HATCHERY/BREEDER TIP . . .

MANAGEMENT OF BREEDER FLOCKS FOR PROFIT

During financially difficult times when money for capital investment is especially limited, it is extremely important to focus our management skills on details that improve the performance of the production unit—the hen. For many producers, performance of current flocks will be directly tied to management verses housing improvements because of the lack of cash for facility investment. With that in mind, let’s review the key factors that affect egg production.

Keeping hens alive to lay is the single most important factor in the profitability of a flock. Average breeder flock (hen) mortality is 13.7% (life of flock, Agri Stat, April 2002). The worst performing flocks were well over this number. Time spent analyzing when and why breeder hens die will likely yield important hints on how to prevent hen loss in your situation. Are the birds dying as pullets from poor brooding practices, disease problems such as coccidiosis, choking because of too little feeder space or poor feed management, or injury due to misplaced vaccinations or handling issues during vaccination? Is the loss more focused on the early lay hen house time? Are you losing hens during the move to the hen house due to handling issues or starve out? Do the hens die as they sexually mature because the feed is being increased too rapidly encouraging oviduct prolapse? Are the roosters extremely aggressive and kill the young immature hens during the early weeks of lay? The list of situations is endless, and mortality problems could be a single house, a farm or span the whole complex.

Reduce the disease challenge to flocks by adhering to a biosecurity program that isolates each flock. Insist that anyone entering the facility wear clean coveralls and boots. Most infectious agents are: 1-already on the premises (poor sanitation and disinfection between flocks), 2-come into the flock via people, wild birds, rodents or insects, or 3-come in with the flock. Reducing or preventing the movement of people, materials, and equipment between farms is an extremely affective means of preventing disease introduction into the flock. An effective rodent and pest program is essential, and the lack of such a control program can undermine all other aspects of disease prevention. Tightening up house perimeters, reducing access to feed and eggs, along with a good baiting program can reduce rodent problems. Insecticide application of the premise is one aspect of cleaning and disinfection between flocks. Remember that cleaning quickly after the

PUTTING KNOWLEDGE TO WORK

The University of Georgia and Ft. Valley State College, the U.S. Department of Agriculture and counties of the state cooperating.
The Cooperative Extension service offers educational programs, assistance and materials to all people without regard to race, color, national origin, age, sex or disability
An equal opportunity/affirmative action organization committed to a diverse work force.
birds leave the house will give the house more down time that allows many infectious agents to die, as there are no birds or rodents on the premises to harbor the bacteria or virus. Breeder facilities are only free of birds twice per year so make the most of the down time to clean, disinfect and treat for insects. Ventilate for the comfort of the birds. The further house environment is away from the comfort zone (65-70 F) of the bird the poorer the performance. With the restricted dietary intake of breeder flocks, hot or cold environments will cause the hen to use nutrients to produce heat or try to cool herself instead of producing an egg. Another consideration of optimum house ventilation is dust removal during cool weather. Most breeder houses in the southeastern US are heated with BTU’s from the bird, forcing minimum ventilation rates to be very low in order to maintain optimum house temperature. However, keeping minimum ventilation at a reasonable level will reduce respiratory infections and improve bird health. House dust is one of the major routes of inoculations of infectious bacteria like *E. coli* and *Salmonella*.

Harvest a greater percentage of the eggs that are laid. The more often the eggs are collected the more eggs will be harvested from a flock. The longer the eggs lay in the nest (conventional nesting) or on the belt (mechanical nesting) the fewer total eggs that will be collected over the production period. Eggs will be broken and contaminated the longer the eggs stay in the house. With the feed restriction of these flocks, many eggs are consumed if laid in easily accessible areas. Walking the scratch area and slats, it is surprising how often you see a cluster of birds around a broken egg and the yellow yolk material on their feathers. Three to four times a day egg collection is recommended, and timing the collection to prevent large number of eggs in the nest or on the belt will again reduce breakage. A large volume of eggs on mechanical collection belts results in impact cracks or hairline cracks that cannot be seen at the time of collection, making it difficult for the farmer to remove them. Prevention is the key to eliminating this type of loss. Determine the peak lay period and time egg collection to decrease the number of eggs in the nest or on the belt. Hens lay later in the day as they get older, so shift the collection times as the hens age.

Manage the litter and slats to keep feet and legs in good conditions. Slow moving or immobile birds will not survive the competitive breeder house environment, and roosters will not be able to mate unless their feet and legs are functional. Rough litter (large wood chunks or large diameter twigs) will not be absorbent and could damage the footpad. Wet surfaces (poor drinker, litter, and/or ventilation management) increase the incidence and severity of footpad infection and inflammation. Keep slats in good repair to prevent birds being caught or injured.

Body weight uniformity for the breeder flock impacts how closely the feeding levels can be matched to the bird’s requirement. The closer the hens are in body weight, the more similar their dietary needs for maintenance of the body and egg production (the need for growth is minimal at this stage). Most uniformity problems occur in the pullet house and carry over into the hen house; however, it is possible to see uniformity decline during lay. The amount of feeder space, speed of feed delivery, consistency of feed increases, and disease challenges all have a great impact on body weight uniformity of the flock.

*Remember . . . reaching the target for eggs per hen housed is a matter of keeping the females alive and functional!*

Jeanna L. Wilson
Extension Poultry Scientist
County Extension Coordinator/Agent

**Consult with your poultry company representative before making management changes**