Why Have My Hens Stopped Laying? 5 Factors that Impact Egg Production

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Introduction

A common question from laying hen flock owners is "Why have my hens stopped laying?" There are many factors which can cause hens to stop laying and there can be multiple causes which result in few or no eggs. The most common causes of decreased egg production include: not enough light/short days, improper nutrition, disease, advancing age, and negative stress.

1. Short days/less light exposure

Hens require 14 hours of light exposure or day length to sustain egg production (Figure 1). Once day length drops below 12 hours, production will decrease and frequently stop. This happens naturally from October through February.



Figure 1. Laying hens need at least 14 hours of bright light to keep egg production at a maximum. Image by Artur Pawlak from Pixabay.

To prevent this, provide artificial light to maintain a constant day length of at least 14 hours per day, although some recommend at least 16 hours of light

exposure. One 4-5 Watt LED bulb (40 Watt equivalent) for each 100 square feet of coop is adequate. The light color should be a warm-white or yellow light, simulating sunlight.

The lights should be added in the morning hours so the birds can go to roost as the sun sets. This prevents birds from being stranded in the dark when lights are turned off when it is already dark outside (Figure 2). This could also be prevented by dimming the lights before turning them off. Birds do prefer a dark period to rest, so best not to keep lights on continuously and allow at least 6h of continuous dark. A timer could help ease light management.



Figure 2. Laying hens will go up to perch when dusk sets in. If artificial lighting is provided, make sure that lights turn off before it is dark out, or they may be stranded unable to find the perch at night. Photo by Marius Karotkis on Unsplash.

2. Improper nutrition

Layers require a completely balanced ration to sustain maximum egg production. Improper nutrition can occasionally cause hens to stop laying. Inadequate levels of energy, protein or calcium can cause a production decrease. This is why it is so important provide hens with continuous access to a nutritionally balanced layer food, containing 16% - 18% protein. Having oyster shell freely available at all times helps ensure strong egg shells.

As a treat, birds will enjoy whole grains, scratch, and table scraps, but do not provide this in too large amounts, as it could cause an imbalanced diet. Many times these imbalances can cause other problems like vent prolapse (egg blow-outs). Prolapse is caused when the bird is too heavy and/or the egg is too large and the birds' reproductive tract is expelled with the egg. Prolapse usually causes permanent damage to the hen and is fatal in many cases.

A common problem is failing to provide a constant source of fresh water (Figure 3). Especially during the coldest months when the water can freeze. Provide adequate water equipment so the birds always have fresh water.



Figure 3. Chickens need access to fresh and clean drinking water at all times (Abdullah Al Mamun, Pixabay).

3. Disease

Disease can occur under the best of conditions. As with any animal, disease will reduce or stop production. When the hen's body is fighting an infection or other issue, energy will be diverted to that goal, rather than to producing eggs.

Often one of the first signs of disease is a drop in egg production. Other symptoms of disease include dull and listless appearance, watery eyes and nostrils, coughing, molting, lameness and mortality in the flock. Keep in mind that some death can be normal over the period of a year in any flock.

If you suspect a disease, contact a skilled veterinarian for help in examining your flock and get an accurately diagnosis and treatment. The Association of Avian Veterinarians provides a

<u>resource</u> to find avian specialists near you. Home remedies and do-it-yourself fixes are not often in the animal's best interest.

Preventing disease can be done to a certain extent by keeping in place biosecurity measures. For instance, designated shoes, disinfecting between flocks, and washing hands before and after visiting the flock. Your best protection against disease is to buy healthy birds that are vaccinated against common infectious diseases. Chicks or eggs from NPIP-certified hatcheries (National Poultry Improvement Plan) are tested or vaccinated against common diseases. NPIP-certified hatcheries by state or territory can be found here.

Buying adult poultry and introducing them to your flock is asking for trouble. Adult birds can look healthy and carry diseases. New birds should be isolated from other birds for a few weeks to make sure they are healthy.

4. Old age

Production hens can lay efficiently for two laying cycles. However, after two or three years, many hens decline in productivity. This varies greatly from bird to bird and between bird strains. Good layers will lay about 50 to 60 weeks per laying cycle. Between these cycles their productivity will be interrupted by a rest period called a molt. Poor layers and old hens will molt more often and lay fewer eggs. Removing these hens from the flock will save costs if economical egg production is your goal.

5. Stress

Any negative stress such as moving, handling, changes in environmental conditions or fright can contribute to or be the main cause for egg production declines. Common stresses include:

- Chilling. Chickens do not handle damp, drafty conditions well. Prevent excessive exposure to wet, drafty conditions during colder months. Providing access to a heat lamp in the coop allows hens to regulate their own access to heat.
- 2. Handling or moving. Once the laying flock is in place, limit any unnecessary moving or handling.
- 3. Change in social structure. Switching roosters or changing the population will also disrupt the pecking order and cause some temporary social stress in your flock (Figure 4).

- 4. Parasites. If external or internal parasites are present, get proper diagnosis and treatment.
- 5. Fright or fear. Limit the movement of children, dogs, livestock and vehicles around your flock as well as loud noises to prevent frightening the hens. Negative interactions with people will make hens generally more fearful and anxious, and will reduce productivity.
- 6. Predators. Birds of prey, raccoons, snakes, and other predators all can show an interest in your birds or their eggs. Their presence can also stress the birds and create a decrease in production.

Other

There are some other problems to consider when your egg collection numbers seems to decrease:

- Predators and snakes consuming the eggs.
- Egg-eating by hens in the flock.
- Excessive egg breakage.
- Hens hiding the eggs when able to run free.



Figure 4. Changes in social structure, for instance by introducing new hens or a rooster, can add negative stress to the flock, reducing egg production (RitaE, Pixabay).

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