Cage-Free Production for 500 eggs and more

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Transfer to production farm

Make a plan before the start of production

Transfer to production farm

Make a plan before the transfer to production

Determine the strategic road with:

- Pullet grower
- Producer
- Local veterinarian
- Feed supplier
- Other involved parties

Transfer to production farm

Make a plan before transfer!!

- On what age we transfer the pullets?
- Is the vaccination program ready?
- What type of feed we like to use during start production?
- Lightstimulation? (Hours, dimming program and LUX)
- Close the PULLETS inside the system?

Transfer to production farm

Make a plan before transfer

Physical stress	Psychological stress	Biological stress
• Injury • Disease • Environmental • Performance	• Fight or flight • Hierarchy • Social	• Rest and Digest • Reproduction • Circadian Rhythm

Transfer to production farm

Make a plan before transfer

- When rearing and production is not in Scandinavian, production can´t start before 17 weeks of age! STRESS
- Transfer before 17 weeks is possible, but be aware that we treat them as pullets! STRESS
- NO transition feed or Layerfeed on early age! STRESS
- NO light stimulation in Hours/Intensity before 17 weeks! STRESS
- When you need to lock-up the pullets, then not for long! (Max 1 week) STRESS

Transfer to production farm

Make a plan before transfer!!

- The body weight of the pullets should have reached the breeder-standard.

Be aware of weight loss due to loading and transport.

- Time settings from the rearing house should be copied to the layer house as accurately as possible.

Transfer to production farm

Make a plan before transfer!!

- Preparing for placement
  - *Check setting in the computers if they are O.K.*
  - *Is everything checked & tested (especially with first flock)*

- Start pre-heating the house on time.

  House temperature up to 20°C.

  - *The first 48 – 72 hours after placement, this temperature must be maintained.*
  - *The pullets will distribute directly on the way they should!*

TRANSFER TO PRODUCTION FARM

STOCKING DENSITY IN THE LAYING HOUSE

The birds should have enough space, especially in hot climates!
When pullets are closed inside the aviary system, keep them only closed for a few days!!!! Important is not only 8 9 bird/m2/living space, but even more important that there is enough feed/water/nest box per bird in the house. (a minimal recommendation is given in table 5).

Overstocking has a strong impact on mortality, body weight and uniformity, feathering status and finally eggs laid per hen. In addition, local legislation should be respected.

Table 5: Stocking density at production house

Equipment	Requirements*
Stocking Density	475 – 750 cm²/hen**
Drinkers	
Round drinkers	1 drinker (Ø 46 cm) for 125 hens
Linear drinkers	1 running meter for 80–100 hens
Nipple drinkers	1 nipple for 8–10 hens (access to 2 nipples/hen)
Feeders	
Round feeder	1 feeder (Ø 40 cm) for 25 hens
Chain feeder	10 – 15 cm / hen
Nest	
Familiy type nest boxes	120 hens / m²
Familiy nest in family cages	50 cm²/hen (42 to 65 cm²)
Single nest (26 x 30 cm)	4 to 6 hens per nest

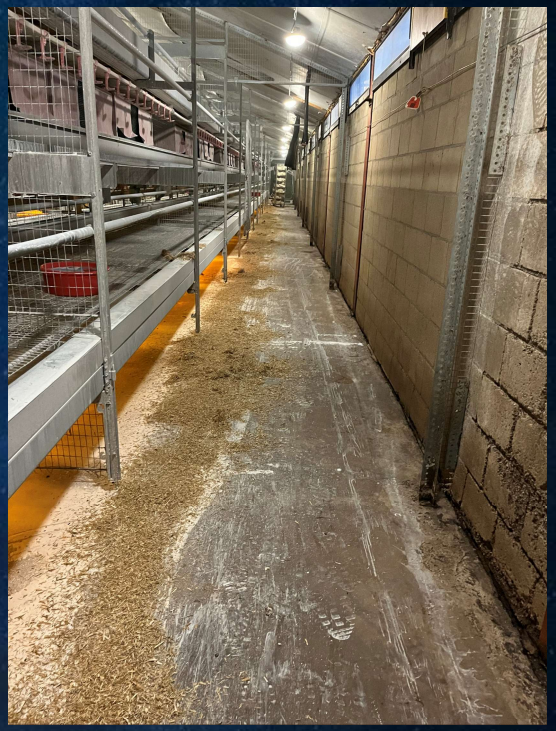
** These recommendations should be adjusted to meet local regulations.*
*** Includes all the available space*

H&N Cage-Free Mangement Guide
https://hn-int.com/

Transfer to production farm

Make a plan before transfer

- Shocking wire (when allowed!!)
  How to use…
- Distribution of the birds in the house.
  - *Per row*
  - *Per compartment*
- Unload the birds on the system
  where feed and water is available
- *Use (low level litter) material on the floor.*

