

IVMA One Welfare Article  
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Molting Practices of Laying Chickens

Molting, whether a natural or induced event, is the loss of feathers and reduction in size of the ovary. Molting is an essential rest period especially for high producing hens. Basic husbandry is critical to an appropriate and welfare-friendly molting process no matter the scale it is performed. Similar to other basic husbandry practices, molting can be performed correctly or incorrectly in flock sizes ranging from one bird to large commercial flocks.

Natural molting occurs as a result of seasonal changes in day length. If photoperiod and environment are not controlled 100%, then molting can occur. Natural molt can range from a total loss of feathers to a barely noticeable loss. During a molt, the hen will remineralize important bone reserves, and regress reproductive development. This break in egg production generally allows flocks to return to profitable production for a second or more lay cycles.

In commercial systems where molting is induced, all of the factors contributing to a molt must be tightly controlled. Augmenting feed with calcium is important during lay but can cause urolithiasis in birds that are not in lay. Therefore, all birds in a house must be brought into lay simultaneously and molted simultaneously to insure appropriate feeding. Flocks that are placed into an induced molt are done so with a combination of reductions in lighting day length and a reduction in caloric density of diets that are provided. These changes should occur through a well-planned synchronization of events that allow sufficient time for an entire molting process to occur. This planned process should include built-in monitoring procedures to guarantee birds have access to feed and water throughout the molting process. During an induced molt careful attention should be paid to both body weight and any unusually changes in morality.

Without the use of molt and a second productive cycle in commercial layer systems, the turnover rate of commercial flocks would be much higher. This results in a greater loss of life for essentially the same number of eggs, in addition to increased costs. The extended reproductive life span provided by the induced molting process creates better egg quality (shell strength) due to restored bone calcium reserves during the molt. Sufficient egg quality is important in the marketing of eggs from every laying flock. Molting of flocks can create difficulties in controlling egg size which is also important in the marketing of eggs.

In the future genetic improvements may allow for longer, more productive cycles from commercial laying hens which would reduce the need for induced molting practices. Regardless of genetic developments, induced molting will always be a helpful tool used in commercial poultry. Most commercial companies have fixed processes for conducting

and monitoring induced molting practices and these practices are generally audited by third parties.

Backyard poultry producers should familiarize themselves with the molting process to better understand the changes flocks go through during molt. All chickens need a rest period if they are kept producing for a year, including small flock hens. Information generated by commercial companies can help small flock owners to develop their own molting plans.

For more detailed information and sources regarding induced molting please visit the AVMA Literature Review on the Welfare Implication of Induced Molting of Layer Chickens.

<https://www.avma.org/KB/Policies/Pages/Induced-Molting-of-Layer-Chickens.aspx>