



Cage-Free Production

H&N Cage-Free academy 2023

Leon Schouren
Key Account Manager Europe & Global Technical Service
schouren@hn-int.com

Transfer to production house

Make a plan before the start of production



Transfer to production house

Make a plan before transfer

Determine the strategic road with:

Advisors from the hatchery, feed suppliers, Veterinarian and other involved parties!



Transfer to production house

Make a plan before transfer!!

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



Transfer to production house

Make a plan before transfer

Physical stress

- Injury
- Disease
- Environmental
- Performance

Psychological stress

- **Fight or flight**
- **Hierarchy**
- **Social**

Biological stress

- Rest and Digest
- Reproduction
- Circadian Rhythm

Transfer to production house

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 lightstimulation 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 house

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 house

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.

Also the equipment has to get on temperature.

- *House temperature up to 22°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 HOUSE



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 cm ² /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	
Family type nest boxes	120 hens / m ²
Family nest in family cages	50 cm ² /hen (42 to 65 cm ²)
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
Management Guide**
<https://hn-int.com/>

Transfer to production house

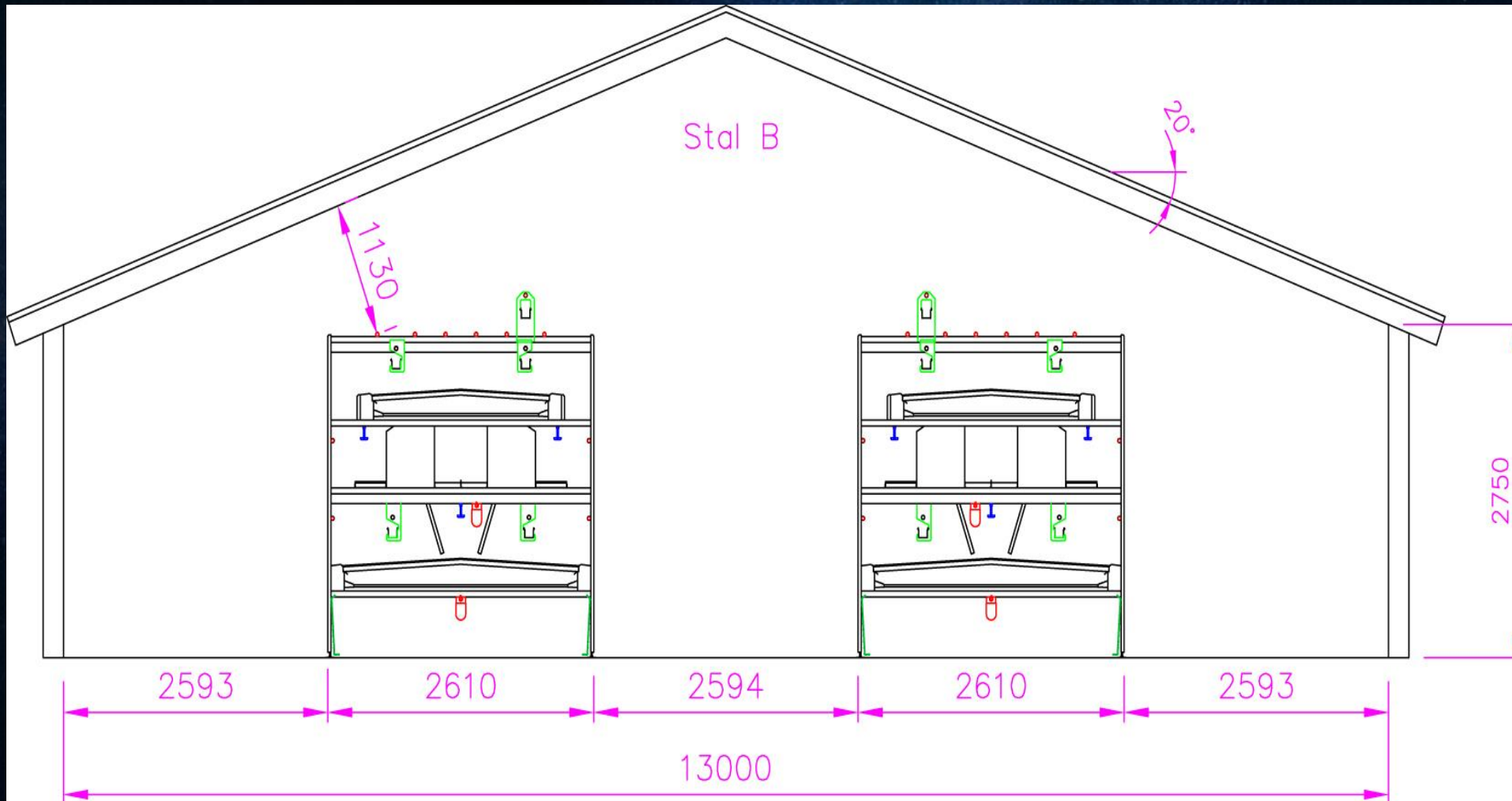
Make a plan before transfer

- 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 house

Make a plan before transfer!!



Water

Clean water

- Every day fresh water
- Vaccinating or other additives by the water system!
- Clean the water system on a regulary base
- Test the water on a regularly base



Transfer to production house

Make a plan before transfer

- Clean & Fresh Feed and water available in the system before the birds arrive.
- Feed level in the trough through the first days. (Feed management)



Transfer to production house

Feed Management



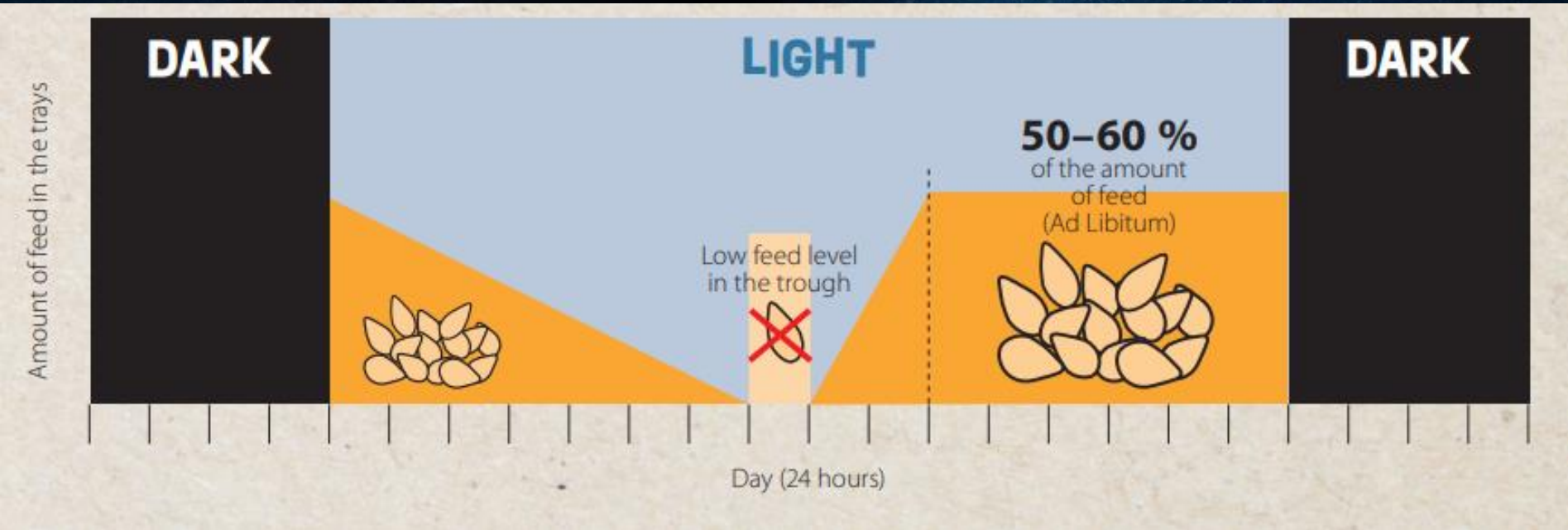
Remember!