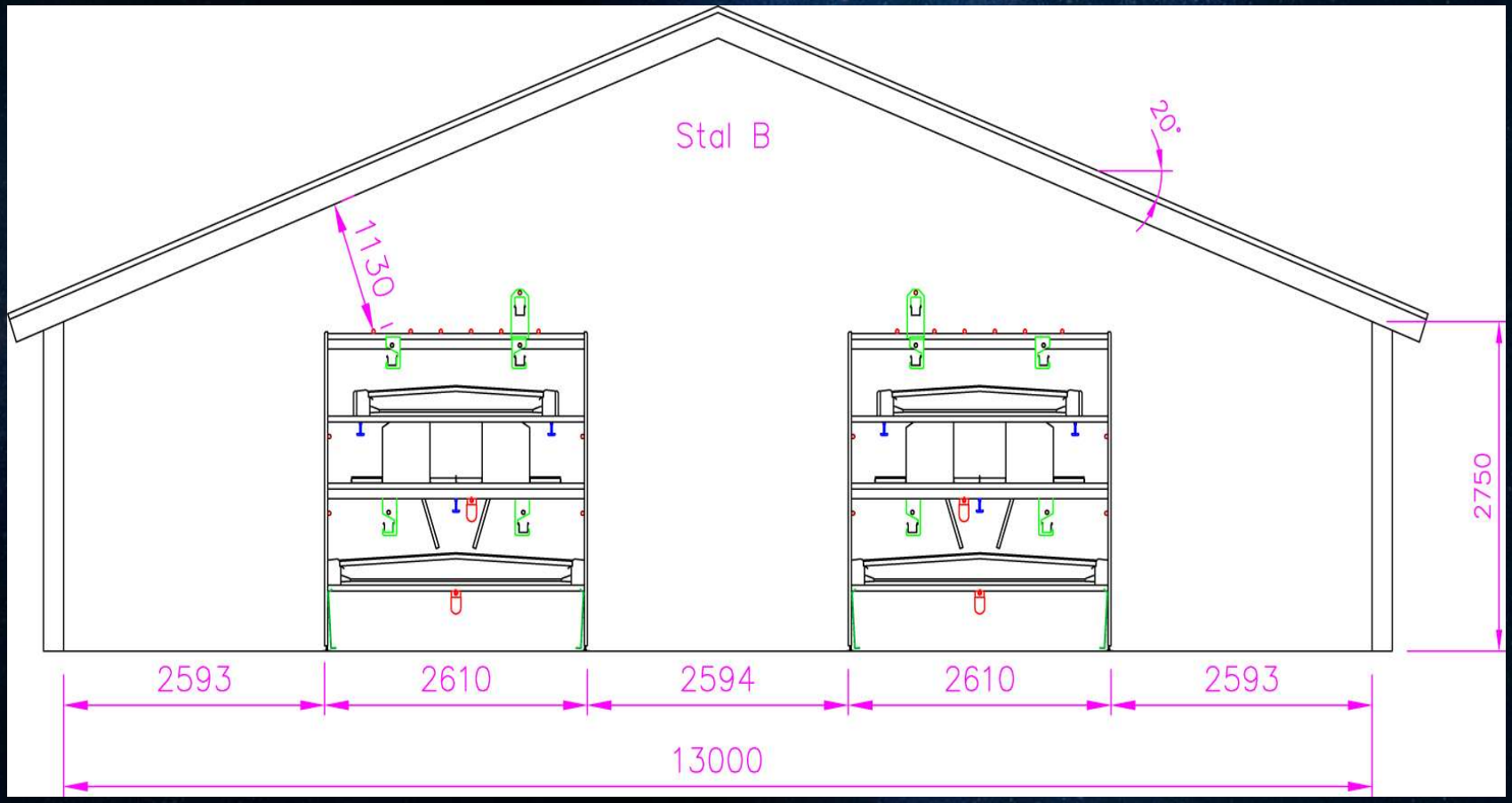


Transfer to production farm

Keep eyes open!

Transfer to production farm

Make a plan before transfer!!



Transfer to production farm

Clean water

- Flush drinkers before housing pullets!

- Clean the water system before housing new flock, and on a regulary base during production period.

- Test the water on a regularly base

Transfer to production farm

Make a plan before transfer

- Correct & Fresh Feed available in the system **before** the birds arrive/housed.

- Feed level in the through the first days. (Feed management)

