

Molting Commercial Egg Layers

A narrative summary for the Texas Commercial Egg Clinic presentation

Molting hens is not always a profitable situation. Sometimes it is necessary in order to meet a marketing need. However, if you need to molt hens, for whatever reason, there are certain given facts that should be taken into consideration regardless of the molt method used. Proper molting usually returns a flock to a physical condition equivalent to a 32 week old pullet. This is based upon the grading quality of the egg's shell and interior quality. This egg quality is lost more rapidly in flocks rested only 6 weeks (i.e.: 50% production) as compared to those rested for 8 weeks. These are points presented in the first 11 slides.

Mass culling is an older valuable management tool that usually gets overlooked. Its value lies in its feed savings plus the removal of hens who are potential disease reservoirs. I adapted the procedure to be effective in a commercial cage setting. The crew should work only one side of the cage bank on each pass for the entire length of the bank. They should scan all rows in a 10 foot section of the bank before advancing to the next 10 foot section. In that way, they won't miss observing any cages. The first culling should occur at about 40-42 weeks of age in order to allow even the slowest hens time to develop. If it is not certain that a hen is a cull, then one should error on the side of the hen and return her to the cage. The house caretaker should remove culls as soon as one is identified because each one costs money as long as they are kept.

Slides 12 through 27 pertain to the pilot study where we tested the AM/PM feeding pattern. The study shows that using that feeding pattern will result in a zero level of egg production. The one percent level existing as late as 4 weeks in this study appears to be due to the extra feed offered during the 2nd week since it affected only the Hi/Lo diets and the 14% commercial diet went to zero the 3rd week. It was the W-98 strain that showed this. It also appears that this technique is effective even with molt diets that have normal nutrient levels.

It is expected that lower protein and energy levels in the diet than those normally used will increase the length of rest resulting in a more complete molt which should allow the flock to produce

marketable eggs for a longer period. Also, note that the W-36 strain appears to need about 30 Kcal/pound more energy in its layer diet than the other 3 strains.

The information shown on slides 28 through 37 was taken from the full fed low nutrient study. This data supports our previous studies while giving more information on necessary nutrient levels during the molt period. Low nutrient diets should not be fed beyond 21 days of the molt. Increasing the nutrient levels in three 2-week increments (Treatments U & V) shows no advantage over going from low to normal levels at 21 days of the molt (Treatments W & X). While there were no significant differences at the 5% level in eggs per hen housed at 12 weeks, the following differences existed at 24 weeks of the molt.

U-104.4 a
V-102.1 ab
W-104.8 a
X-102.8 ab
Y-99.5 b
Z-102.4 ab

Since the W treatment requires only 2 molt diets and is slightly superior numerically to the U treatment, it is probably the first choice for a full trial in a commercial flock. Treatment Z might be needed for a flock still producing near 80% at the time of the molt. That treatment would be more likely to ensure a rest long enough in such a persistent flock to delay the return to 50% production until the 8th week. This should give an acceptable performance for 6 months or more beyond 50% production. Again, the W-36 strain will need more energy in the layer diet.

For more information, please refer to the contact data on the last slide.