Feeding management

- In rearing period (age of 3-4 weeks)
- Start to empty the feeders first one or two times a week. (Keep an eye on behaviour of the flock)
- From 6 weeks of age, we let them eat the feeders till low level, **ones every day.**
- **Continue this also after transfer to production!**



FEED MANGEMENT



Production

Transfer to production house

Measure number of LUX, avoid bright light spots (feather pecking)
avoid dark spots (floor-eggs)



Transfer to production house

The first evening(s)

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



Transfer to production house

The first evening(s)

➤ Slat ramps – additional perches

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

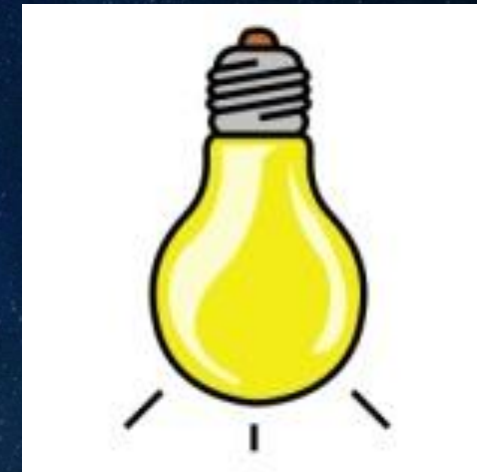
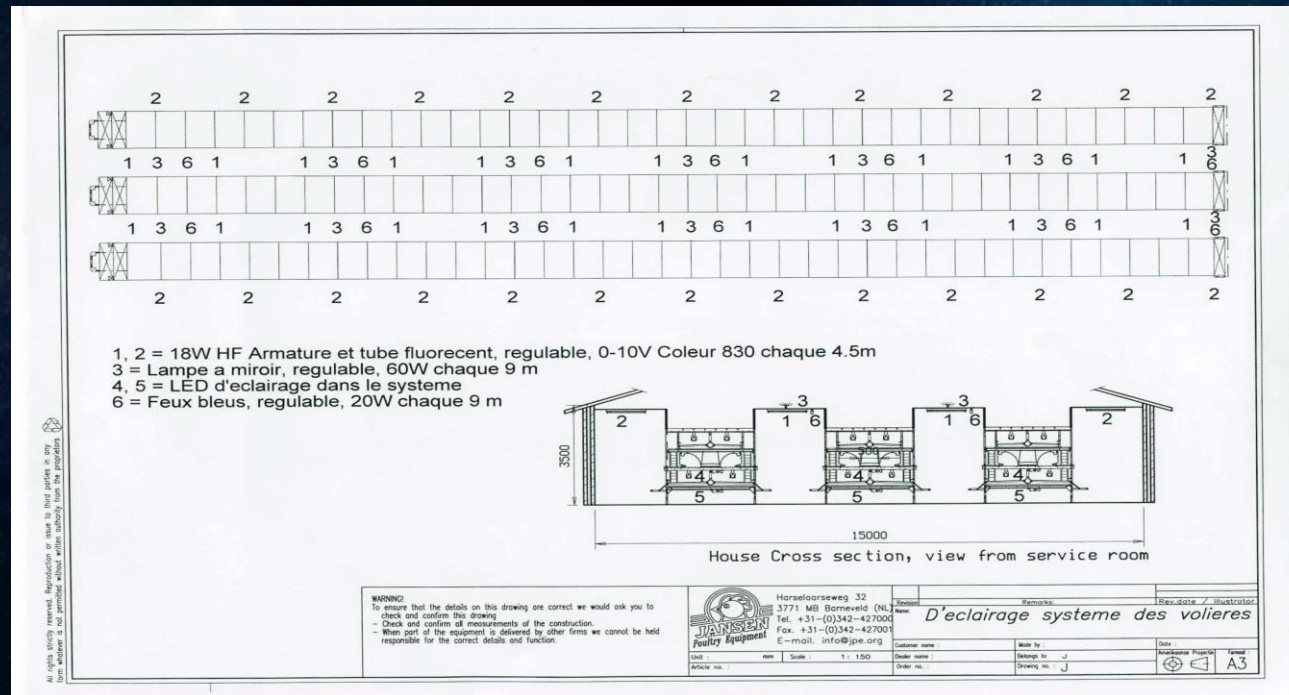
.....Even important after a few flocks.....