Transfer to production farm

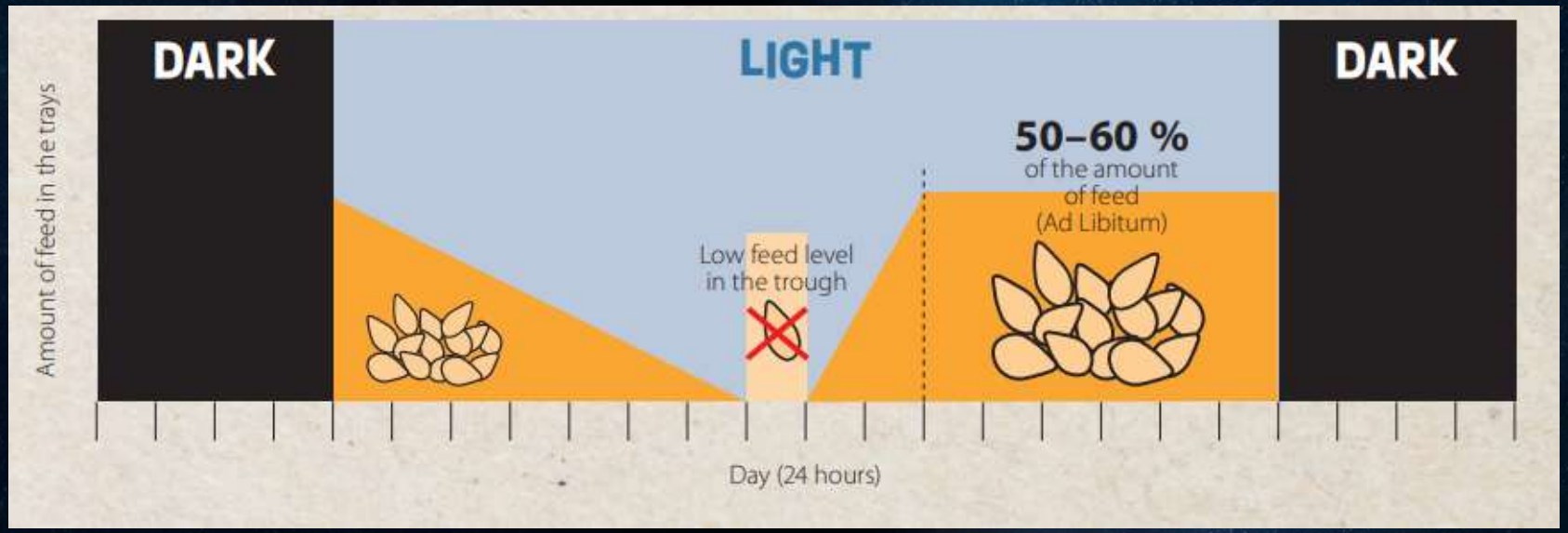
Feed Management

Transfer to production farm

To remember!

- In rearing period (age of 3-4 weeks)
- Start to empty the feeders first ones a week. (Keep an eye on behaviour of the flock)
- **Continue this during whole rearing and also after transfer to production!**

TRANSFER TO PRODUCTION FARM



Production

Transfer to production farm

Measure LUX, avoid bright light spots (undesirable behavior) avoid dark spots (floor-eggs)

Transfer to production farm

The first evening(s)

- The birds (if possible) have to be placed and unloaded in the house at noon or early afternoon. (this requirers good scheduling)
- Make sure there are enough people around the first evenings.
- Every evening, ALL the birds have to be inside the system.

Transfer to production farm

The first evening(s)

- Slat ramps – additional perches

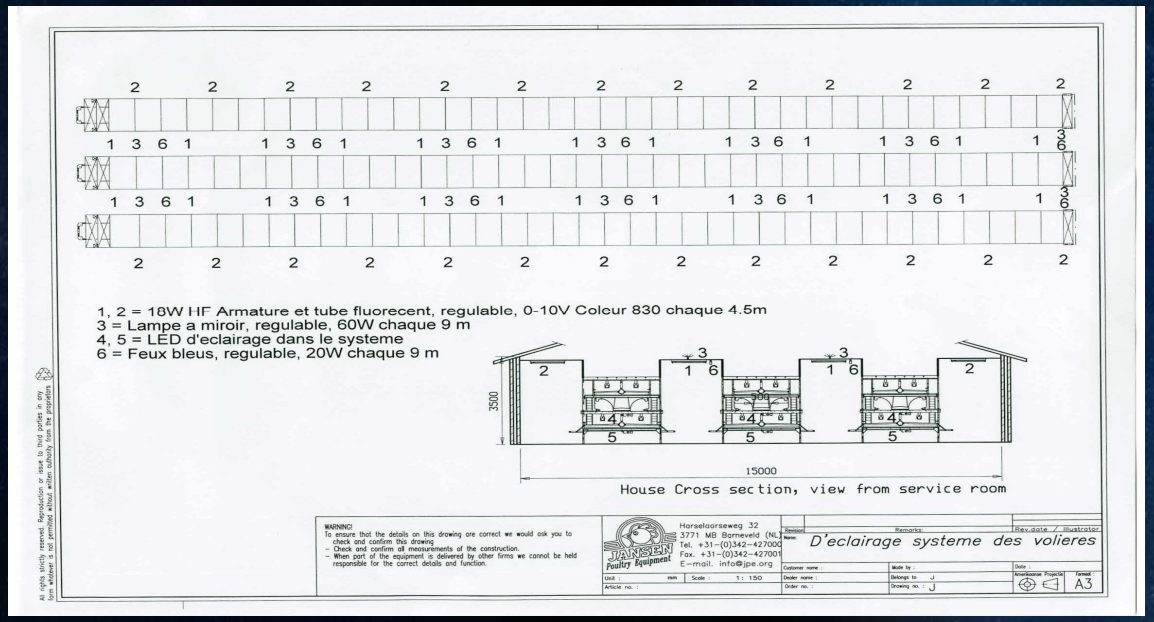
  For an easier access into the system when the birds have difficulties to enter the system.

