



Floor Egg Management

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Why dirty eggs are a problem?

Article

Microbiological Quality of Free-Range Eggs from Nest Boxes and Litter in the Late Production Stage in Southeastern Brazil

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Egg Component	Laying Location (LL)	
	Nest	Bedding
	<i>Staphylococcus</i> spp. (CFU/mL)	
Eggshell	3.58 ^{Ab}	5.57 ^{Aa}
Yolk and Albumen	2.00 ^{Ba}	2.16 ^{Ba}

	Total Coliforms (MPN/mL)	Thermotolerant Coliforms (MPN/mL)	Mesophiles (CFU/mL)	Psychrotrophs (CFU/mL)
	Laying location (LL)			
Nest	1.44	1.37 ^B	3.65	3.47 ^B
Bedding	2.06	2.16 ^A	4.95	4.56 ^A

shells of nest eggs. No contamination from sulfite-reducing *Clostridium* was found. The study concluded that hygienic conditions were insufficient, emphasizing the need for better food safety practices in non-cage systems. It is recommended that free-range eggs be collected immediately after laying to minimize contamination. The consumption of eggs collected directly from bedding is not recommended due to the increased risk of microbial contamination.

Floor Egg Management

Starts with REARING...

Start training - Open the system on time

- Don't keep birds closed too long. The earlier, the better
- The longer you keep them closed, the worse it is to get them used to the system
- Between 3-6 wks to start training (depending on the system)

Floor Egg Management

Starts with REARING...

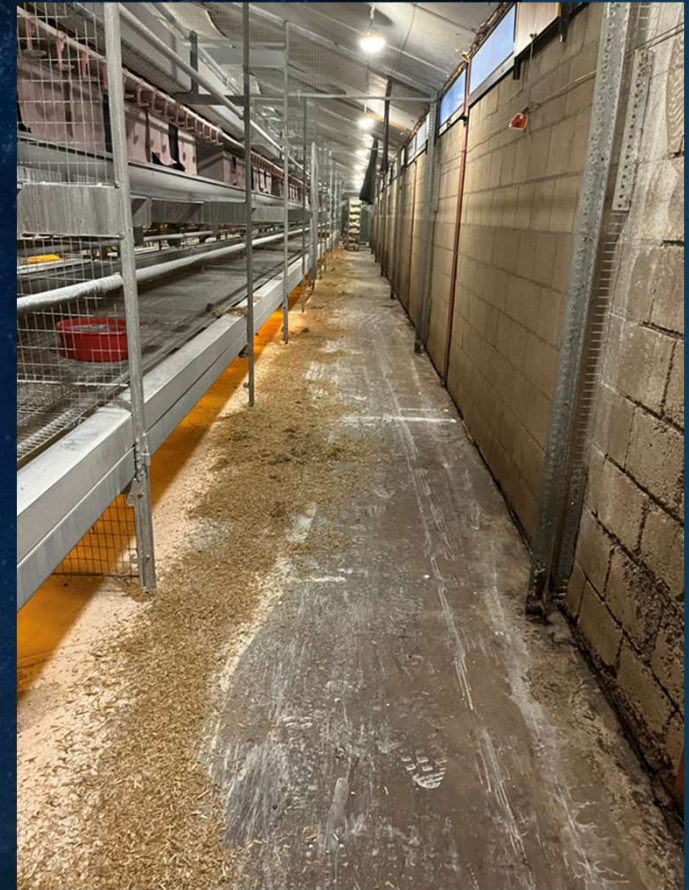
Light Intensity

- After brooding 1 fc (10lux)
- Don't do the rearing too dark
- ✓ Make sure all birds find the way back to the system
- ✓ Every 2 weeks be there 1 night after diming to check if they are all inside the system (take notes!)

Floor Egg Management

Starts with REARING...

- Litter
 - Respect local regulations
- Stocking Density
 - Based on feeding and drinking space



Floor Egg Management

Transfer...