Transfer to production house

The first evening(s)

Dimming period



Start production

And then it goes on...

- Check if needed to remove birds from the levels without water.
Especially Brown layers!
- Open system underneath a.s.a.p (if present)
- Water training?



Enrichment



Dry litter to keep the hens busy

Start production

Alfalfa

- We don't use alfalfa to feed our birds!
- We use alfalfa only to give us some extra hints 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 periods:
(17 till 30 weeks)



Source: J. Terhorst

Start production

5 steps

1. Make the first light increase in production towards dusk until 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.
3. Apply a minimum stimulation of 30 minutes.
4. Maximum light hours in production should be longer than 14 hours to allow enough time for feed consumption during the production period. 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.

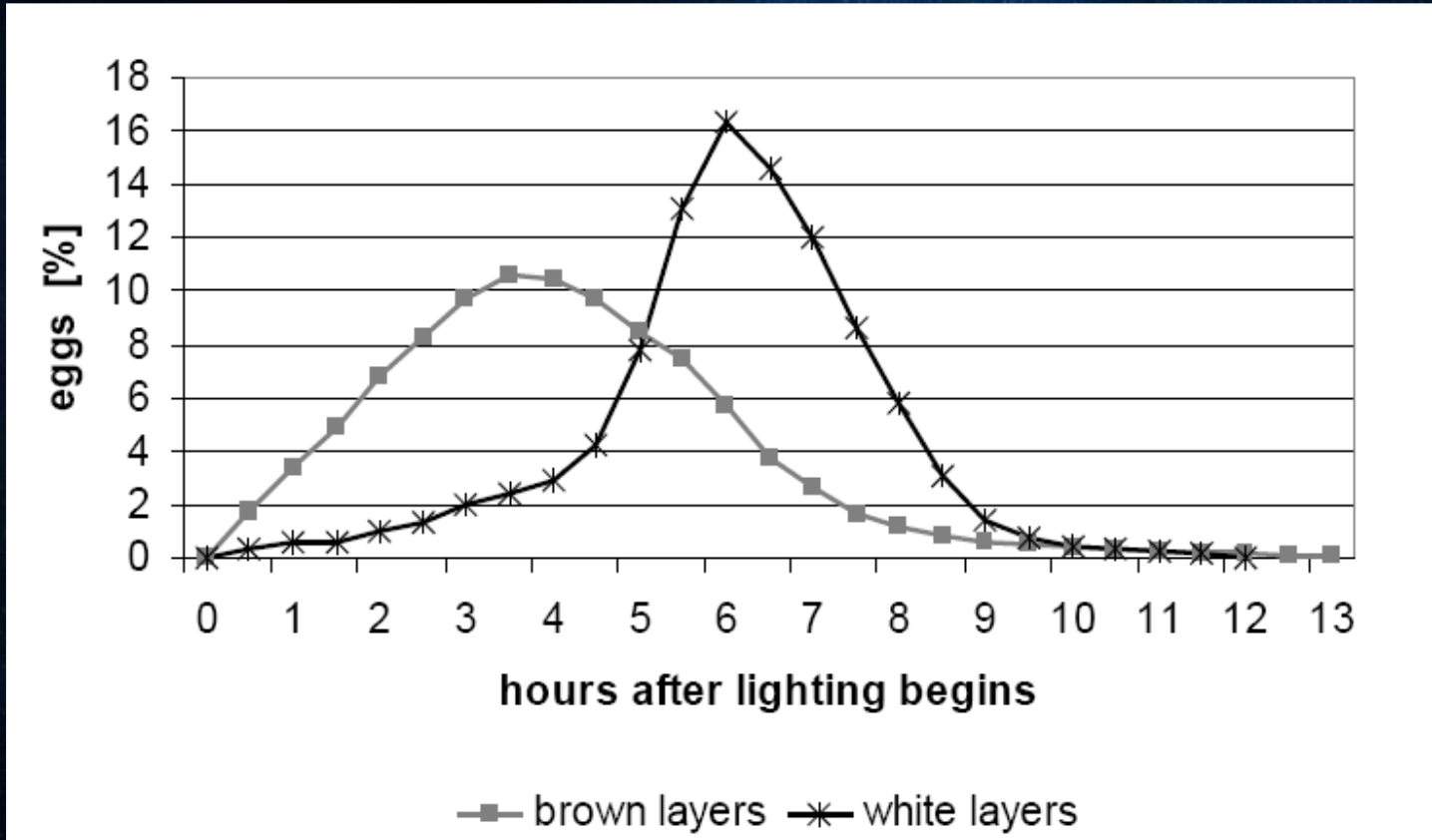
Start production

Nestbox management

- Keep nestboxes closed during housing of the pullets
- Open the nestboxes 2 weeks before onset production
- Open the nestboxes a few hours before start of daylength.
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 !!!