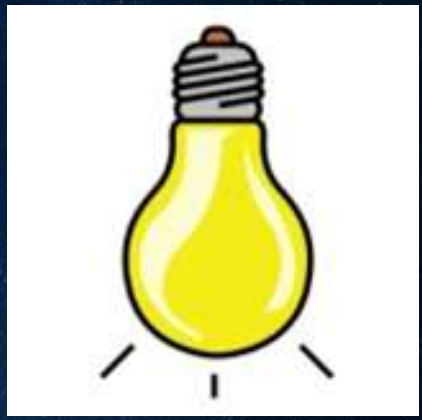
…..Even important after a few flocks…..

Transfer to production farm

The first evening(s)

Copy dimming program from rearing!





Start production

Light stimulation

Light stimulation on body weight and uniformity

Body weight:
Egg weight profile (KAI)

Uniformity:
<10% birds with body weight 100 gr. below standard (egg weight profile)

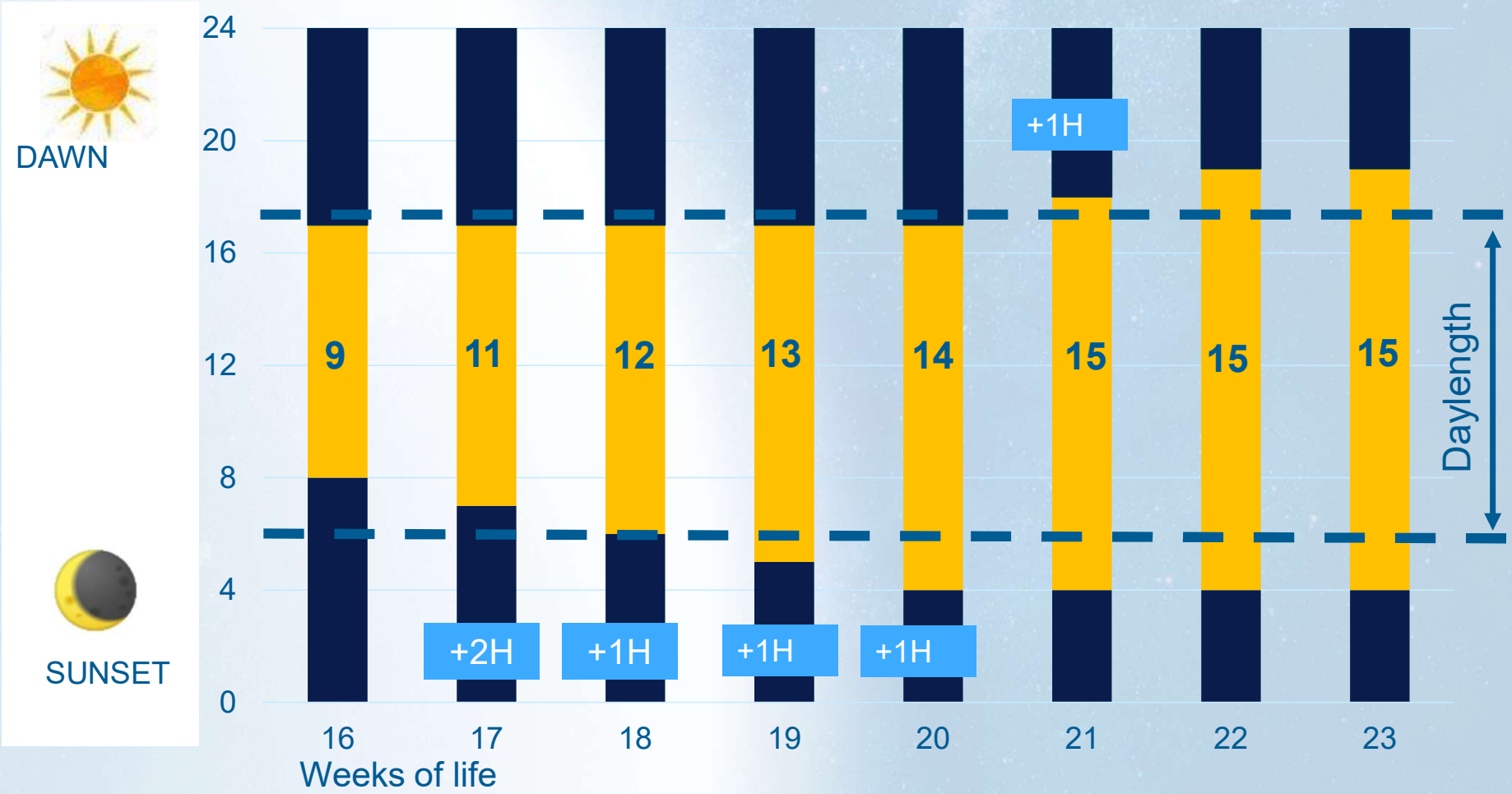
First stimulation:
2 hours

Cage-free management for 500 eggs and more

Body weight to start lighting stimulation!

