



ENGLISH
VERSION

EFFICIENCY PLUS

SUMMARY OF KEY POINTS FOR BROILER MANAGEMENT IN AFRICA*



HIGH VOLUME OF
GOOD QUALITY LIVE WEIGHT
AT LOW COST

* For further details please refer to the Hubbard Efficiency Plus Broiler Management Guide.

www.hubbardbreeders.com



BROODING THE CHICKS



BIOSECURITY

- Try to keep a down time of 14 days between placements and an all in all out programme.
- Use detergent and disinfectant to clean the house with enough time for the disinfectant to work before the arrival of the chicks.
- All drinkers, feeders and tools should be washed and disinfected.
- Before entering the house, have a clear protocol for everyone to follow: including wash hands, wear clean farm clothes and boots.
- Work with a professional company to control pests.



FEED

- 1 feeder for 50 to 70 chicks.
- Chick paper on the floor with feed on 40 - 50 % of the surface. If paper is not available use supplementary feeder trays or egg trays.
- Fresh feed (starter crumbs type), replenish regularly to stimulate appetite.
- If chain feeders are used then use them from 6 - 8 days.
- Check the crops: after 24 h, 96 % of the chicks should have a full and soft crop (Fig. 1).



Fig. 1 – Full, soft and rounded crop



WATER

- 1 drinker for 50 to 70 chicks or 1 nipple for 10 - 15 chicks.
- Ensure chicks have access to fresh water when they are placed.
- Water sanitation is recommended. For example, use chlorination aiming for a minimum 0.5 ppm Chlorine at the end of the line according to pH..
- Drinkers: maximum water level at placement.



TEMPERATURE

- Ambient temperature at start: 32 - 34 °C.
- Decrease the temperature regularly and progressively to 30 - 31 °C at 7 days (Fig. 2).

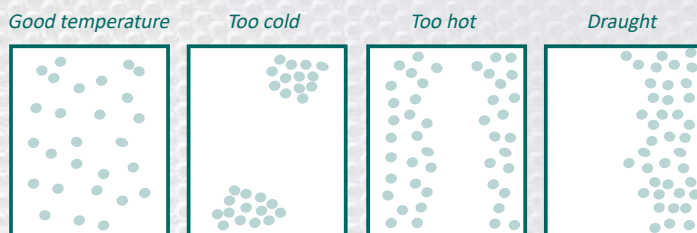


Fig. 2 – Interpretation of the distribution of chicks in their brooding area



DENSITY / LITTER

- Density at placement: 25 - 40 birds / m².
- Follow the local regulations for density if different than above.
- Preheat the house so the floor / litter (30 °C) 24 to 72 hours before placement.
- Flat litter to promote chick activity:
 - 1 to 2 kg / m² wood shavings or equivalent on concrete floor.
 - 4 to 5 kg / m² chopped straw or equivalent on ground floor.



LIGHT

- Uniform lighting.
- Minimum 50 lux during the first seven days.
- In open house: Day 1 - Day 4: 24 hours of light.
- Use 4 to 6 hours of dark from Day 5 if possible.
- Light duration and minimum light intensity may be subject to local regulations that must be respected.

AGE IN DAYS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
TEMPERATURE	Under the heaters	36-38				34-36			32-34								
	Living area	32-34	32-33	31-32	31-32	30-31			- 0.3 °C per day								
	Environment	30-34	30-33	30-32	30-32												
EQUIPMENT	Drinkers	1 round drinker for 50 birds 1 nipple for 10-15 birds				1 round drinker for 100 birds / 1 nipple for 10-15 birds											
	Feeders	1 feeder / 50-70 birds + chick paper				1 feeder for 50-70 birds											
DENSITY	Chicks/m²	25-40				25-35					15-25						
LIGHT PROGRAM**	Broilers under 2 kg Liveweight (h)	24h of light or 6x3.5h light & 0.5h dark					20	20	20	20	20	20	20	20	20	20	