- ✓ Between 15 – 16 wks
- ✓ Light Intensity
1 fc at rearing (10 lux) → 2.5 fc at production (25 lux)
- ✓ Keep them closed maximum of 1 week



Floor Egg Management

Transfer...

Nest:

- Keep nest closed at transfer
- Open in the morning (for 5 hours) (to explore)
- As the first egg comes, keep they open

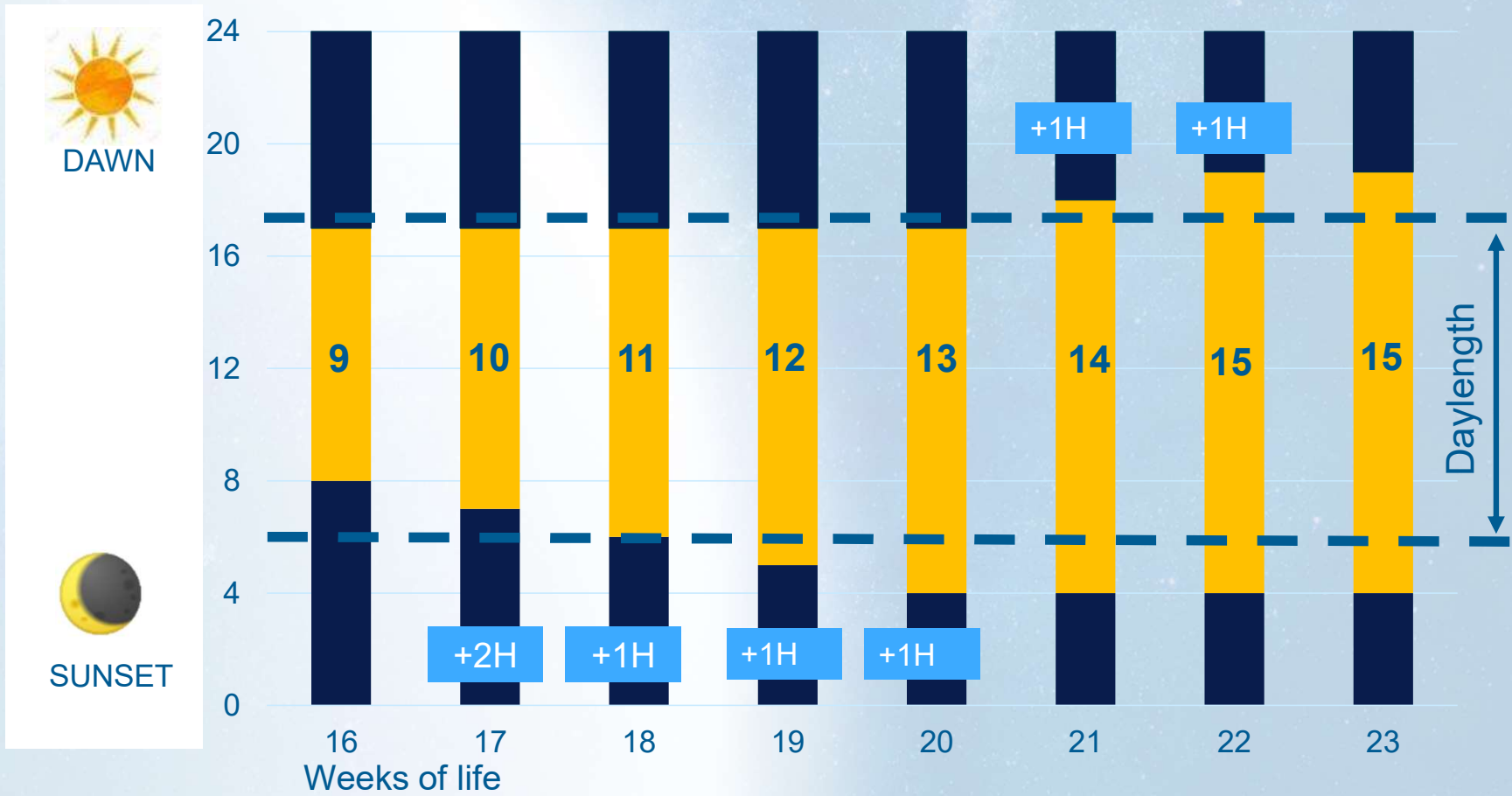
Floor Egg Management

Light Stimulation

- ✓ Reach 2.8 lbs (1270 g) body weight.
- ✓ Increase light 2 hours first then 1 hour per week.
- ✓ Add hours at the end of the day to postpone laying in the morning after!!!! (lay later because the birds will be going to bed later).
- ✓ This is where we can help with floor and system eggs.



Start Production



Floor Egg Management

Light Intensity

- ✓ The general rule is 2.5 to 3 fc (25-30 lux)
- ✓ But there are parts of the house that can be brighter for certain periods that can aid with floor eggs.
- ✓ Make sure the lights are brighter under the system as they are coming into lay.