Table 1. General correct body weight (and estimated age) to start the light stimulation		
Commercial hens	**Uniformity**	**Body weight**
Brown Nick	>90%	1,450 g
Super Nick	>90%	1,260 g
Nick Chick	>90%	1,250 g

Start production



Start production

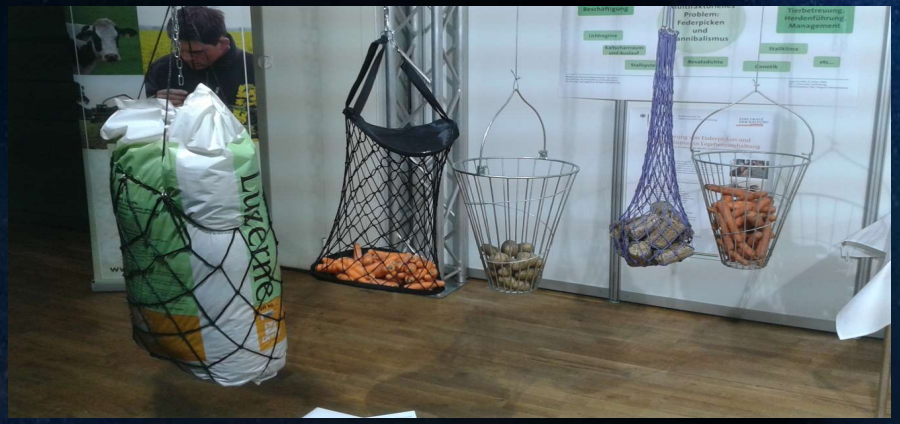
And then it goes on…

- Check if needed to remove birds from the levels without water.
  Especially brown layers on higher levels without water!

- Open system underneath a.s.a.p (if present)

Start production

Enrichment



Dry litter to keep the hens busy

Start production

Alfalfa/luzerne

- We don´t use alfalfa to feed our birds!
- We use alfalfa to see if everything is in good balance!
- **When birds don´t take alfalfa, they are in good balance.**
- Advisable to use it during most stressfull period (17 till 30 weeks)

Source: J. Terhorst

Start production

Lighting

1. Make the first light increase (hours) in production towards dusk untill first eggs are coming, and later ones towards dawn.
2. Depending on breeds:
   White Layers : 1 hour for the first light stimulation and then 1 hour/week
   Brown Layers: 2 hours for the light stimulation and then 1 hour/week
3. Light stimulations of more than 2 hours at once might produce stress for the birds and has no beneficial effect.
4. light hours in production should be longer than 14 hours to allow enough time for feed consumption during the production period.
5. It is of no advantage to exceed to 16 hours of light because after this day length the birds do not increase their daily feed intake.

