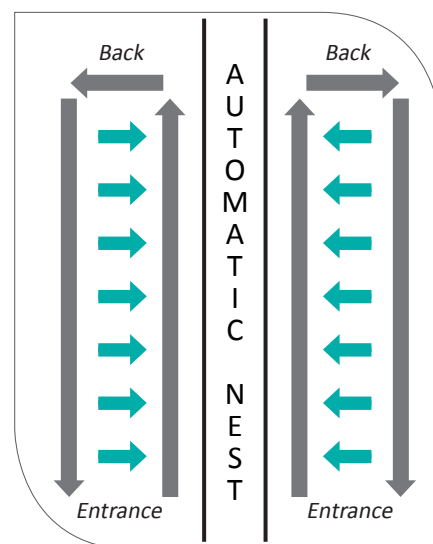


FLOOR EGGS COLLECTION

The evolution of the number of floor eggs must be monitored daily after each collection to follow the evolution. Use the Hubbard Analyzer System to record this.

How to collect floor eggs properly?

- ✓ When to start? From the day the 1st egg is laid on the floor.
- ✓ How often? At least, **once per hour during the laying time**. At the very beginning of lay, this may be 10-12 times per day.
- ✓ How to collect the floor eggs? If there is a bird close or on the egg, put it into the nest. During the collection, push the flock to the nests. Avoid disturbing the litter or doing something that could attract birds out of the nests during the morning. The main objective is to teach birds to enter into the nest to lay. Using a flag or another strange object is a good way to move the flock towards the nest without making a noise or attracting birds.
- ✓ How to monitor the evolution of floor eggs? Record and monitor the daily ratio of floor/nest eggs. Identify spots where floor eggs are found and eliminate them.
- ✓ How long to continue? Until the floor egg percentage is stabilised at a low level.
- ✓ How to move birds in the house? During floor eggs collection, it is very important to push birds into the nests as shown in Figure 11. This operation can be done carefully not to scare the birds by staff with a flag to make it easier. A robot can do this job also, but it depends on the house configuration and nest arrangement.



 Birds  Staff

Fig. 11 – How to move birds in the house?

>> Follow the Breeder Guide Recommendations and refer to your Hubbard Technical Manager for more details.

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