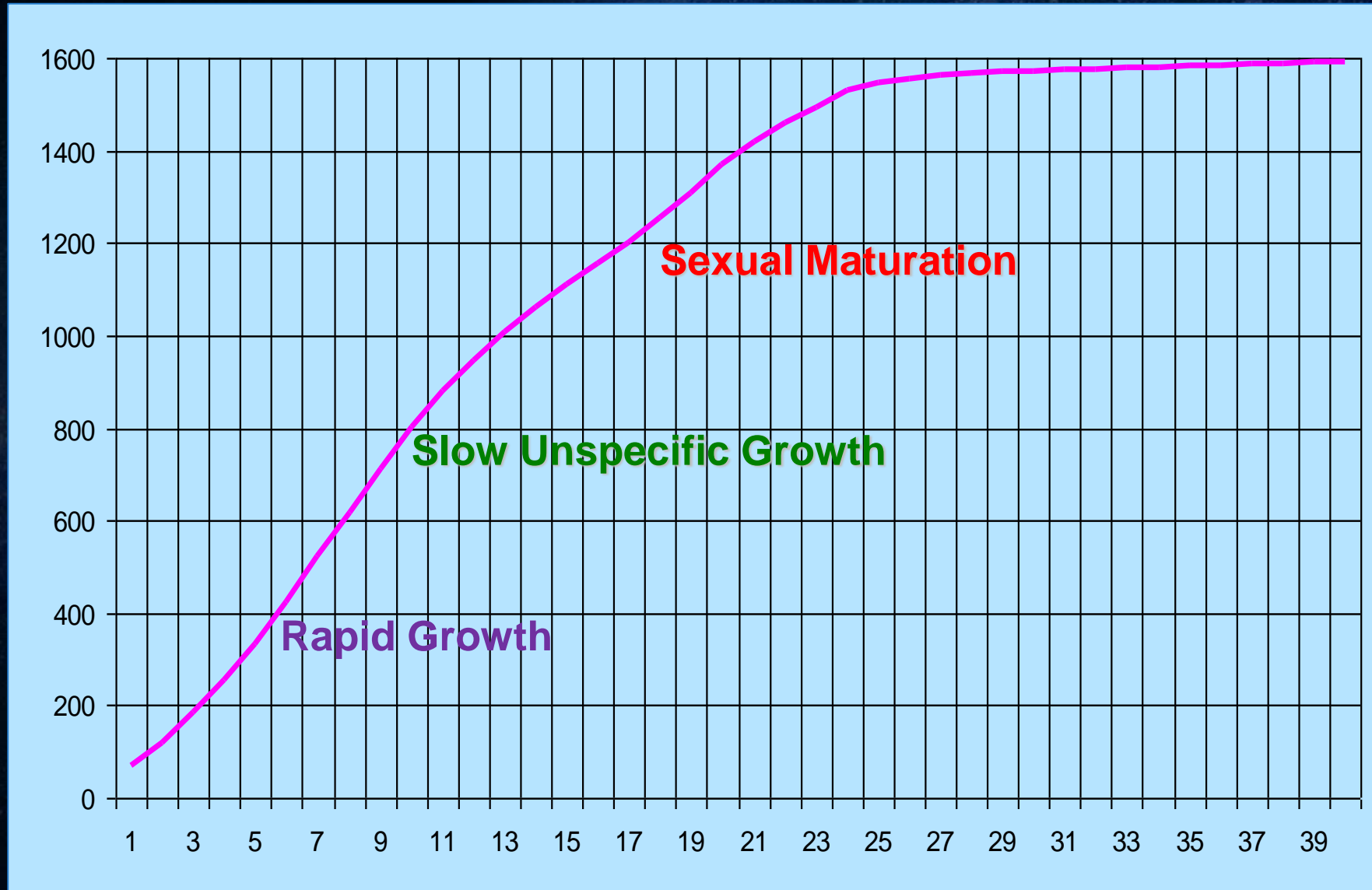


Start production

To remember !!!



Body Development during production



Body Development during production

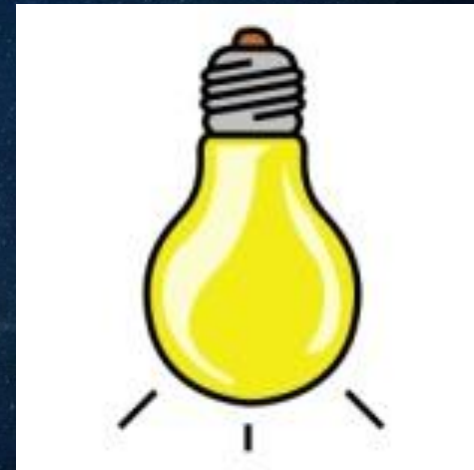
Check weekly the body weight!



Light intensity

After piek production!

- Start to reduce LUX after piekproduktion.
- You can reduce lightintensitie with little steps every week. (1 LUX weekly)
- Start to swich 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 mangement

Wrong use of the nestboxes!

Wrong use of the nestboxes!!!!!!

- *To hide (selcection 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 piekproduction) earlier at the end of the day. (Slow steps!!!!)

(Floor/system should not increase in numbers!)

Further.....

samples