Start production

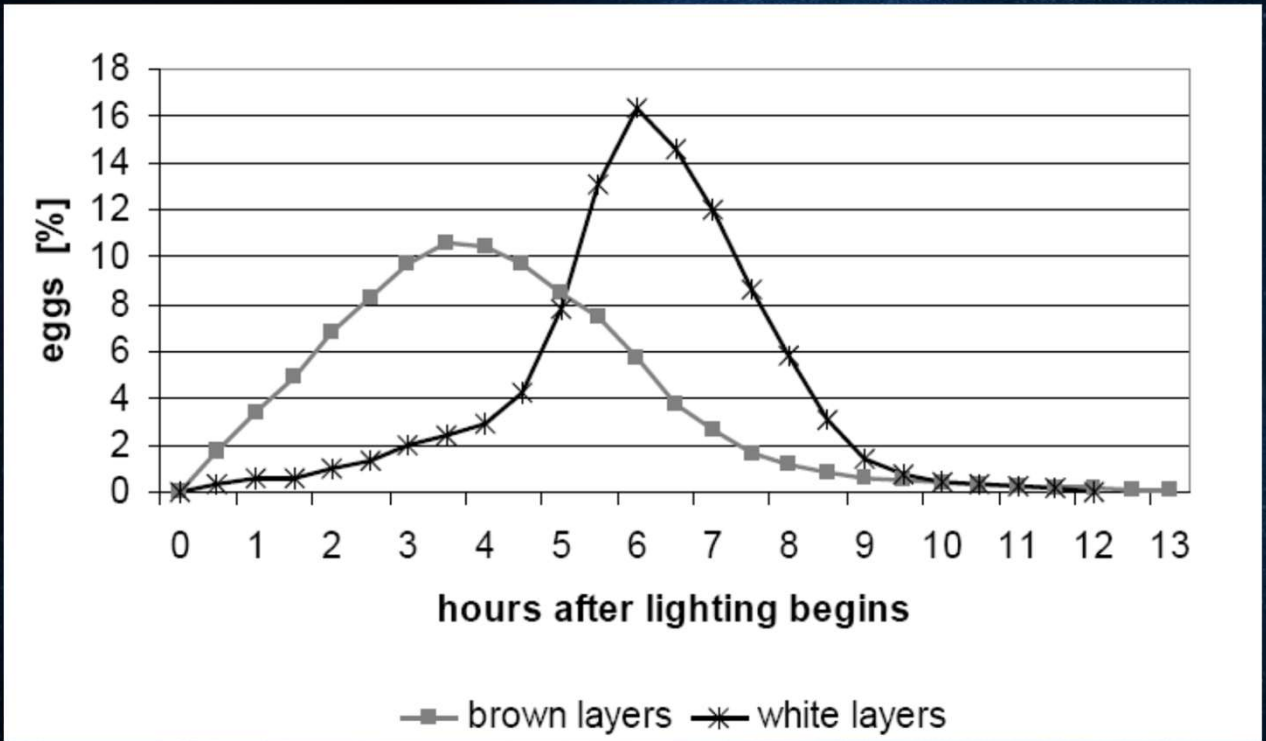
Nestbox management

- Keep nestboxes closed during housing of the pullets
- Open the nestboxes few hours in the morning before onset production
- Open the nestboxes a few hours before start of daylenght.
  (When something is not working, you have some time to fix before start of production.)

Be there at start of production a few times a week, when lightperiod starts!

Start production

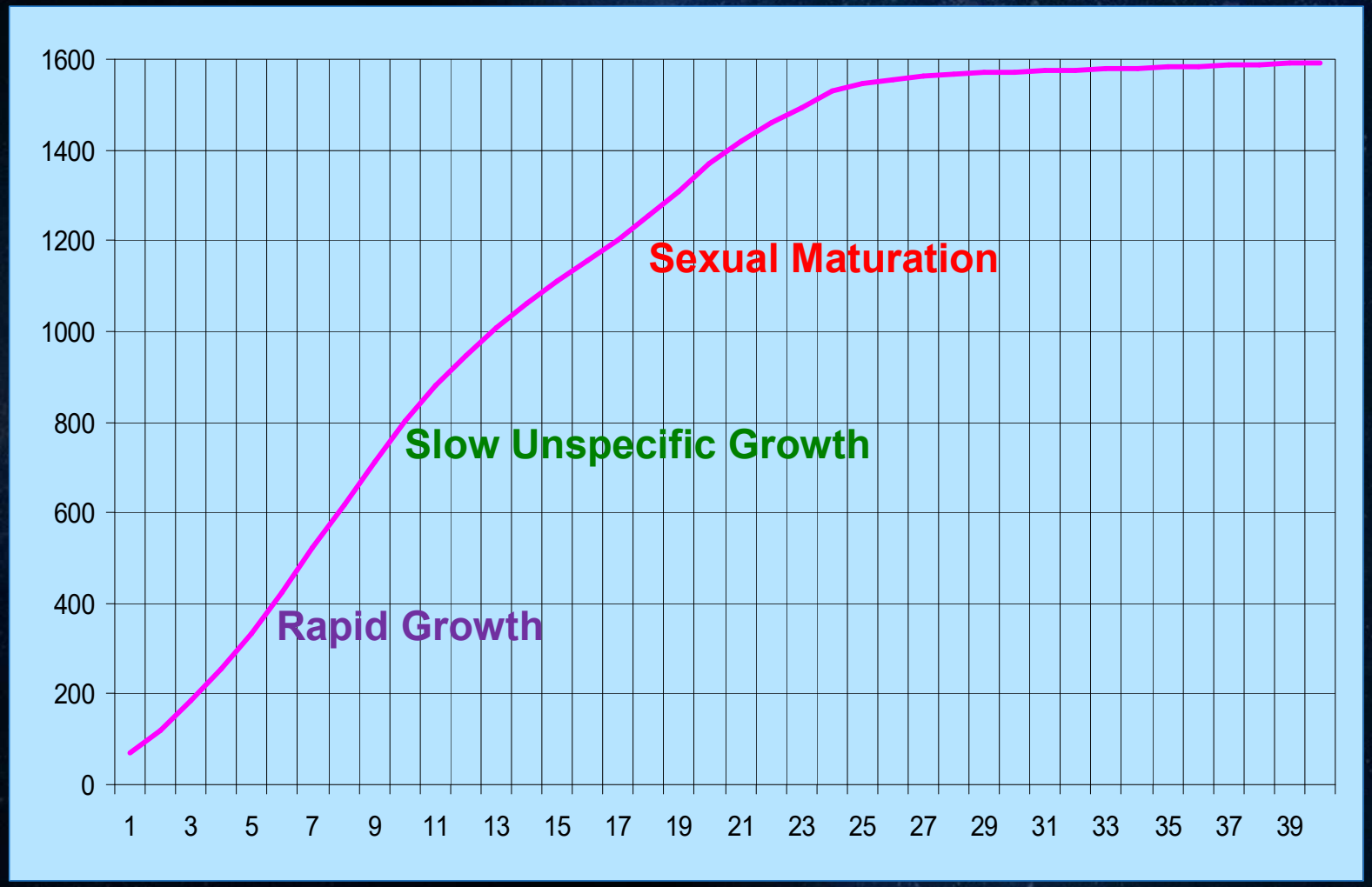
To remember !!!



