

Paneling the Breeder House

**Work by:
Inma Estevez
University of Maryland
College Park, MD**

**Presented by:
Michael J. Wineland
NC State University
Raleigh, NC**

Male aggression in the breeder house can cause severe situations with female mortality. The reasons for the overtly aggressive males is complex and never really investigated. What is observed is a low proportion of females to males in the scratch area. Why it occurs in houses and not in others is uncertain. The cause is sometimes attributed to males maturing prior to the female and the immature hens stay on the slats. The female often appears afraid to come down off the slats and if it does, because of reduced number of females in the scratch area, it risks being injured or killed resulting from excessive mating activity by males in the scratch area. The females that do venture to the scratch area are most often injured when the hens try to escape from the forced mountings. Wounds can become infected and result in death of the hens.

Over the years many different things have been tried to alleviate this situation. Some have thought it may be related to the spectrum emitted by the high pressure sodium lights which may cause earlier maturity of the males and tried different lights. Others have tried to alleviate the problem by using bales of straw in the house. Others do not put all of the males into the house initially, but place a reduced number in when moved to the house and add males. In fact using reduced number of males seems to be used the most. However, reducing the number of males, without altering fertility can be a challenge. To solve this situation it is important not to reduce the number of males to where fertility may suffer but to increase the number of females on the floor.

This started out when a producer contacted Inma about a male aggression problem. Other research she had been involved with pertained to the use of panels in broiler houses to effect better bird distribution within the house. The first house where she

introduced vertical panels was experiencing high female mortality at 23 weeks of age with typical low number of females in the scratch area. 24 hours after introduction of the panels relevant behavioral changes were observed. More females were in the scratch area. The higher availability of the females resulted in males that appeared more relaxed and altered their courtship behavior. Observations so far are that the panels can be an efficient and economical option to reducing behavioral problems in breeder houses. Preliminary indications are:

1. Earlier and better mix of males and females
2. Relative higher hatchability early on
3. Have not observe an increase in floor eggs
4. The introduction of panels will have no effect in reducing female mortality if the hens have been suffering from male aggression for too long.
5. If a farm does not have a male aggression problem and females on the slats, the use of panels does not appear to improve mortality or hatchability.

The cost of implementing this system is approximately \$100-150 per house (one panel every 12 feet)

These panels have been patented by the University of Maryland. If anyone is interested in collaborating with Inma on research associated with the use of the panels, and effect upon mortality and hatchability please contact her.

INMA ESTEVEZ
Dept of Animal and Avian Sciences
University of Maryland
College Park, MD 20742
e-mail: ie7@umail.umd.edu
Phone: 301.405.5779