

Episode 7

Managing the broiler grower and finisher Phase

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CHICKS DIG IT!

WHAT WE WILL BE COVERING TODAY:

- Hot Weather Ventilation
- Feeder Management
- Drinker Management
- Litter management
- Monitoring Growth



HOT WEATHER VENTILATION

Three Stages of Ventilation

- Minimum/cross ventilation
- Transitional Ventilation
- Tunnel Ventilation

Recommended Wind Speed

Age (days)	Max Airspeed (m/s)
0-5	0-0.3
6-14	0.3 – 0.5
15-25	0.5 – 1.8

HOT WEATHER VENTILATION

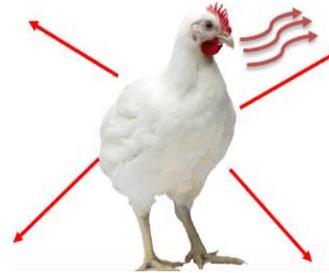
- **Two ways the chicken loses heat**

- 1. Sensible**

Head
Legs
Under wing

- 2. Latent**

Mouth and Nostrils



1. To the surroundings/environment–Sensible heat loss

The cooler the air the greater the amount of the heat loss. The warmer the air, the smaller the amount of heat loss.

2. Through evaporation of moisture from respiratory system – Latent Heat loss.

The amount of heat a bird loses through evaporation of moisture from its respiratory system depends on the relative humidity of the air.

HOT WEATHER VENTILATION

The effects of heat Stress

- Stress result in an increased FCR
- Increased water intake
- Reduced activity
- Reduced feed intake
- Reduced growth

Internal bird temperature at 42.8°C result in Panting
Internal bird temperature at 43.9°C result in death



FEED MANAGEMENT DURING HOT WEATHER

- Feeders to be lifted to bird height as the birds grow.
- Feed increases the heat generated by the birds and adds to the heat build-up/stress during hot weather.
- In the event of anticipated bird heat stress, and to reduce possible mortality, the following can be considered:
- Under extreme conditions, feeding is stopped by raising the feeder lines.
- Feeding should be resumed after the hottest part of the day has past, or if the weather changes such that the temperature can again be controlled.
- The light program may be altered to accommodate night feeding.



FEEDER MANAGEMENT

Pan Clean out

- The aim - minimise the build up or accumulation of "fines" in the pans.
- The time allowed for "cleanout" must be adjusted with age to ensure that it is just long enough to clean out the pans, and not too long that the birds are without feed.
- The cleanout programme must be done during the day shift.



DRINKER MANAGEMENT

Bell drinkers

- The height to be adjusted so that the lib is always the height of the at the bird's back
- Cleaned daily

Nipple drinkers

- Height should be at chick's eye level for the first 2 – 3 hours and then adjusted slightly above the chick's head.
- With the bird's feet to be always flat on the litter when drinking
- Ensure correct water Pressure
- Flush regularly to stop biofilm build up.



DRINKER RECOMMENDATION

- Nipples or bell drinkers should be eye level the 1st three days.
- After that slowly adjust upward so that the chicks has to reach up to nipple with feet flat on the floor.
- Bell drinkers (40cm diameter), min of 6/1000 chicks, as birds become older, min 8/1000 birds OR work on 100 birds/ bell drinkers if you are not certain.
- Always check that water is clean, cool and drinkable.
- Control water pressure to avoid water spillages.



DRINKER MANAGEMENT

How to use the Cobb water flow meter

- Place under an active drinker line, where birds are drinking.
- The gauze opening should be placed touching the nipple, preferably at an angle, so that the water flows freely.
- Take the sample with a stopwatch for 30 seconds and record volume.
- The 30 seconds volume required in relation to age is:



Age	Flow per 30 seconds
0-7 days	20ml
8-14 days	25ml
15-21 days	30ml
22-28 days	35ml
29-35+ days	45ml

Reduced water intake =
Reduced feed intake=
Reduced weight gain

LITTER MANAGEMENT

- Evaluate the litter by doing a sample litter squeeze.
- Wet litter should be removed from the house and be replaced.
- Caked litter must be turned and broken down.
- Litter moisture to be < 25%

Controlling moisture in the house

- Bedding material
- Stocking density
- Drinker Management
- Ventilation – Monitoring RH



FPD /Foot Pad
Dermatitis



MONITORING GROWTH

TEST WEIGHTS

Weighing Requirements

- Test weights at 7, 14, 21, 28, and 32 days of age.

Procedure

- Ensure the weighing crate and scale used has been properly tare.
- Ensure that the scale is calibrated and verified.
- Weigh birds at 3 different locations in the house (front, middle, and back).
- Weigh at least 10% of the birds
- Trap the birds in a weighing pen and weigh all the birds in the pen.



Thank you

