K-STATE Research and Extension | Meadowlark District

June 7, 2024

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Summer Solstice

Why in world would I choose to write about the longest daylight day of the year? This might be an important day for those growing plants counting growing degree days, or for those looking for more time when working outside in the evenings or for many different reasons to different people. My purpose today revolves around folks like myself who keep a poultry flock. June 20/21 is an important date on the hen's internal calendar, so let's take a look at why.

Last week Dr. Scott Beyer, K-State Research and Extension Poultry Specialist, joined a group of interested poultry producers at a meeting in Topeka to discuss photoperiod, molting and many other poultry production topics. Dr. Beyer's discussion of artificial lighting and molting, as they relate to egg production, seems a timely topic to share today as we approach summer solstice.

Pullets will begin to lay eggs around 6 months of age and can lay eggs for upwards of five to ten years, if well cared for. The first two years will be the most productive however. While laying hens can be productive for several years or cycles, they do need time to rest, reset and restart between laying cycles. To accomplish this rest, they go through a period of molt, where feathers are lost and replaced and when egg laying slows or completely stops. This is a natural process, most often seen in late fall.

Hens need 12 to 14 hours of light to maximize egg laying capacity. Since the longest day of the year (June 20/21) is around 15 hours, using artificial light sources for 15 to 16 hours a day, sets the hens "clock" for egg laying. This can be established with a relatively small amount of light from an artificial light source and at timer. In a previous article, this process was discussed, so what I'd like to focus on today is the need for molting and when to best accomplish this for a flock that has had a least one cycle and the 16 hours of artificial light provided.

Egg quality declines slightly with each egg laid by the hen. Summer heat and humidity doesn't help egg quality either, so working to slow egg production and stimulate molt in late summer is not a bad plan. If hens have been exposed to artificial light the easiest thing to do is "pull the plug" on the timer on June 21. Be aware of all artificial light sources, as barn/yard lights can create enough light to interrupt the needed complete dark period. The days will naturally become shorter and egg production will gradually fall off and the hens will eventually enter a molt. By the time early fall approaches and the hens begin laying again, plug that timer back in and look for higher quality eggs to start rolling in again all fall, winter and spring long.

Lighting is of course just one aspect to keep in mind. Hens need to be on a good, complete layer feed, have appropriate shelter, clean/fresh water and be free of parasites and disease. The summer molt period is one time of the year where you can move hens to a lower quality feed, like scratch grains (with vitamins and minerals added) as their nutritional requirements decrease when they stop laying. This molt period may also be a good time to assess which chickens may need to be culled for defects or production issues.

Chickens really are a relatively low maintenance animal to keep and supply the family with a high-quality protein source in the egg. There is a wealth of information on the web about backyard poultry, but I'd always point you to researched based work from Universities as the best reliable source. To learn more, visit the K-State Bookstore and search for poultry publications or Dr. Beyer's poultry Q&A page at: https://www.asi.k-state.edu/extension/poultry/frequently-asked-questions/