Start production

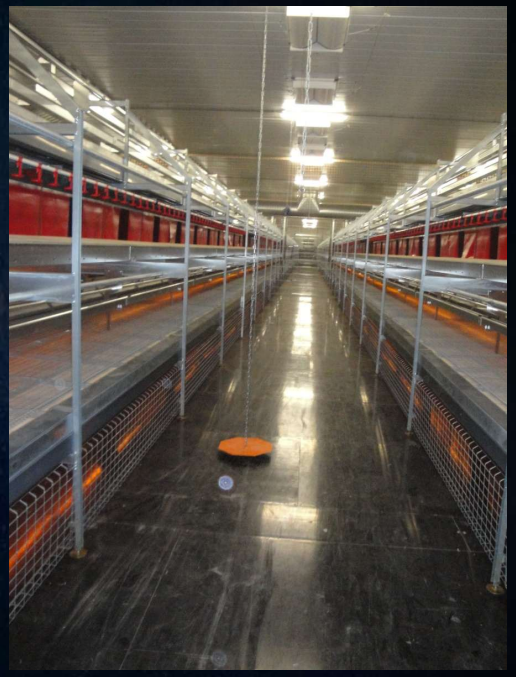
To remember !!!

Body Development during production



Start production

Check body weight weekly!



Light intensity

After piek production!

- Start to reduce LUX after piek-production.
- We can reduce light intensity with little steps every week. (1 LUX weekly)
- Start to switch off light (different levels) after laying period in second part off the day. (Aviary systems…)

Light intensity

After piek production!

Please check local regulations!

Nestbox management

Wrong use of the nestboxes!

- *To hide (selection non productive layers)*
- *To rest, and produce manure (Dirty eggs)*

How can we prevent this wrong use?

Nestbox management

Wrong use of the nestboxes!

- Close the nestboxes for a short time in the afternoon, and stimulate the birds to go out.
  (Use that time to look voor non-productive birds!)

- Start to close the nestboxes (after piek production) earlier at the end of the day. (Small steps!!!!)
  (Floor/system should not increase in numbers!)