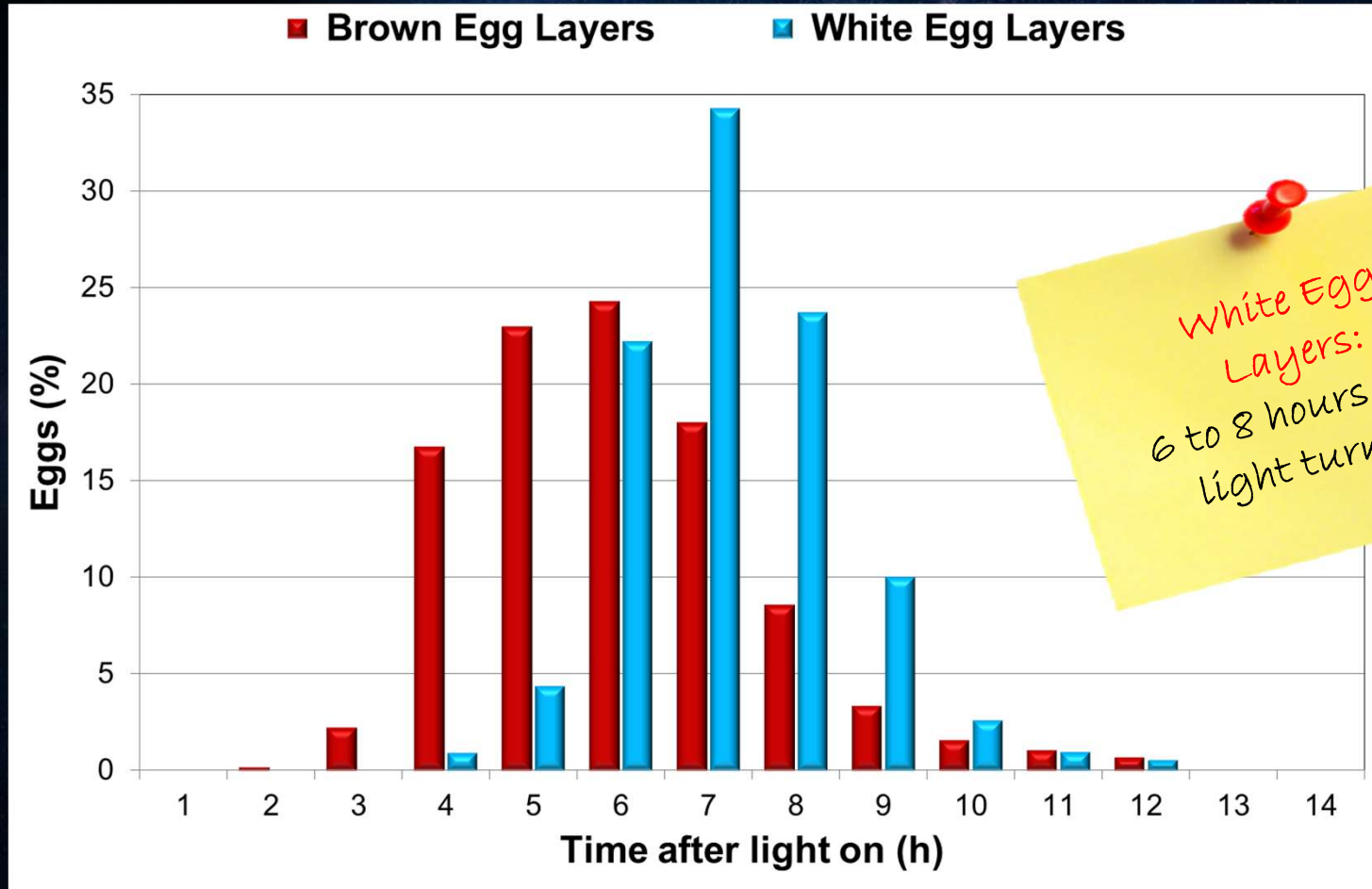
Floor Egg Management

Floor Assistance Eggs:

- ✓ 19 – 25 wks: be there to make sure. It will save your time and problems in the future....
- ✓ Every 2 hours check:
 - ✓ How many eggs are out of the nest?
 - ✓ Where are they? (up? Below the system?)



Nesting Behavior



White Egg Layers:
6 to 8 hours after
light turn on

Nesting Behavior

Trait	Brown layer	White layer
Oviposition time	8:00	9:45
Stay in Nest with oviposition	30 min	45 min
Stay in nest without oviposition	10 min	28 min

* Switch on the light at 3:00



Nesting Behavior

Time spent in Nest (Minutes)

	Individual Nest		Family Nest	
	with oviposición	no oviposición	per visit	per day
Brown Layers	30	10	25	35
White Layers	45	30	45	75



Feeding Management

Feed Stimulation...

Total volume spread throughout the day (3 times per day, for example):

1. Feed 15-25 Minutes after lights on (or the night before).
2. Feed in the middle of the day.
3. Feed 1 hour and a half before lights off.

Feed Management

Example:

Total volume spread throughout the day (5 times per day, for example):

- ✓ 7:00 AM = Turn lights on
- ✓ 7:15 AM = 1st Feed
- ✓ 12:00 PM = 2nd Feed
- ✓ 02:15 PM = 3rd Feed
- ✓ 04:30 PM = 4th Feed
- ✓ 06:30 PM = 5th Feed
- ✓ 08:00 PM = Turn light off

