

Preparing the house to ensure a successful start for turkey poults

A successful flock begins before it is even placed. The care of preparing the house and environment will greatly influence the way in which the flock will perform. There are basically two different systems to brood a day old turkey poult: a system based on 'spot brooding' and the other based on 'whole house' brooding.

by Dr Carlo Norci, Management Specialist, Aviagen Turkeys Ltd.
www.aviagenturkeys.com



● Spot brooding

This entails a variation in temperature around the source of the heat and the birds are generally placed inside rings so they can find the most comfortable area they prefer themselves.

● Whole house brooding.

Whole house brooding has less variation in temperature and birds are not confined in small areas. A more precise management of temperature is required.

Prior to arrival

● The houses and equipment should be thoroughly cleaned and disinfected. The equipment, such as fans and generators, should all be working properly and the time between crops should be maximised.

● Fill up feeders with a good quality crumb and the drinkers with fresh water. One feeder (trough type or linear feeder) should be provided for 50-55 poults and one egg tray per 100 poults should be added for the first 24-36 hours. After this time they should then be removed. One automatic bell drinker and one manual drinker should be available per 100 birds placed.

● Good air quality. Avoid any draughts but limit the level of CO to 20ppm, CO₂ to 2500ppm and NH₃ to 20ppm.

● Litter temperature is crucial, therefore the houses should be pre-heated before the poults arrive. The litter/bedding should preferably be shavings (white, without dust, chemicals and mould). The litter depth should be a minimum of 7cm in the summer placements and a minimum of 10cm in the

winter placements. Do not let litter become wet and crusty, as this can cause problems to the poults' feet, such as foot pad dermatitis.

● The rings/surroundings can be made of different materials, such as cardboard, wire netting or hardboard, and should be at least 50cm high to prevent poults jumping out from the brooding area too early.

On arrival

● Group poults by breeder flock age.

● In case of spot brooding the number of poults placed in the rings will vary depending on the size of the rings, brooder heat output and the season. Brooders need

Continued on page 9

Whole house brooding.



Spot brooding.



Age	Sex	Under brooder	Ambient temp.	Edge of surround
Day 1	M+F	36-40		26-28
Day 2	M+F	36-40		26-28
Day 3	M+F	35-36		25-27
Day 4 to 7	M+F	34-35		25-27
Week 2	M+F		27-28	
Week 3	M+F		25-26	
Week 4	M+F		23-24	
Week 5	M+F		21-22	
Week 6	M+F		20-21	
Week 7	M+F		19-20	
Week 8	M+F		18-19	
Week 9	M+F		17-18°	
Week 10 until depletion	M+F		16-17°	

Table 1. Spot brooding temperatures (°C).

Continued from page 7

to be at the correct height to enable the poults to find for themselves the most comfortable area they prefer.

● In case of whole house brooding the number of poults placed will vary depending on the size of the houses, quality of facilities and equipment, and the season.

● During the brooding period check the poults at least every two hours.

● Place the birds by the drinkers and feeders with minimal noise. Leave for at least 40-60 minutes, continuously checking temperatures and behaviours. Ensure all poults are receiving the right level of care and attention, checking and resetting any drinkers or feeders when necessary.

● When poults arrive ensure lights are on (minimum 80 Lux). Switch off the light for one hour in the first day, continuing to add in dark hours. By day five the poults should receive 16 hours of light and eight hours of dark. Do not reduce light intensity.

● Spot brooding temperatures when poults arrive should be 36-40°C under the brooder and 26-28°C at the edge of the surround (see Table 1). Humidity should be around 60-65% during the brooding period.

● At 3-4 days it is common practice to combine two rings together to give more space to the poults. Generally, at 6-7 days birds are taken out from the rings and released in all the available space.

Age	Sex	Whole house
Day 1	M+F	35-36
Day 2	M+F	34-35
Day 3	M+F	33-34
Day 4 to 7	M+F	Decrease 1°C per day
Week 2	M+F	27-28
Week 3	M+F	25-26
Week 4	M+F	23-24
Week 5	M+F	21-22
Week 6	M+F	20-21
Week 7	M+F	19-20
Week 8	M+F	18-19
Week 9	M+F	17-18
Week 10 until depletion	M+F	16-17

Table 2. Whole house brooding temperatures (°C).

● For whole house brooding, guarantee 35-36° at placement and then reduce the temperature (see Table 2).