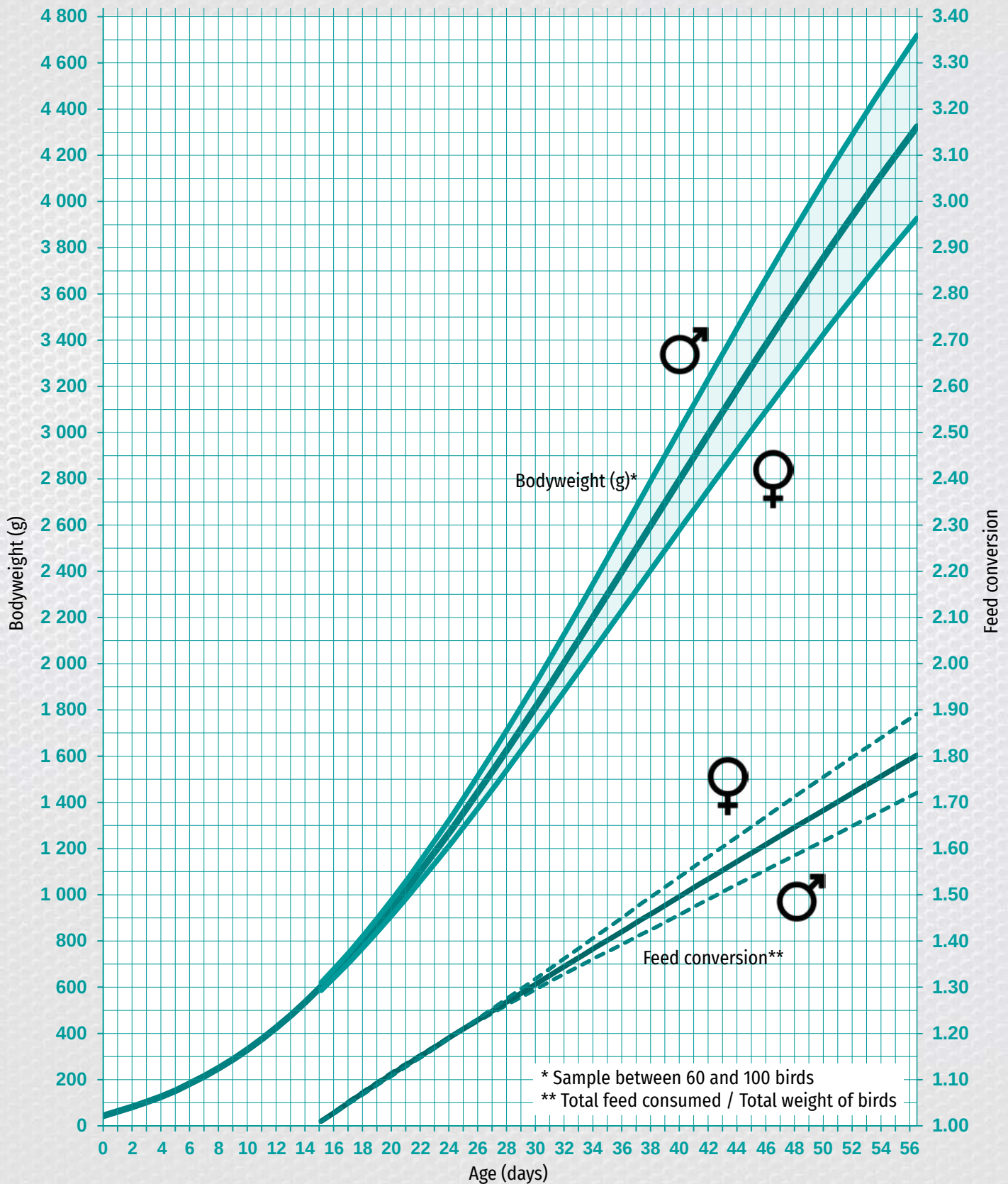


TROUBLESHOOTING

Observations	Causes	Corrective actions
Liveability first week < 99 %	Chick quality	Check with the hatchery
	Non-starters	Check feed availability and quality and light
	Dehydration	Check water availability and quality and light
	Environment	Check house environment parameters
	Disease	Post mortems on dead chicks/Vet advice
High mortality rate in late growth	Metabolic diseases	Check house environment parameters, lighting programme (growth control), feed quality
	Leg problems	See leg problem section
	Infectious diseases	Post mortems on dead chicks / Vet advice
Poor growth the first week	Chick quality	Check with the hatchery
	Environment	Check house environment parameters, lighting programme (day length)
	Nutrition	Check pre-starter diet availability and quality
	Water intake	Check water availability and quality adjustment of drinkers / nipples, n° birds per drinker, access
	Disease	Post mortems on dead chicks/Vet advice
Poor late growth	Environment	Ventilation settings
	Nutrition	Check feed availability and quality
	Water intake	Check water availability and quality and nipple flow rate
	Disease	Post mortems on dead chicks / Vet advice
Poor uniformity	Chick uniformity at placement	Check with the hatchery
	Stocking density	Check stocking density is not too high
	Feed intake	Check feeder access and feed quality
	Water intake	Check drinker space and water quality
	Environment	Check house environment parameters
	Disease	Vet advice
Poor feed conversion	Poor growth	See poor growth sections
	Poor feed digestion	Post mortem for examining gut lesions
	Poor feed intake	Check feed quality, feed form and feeders
	Feed wastage	
Leg problems	Nutrition	Check calcium, phosphorus, vitamin D3, chloride levels in diets
	Excess early growth	Slow down the growth with the lighting programme or feed restriction
Poor feather cover	Environment	Check house temperature is not too high
	Nutrition	Check the feed content in methionine and cysteine
Poor litter quality	Environment	Use an alternative bedding source
		Check stocking density is not too high
		Check ventilation is sufficient and well distributed
		Check if water spillage
	Nutrition	Check protein content in diets is not in excess
		Check salt content in diets is not in excess
	Disease	Vet advice regarding infectious disease
Carcass quality problems	Breast blisters	Check litter quality at late age
	Pustules	Check litter quality at early age
	Bruises	Check handling and management procedures
	Skin tears	
	Fractures	
	Fatness	Check nutritional balance of diets
		Check house temperature is not too high
	Scratching	Decrease light intensity
		Check access to feed and water
		Check care takers behaviour (walking speed)



EFFECIENCY PLUS BROILER



The performance data contained in this document was obtained from results and experience from our own research flocks and flocks of our customers. In no way does the data contained in this document constitute a warranty or guarantee of the same performance under different conditions of nutrition, density or physical or biological environment. In particular (but without limitation of foregoing) we do not grant any warranties regarding the fitness for purpose, performance, use, nature or quality of the flocks, nor any warranty regarding compliance with local legislation regarding health, welfare, or other aspects of animal production. Hubbard makes no representation as to the accuracy or completeness of the information contained in this document.