POULTRY SCIENCE AND TECHNOLOGY GUIDE

from North Carolina State University at Raleigh / Extension Poultry Science

Brooding Turkeys

Importance of Brooder House Management

Livability is the key word as it relates to turkey brooder house management. Percent livability in the brooder house is a good indicator of future flock performance. Economic loss from early poult mortality is not confined to poult cost as greater economic loss often is experienced in the future performance of the surviving poults.

Production Standards

In a brooding and growing program from 0-8 weeks old, we should expect the following performance:

Hen Poults—97% livability
Tom Poults—95% livability

Poult Quality

To meet the above production goals we must begin with good quality poults. Secure sexed poults from breeders tested negative for *Pullorum, Typhoid, Typhimurium* and *MG S*$_6$ (PPLO). Toe clipping and desnooding should be done at the hatchery. Any one of these operations is a stress on the poult and should be performed very carefully.

Preparing the Brooder House

Insulate the ceiling or roof area to minimum R-11 value (2 inches polystyrene or 1½ inches urethane). For flat ceilings 6 inches thick, insulating bats (R-17) are recommended for greater fuel economy. Automatically controlled sidewall curtains are recommended.

To clean the house between broods:

1. Completely remove old litter down to concrete or dirt—sweep floor.
2. Thoroughly wash overhead, sidewalls, curtain, and equipment.
3. Disinfect all surfaces including equipment with suitable disinfecting agent such as phenols and/or cresylic acid.
4. Allow house to dry out thoroughly, then spread 3-4 inches of dry shavings on the floor.
5. Reuse of litter, or a built-up litter program, requires additional management procedures. Either "Litter-Life"* or lime may be added to the old litter to insure composting. After composting the litter, follow procedures 2, 3, and 4 listed under brooder house preparation.

* Commercial trade name. Its mention does not constitute a recommendation for its use.

Space and Equipment Requirements

Floor space—1 square foot/poult 0-8 weeks; 1½ square feet/poult 8-12 weeks; 2 square feet/poult if kept in brooder house longer than 12 weeks. These figures represent minimum requirements. For winter brooding, allow added floor space to compensate for delayed movement of turkeys to range or growing shed.

Brooders—350 poults per brooder (30,000 BTU rating). Temperature—92°-95° F. at edge of hover for day-old poults. Reduce 3° every 4 days. Hover temperature may vary slightly, depending on house design and outside temperature. After placing poults under brooder, the caretaker should leave the house for 3-4 hours to give poults time to find feed and water. Otherwise, poults will follow movement and sound and will take longer to begin eating and drinking.

Equip brooders with a 7½-watt bulb to attract poults to heat source, and with easy-to-read thermometers. During winter months, maintain room temperature at 70° F. for first 3 weeks. Gradually reduce room temperature in order to harden poults for finishing barns.

Brooder Guards—Brooder guard management may vary depending on house design and season of the year. Have 10-foot circle made of solid material. In insulated housing where environment is more uniform, individual brooder guards are not required. Enclose brooding area entire length of house.

Feeders—Small poult feeders or plastic egg flats are desirable rather than box lids—10 feeders/brooder. Poults should have access to mechanical feeding equipment (trough, tube, pan) while confined to brooding area.

Waterers—Poults may be started on 8-foot automatic waterers or round pan-type automatic waterers, eliminating gallon founts. Water trough should be shallow v-shaped, placed close to edge of hover.

Brooding the Poults

1. Twenty-four hours prior to poult delivery, light brooders and adjust burner to get blue flame; check watering equipment; and put feed in poult feeders and in mechanical feeders.
2. On day of delivery, see that all brooders are operating properly and desired temperature has been obtained.

3. If environmental temperature is uniform, use 24-hour lighting for the first 3 days (5-10 foot candles) to encourage poults to eat and drink. Turn lights off (except for 7½-watt brooder light) as soon as poults are eating and drinking satisfactorily. Fluorescent lights give more light per watt and are cheaper to operate than incandescent.

4. Be sure that poults are comfortably located around hover ("bedded down") before lights are turned off. Check 3-4 times during the night for the first few nights. This will reduce losses from smothering and lack of heat. Adjust hover height to age of poults and environmental temperature.

5. Remove brooder guards by the sixth day and debeak at 10-12 days.

Brooding Sanitation

—Clean all waterers with a brush and disinfect them daily. Quaternary ammonia or organic iodines are suitable disinfecting compounds. Do not spill water in brooder area.

—Be sure that all equipment, feed, and management changes are made gradually.

—Move portable feeders and waterers daily to help eliminate damp or wet litter. After one week keep feeders and waterers adjusted to be level with the poults' backs.

—Remove or stir damp or caked litter daily to prevent mold buildup.

—Maintain desired house temperature. Lower curtain enough, however, to provide air circulation and dust removal and/or excess moisture.

—Remove and record dead birds on each trip through the house.

—Use dip pan for disinfecting shoes and boots of caretaker at entrance of brooder house.

—Servicemen should use disinfecting pan or keep rubber boots just inside brooder house.

—Do not allow visitors in brooder house.

—Keep all animals, rats, dogs, birds, etc. out of brooder house.

Practice Good Husbandry

The turkey poult, like the young of any species, requires attention. Close observation of poult movement and sound will reveal much about poult comfort and health. Most poult mortality can be traced to inattention to detail, poor sanitation, infrequent visits to the brooder house, faulty equipment, inadequate ventilation, or put simply, poor husbandry.

Prepared by
Charles E. Brewer and W. C. Mills
Extension Poultry Specialists

Published by
THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE

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PS&T Guide No. 8 (Revised) October 1979