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

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

Further.....

Litter management

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



Further.....



Extra course Calcium

Extra Calcium – 40 weeks onwards

- *Depending on the egg quality*
- *In stead of moving to other phase*
- *On the demand of the birds*
- *Increasing step by step, when required*
- *Preventive, not curative*
- *Several technical solutions possible*

Extra course Calsium

Extra Calcium – 40 weeks onwards



Extra course Calcium

Extra Calcium – 40 weeks onwards



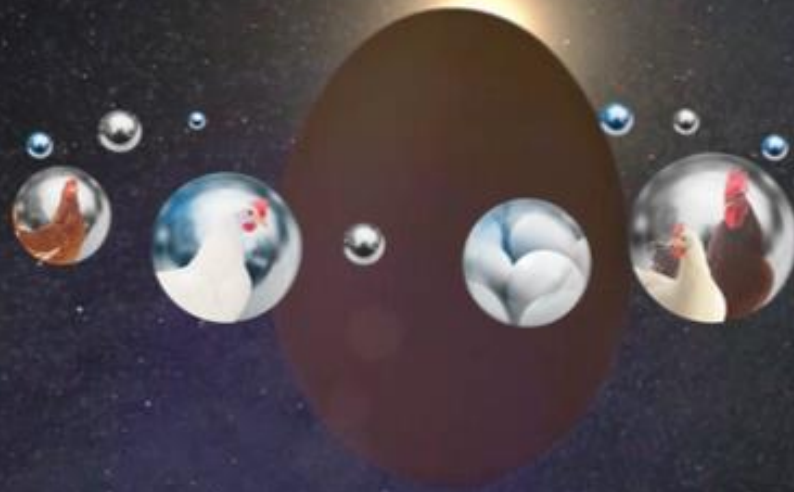
Conclusion

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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