How to check correct feed management

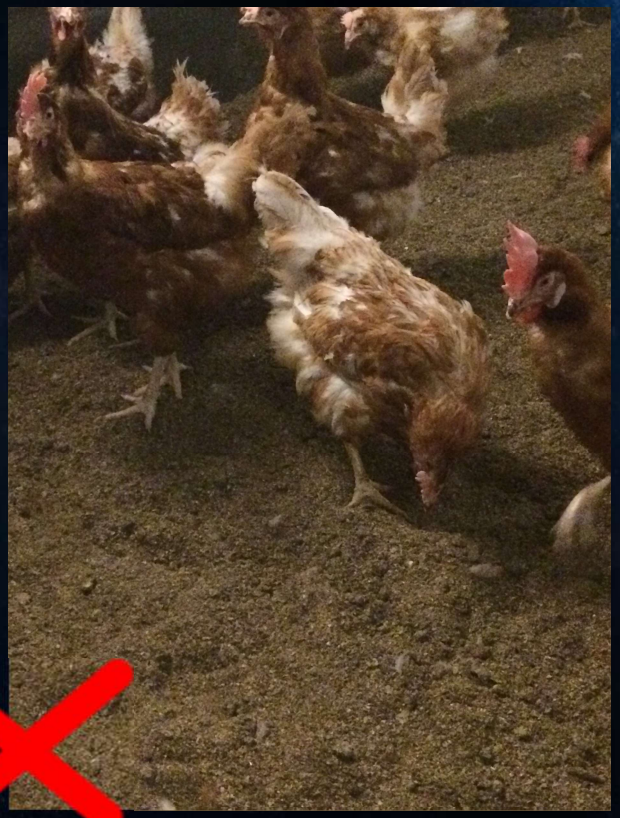
5 step check

- Litter
- Plumage
- Section
- Behaviour
- Body weight

How to check correct feed/management

Litter

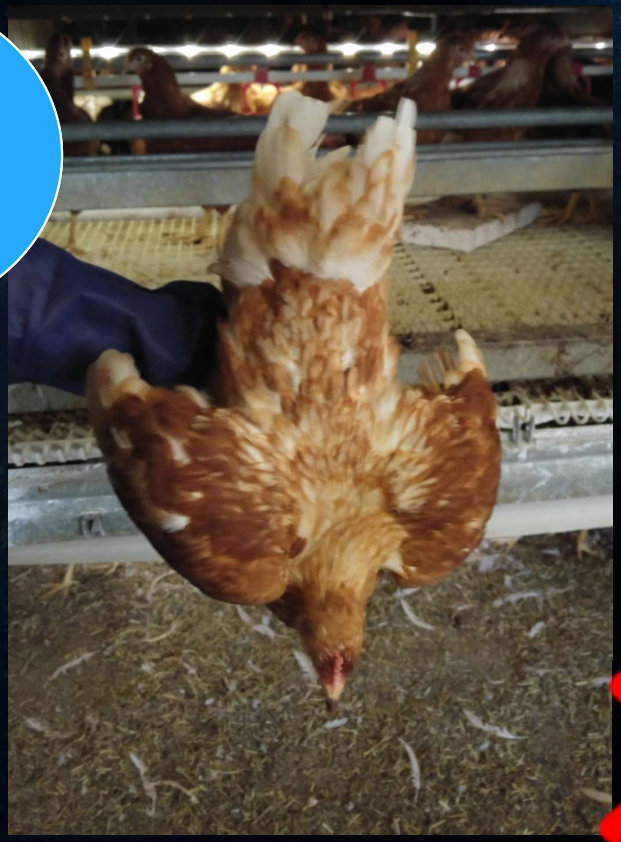
On the litter



How to check correct feed/management

Plumage

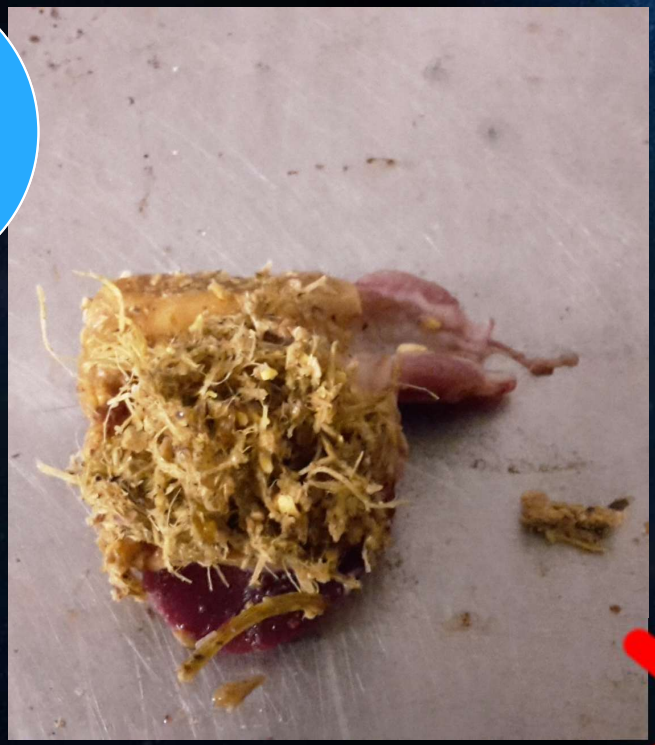
On the Bird

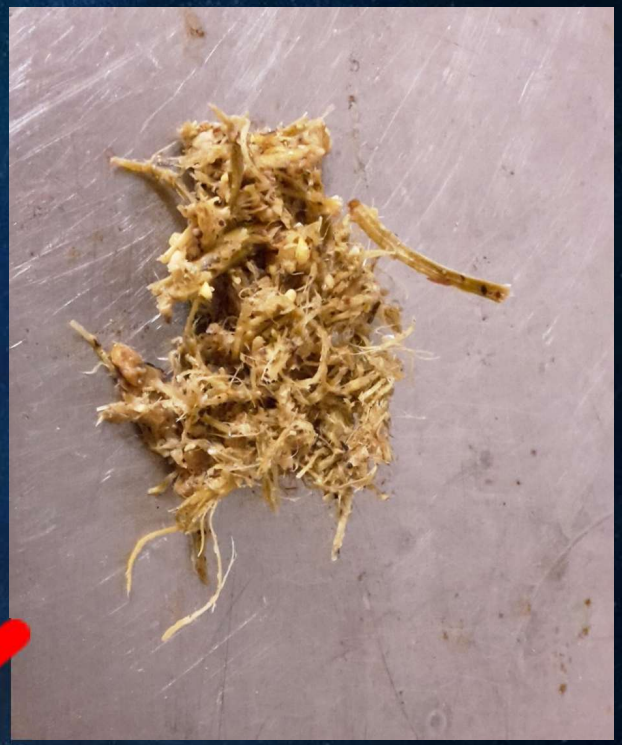


How to check correct feed/management

Section

Inside the Bird





How to check Feed Management?

Behaviour!

Behavior

Further……

samples

- Take (& store) feed samples on a regularly bas
  (if necessary, investigate them.)

- Blood samples
  - *At arrival of the birds, and if necessary (IB – pressure for example), on a regularly base.*
  - *Store them in an ordered manner and investigate them when requested.*

Further……

Litter management

- *Prevention for floor eggs!*
- *Especially white, but also brown layers*
- *Better climat (Ammonia)*

Further……

Please be excellent because …

An excellent manager will still be able to perform with acceptable results although the circumstances are not perfect

but…

A manager with poor skills will be able to spoil the birds (& the results) even in a Situation with the best circumstances!!!

Thank you for your attention

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