Feeding Management

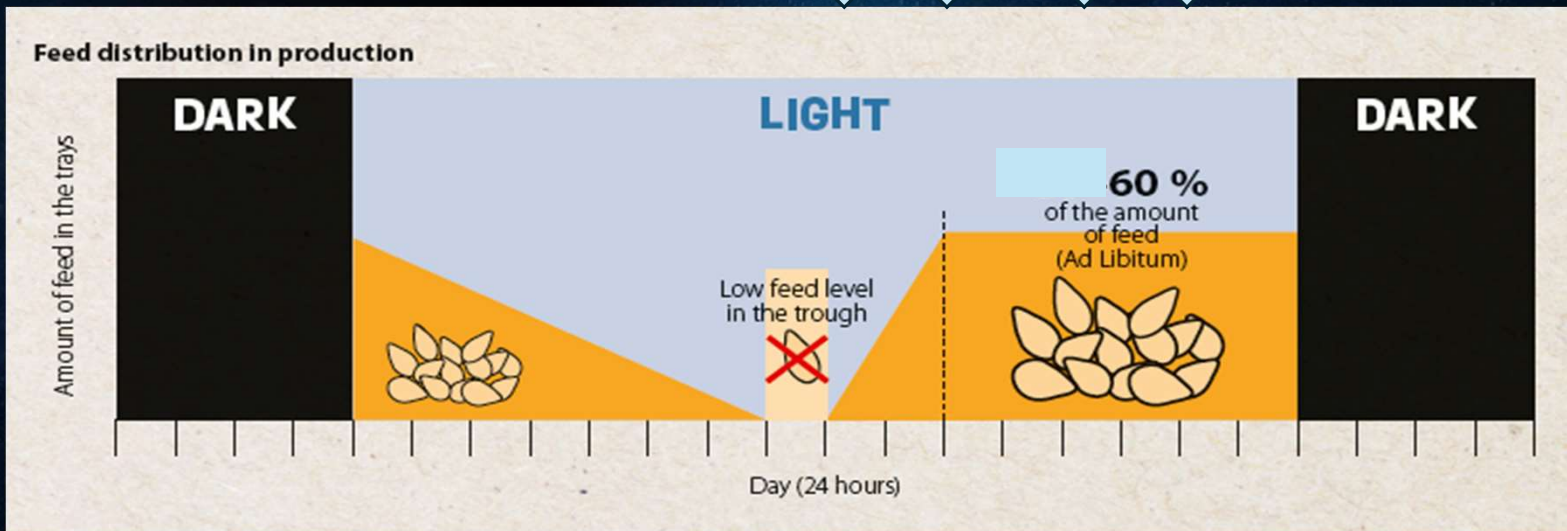
20%



20% 20% 20% 20%



*5 times per day, for example



This is just an example: in practice, feed distribution will depend on feeder equipment/
space/ level, but it needs to follow this scheme

Stimulation / Feed Times

The idea of the large gap between feeds in the morning is to not distract the birds as they are trying to lay.

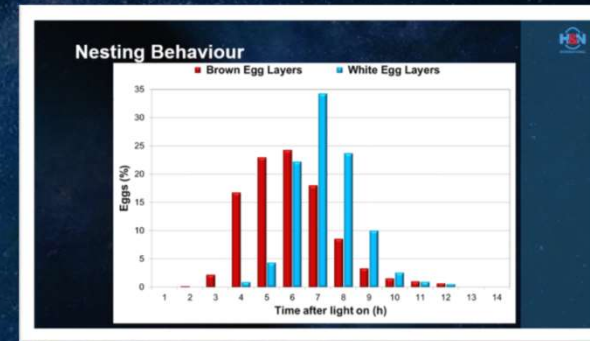
Don't attract birds to the feeders while they are in the nest

But also acts as a clean out period for the feeders and promotes appetite. Got to get the fines into the birds and keep them keen on the food.

If and when a fifth feeding needs to be added it should also go closer to the afternoon feeding always leaving a healthy gap in the morning.

Feed Times

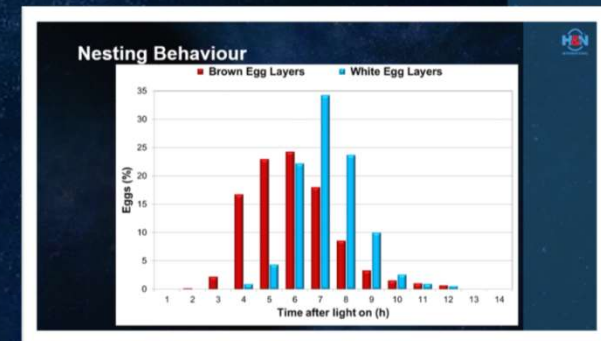
Feeding Management



Don't stimulate
with feeding!

Floor Egg Management

- ✓ Making sure the floor walks are at the right time and in the correct places.
- ✓ Please do not go into the actual system until six hours after lights on.
- ✓ This will only disturb the birds from laying in the nest box.



Floor Egg Management

TIPS

- ✓ Prevention is the word to control Floor Egg Management
- ✓ Never do two things at once
- ✓ You MUST have a good daily overview of feed and water intake
- ✓ You need to know the facts:
 - ✓ Collect the floor eggs every 2-3 hours
 - ✓ Start with the first collection after turning on the light.
- ✓ Grills: leave the under the system grills closed until 11AM (until you get to 80% production).
- ✓ Training Wires: use respecting local regulation



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