



Poultry Fact Sheet

PFS No. 5

GENERAL MOLTING RECOMMENDATIONS

Donald D. Bell, Poultry Specialist
U.C. Cooperative Extension
Riverside, CA 92521-0314

There are many methods to induce a molt in laying flocks. Most involve an initial period where feed is withheld followed by a rest period during which a low nutrient diet is fed for several weeks. Principal differences between the more commonly used programs involve the length of the feed withholding period, the nutrient make-up of the low nutrient ration, and the length of the rest period. Some researchers also have specific recommendations regarding the lighting program and others recommend water removal as part of the procedure.

The University of California has compared numerous methods since the mid-1960s and recommends the following procedure.

Molt Procedure

For a normal molting (return to 50% production in six to eight weeks):

1. Turn off artificial lighting in open housing or reduce to eight hours in enclosed housing on day one.
2. Remove all feed for ten to fourteen days. Do not remove water.

3. Shell feeding on day one is optional.
4. Starting the 11th day, full feed cracked grain through 28 days.
5. At the end of the grain feeding period, feed a normal laying ration and turn the lights back on.

Guidelines

During the molt:

1. Record mortality daily, accumulate the count, and do not exceed 1.25% before returning to feed, e.g., a 10,000 hen flock should not accumulate more than 125 dead birds.
2. Weigh a representative sample of hens daily. Total weight loss should not exceed:

30% for 3.6 pound hens

33% for 3.8 pound hens

35% for 4.0 pound hens

(North Carolina State University recommendation)

3. Withhold feed for up to 14 days but do not exceed the mortality and body weight limits listed above.
4. The use of a molt feed is recommended following the feed removal period to hold the flock at zero production. We generally recommend feeding a low-protein, low-calcium feed until the 28th day following the start of the molt procedure. If a shorter molt period is desired, this step can be eliminated or shortened. We do not recommend this except for relatively short second cycles (28 weeks or less) because it results in a more rapid deterioration of egg shell quality and rate of lay.
5. Molt feeds must be low in protein (less than 10%) and calcium (less than .5%) to sustain zero production. Most poultrymen prefer to add a vitamin and trace mineral mix to their molt feed. UC research has shown cracked grain diets to result in equal performance when compared with cracked grain diets fortified with vitamin and mineral supplements or to so-called "molt mashes."
6. Molt feeds should be full-fed to assure that all hens receive equal access to feed. Daily energy consumption during zero egg production should be 225 to 250 kilocalories (e.g., 15 to 17 pounds of corn or milo per 100 hens/day).
7. Recommendations concerning lights vary between researchers. Our recommendation is to turn off artificial lights in open houses or reduce the program to eight hours in environmental housing from the initiation of the program through the 28th day.

General Comments

- Most flocks will reach zero production by the 5th or 6th day after feed is withheld.
- Zero production will usually be sustained for 2 to 4 weeks depending upon the length of feed removal and type of molt feed.
- Feathers will usually drop between 15 and 20 days. The amount of feather loss is dependent upon the strain, age, previous natural molting history, and the season.
- Peak egg production is usually attained between 8 and 12 weeks after the fast is initiated, depending upon the molting procedure. It is common for egg production to reach 75 to 85 percent during the highest week following the molting procedure.