

# Feather Pecking and Cannibalism in the Backyard Flock

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Did you know that “pecking order” is more than just an expression? Chickens and other types of poultry develop a social hierarchy within the flock; it is called the pecking order. Feather pecking is a way to express dominance in small poultry flocks as flock members establish their rank. A certain degree of **mild feather pecking is normal** within the flock, but feather pecking sometimes leads to cannibalism. **Cannibalism is a separate, more sinister behavior** that goes beyond establishing the pecking order. Cannibalism involves chickens pecking, tearing, and consuming the skin, tissues, or organs of flock mates.

Cannibalism differs from simple dominance and the establishment of a normal social hierarchy because it actually physically harms some members of the flock (Scheideler and Shields, 2007). It may occur among birds of any age or any breed and is not specific to housing type: it can occur in floor pens, cages, aviaries, and free-range, outdoor systems.

## Variety of Causes

No one knows exactly what causes feather pecking and cannibalism, but several triggers seem to be responsible.

Genetics seems to play a part in feather pecking and cannibalism; light breeds are more prone to the behavior than heavier breeds (Savage and Darre, 2008). Management practices may play an even bigger role, though even the best-managed flocks may experience an outbreak.

Feather pecking may also be a learned behavior that spreads rapidly through the flock (Cloutier et al. 2002). **Chickens tend**

**to imitate each other**, so if one bird starts the practice, the others quickly pick up the behavior. Once started, it is difficult to reverse.

Clauer (2009) has identified several other possible causes for cannibalism, including these:

- Overcrowding (limited floor space)
- Excessive heat
- Excessive light
- Shortage or restriction of feed and water
- Unbalanced diet
- Different ages, strains, or colors of birds mixed together
- Changes in environment or management practices
- Shortage of nesting boxes or brightly lit nests
- Failure to remove injured or dead birds in a timely manner
- Genetically slow feathering birds

## *Limited floor space*

Overcrowding encourages pecking and cannibalism by increasing competition for feed and water space. Adequate feed and water space must be available to prevent dominant birds from keeping the others away from feed and water. Otherwise, the submissive birds will likely fall behind in weight gain and size, making them targets for feather pecking and cannibalism.

Overcrowding also decreases the floor space available to each member of the flock, which can increase the stress level and may make flock mates more likely to use feather pecking as a means of retaliation.



### *Too much heat*

High temperatures are stressful and uncomfortable for chickens, leading to a greater incidence of pecking. Make sure there is a constant supply of cool, fresh water available at all times. Some backyard enthusiasts add a few ice cubes to the water supply during periods of high temperature when heat stress is at its worst. During the early brooding period when birds require a heat source, do not heat the entire brooding facility. **Heat only a portion of the brood area.** This will allow the birds to adjust their individual comfort zones by moving closer or farther from the localized heat source.

### *Too much light*

Providing light that is both strong enough and lasts long enough is critical to maintaining egg production, especially during the short days of winter. However, too much light can be a problem. Light that is extremely bright -- larger than 40-watt bulbs -- or light for more than 16 hours per day may cause birds to become hostile toward one another. If you use heat lamps as a heat source during winter, use red bulbs, which will reduce the foot candle level and are less stressful to the birds than white bulbs. Low light levels (0.5 to 1.0 foot candle) will help limit cannibalistic behavior.

### *Improper nutrition*

Poultry must have access to a well-balanced diet and clean, fresh water in order to stay healthy. Several **nutritional factors can increase the level of feather pecking.** Deficiencies in sodium and phosphorus have been linked to cannibalism. High energy, low fiber diets tend to increase the activity level and aggressiveness of the flock. Low protein feed or feed with an amino acid imbalance, especially feed lacking adequate amounts of methionine, will often cause birds to peck feathers. Requirements for protein change as birds grow, so be sure you are feeding the right feed for your birds' current stage of growth. If you are unsure, ask at the local co-op or feed store or your county Extension office.

The **natural behavior of a chicken includes spending a good portion of the day foraging** and searching for food. If this natural foraging behavior is disrupted by environment, management, or some other factor, pecking may be redirected toward other members of the flock, which may lead to cannibalism. It has also been reported that the risk of feather pecking is lower if hens are fed a mash diet, which takes longer to consume than a pelleted diet (Savory, 1995).

### *Co-mingling birds*

You should never co-mingle birds of different sizes, breeds, colors, or ages unless they were raised together throughout their lives and are therefore used to each

other. This will likely upset the hierarchical social order in the small, backyard flock, which depends on individuals being able to recognize each other. This **social hierarchy is well developed in small flocks** where the birds all recognize each other but tends to break down somewhat in flocks of more than about 30 birds. Do not mix birds that have different genetic traits, such as crested heads or feathered legs, with birds without these traits. The birds will recognize these differences and may start feather pecking out of curiosity.

### *Nesting area*

A dark, safe place for a hen to lay eggs is critical to help prevent cannibalism. Provide an adequate number of nests and avoid bright lights near the nests. A dark nest gives a hen a feeling of safety and also prevents exposure of the inverted cloaca (which occurs when an egg is laid) to other birds in the flock. The inverted cloaca is a target for pecking and is often an invitation for cannibalism. Once targeted, these birds must be removed to a safe location away from flock mates to recover or the problem will only worsen. It's a good idea to cover any injured areas with a topical wound treatment to assist with healing. Also, clean and remove or hide any blood, as it will make other birds peck the blood-stained bird. In severe cases, injured birds may need to be humanely euthanized.

### *Slow-feathering birds*

Avoiding slow feathering genetic strains will help reduce the likelihood of cannibalism in your flock. If you choose to raise slow feathering strains, take extra precautions. Birds that feather slowly tend to have new, immature, and tender feathers exposed for longer periods of time. This additional exposure time increases the risk of feather pecking and perhaps cannibalism. Do not raise slow feathering and faster feathering genetic strains together, as this may also increase the risk of feather pecking.

### **Choose wisely and ask questions**

Another way to prevent cannibalism is to **ask questions and choose breeds that are not prone to cannibalism.**

You may also try using enrichment devices or "toys" to help the birds occupy their time. Something as simple as four to eight pieces of string or twine hung in the pen where the birds can reach them can draw attention away from other members of the flock. Moving or swapping the enrichment devices occasionally will help keep the birds' attention focused on something besides each other.

Also, adding objects to the pens that break up the open area will allow birds to hide from each other and may reduce pecking. For example, you could lean a sheet of plywood or other solid material against the

wall so birds can hide behind it. Provide a dark nesting area and enough nests so that hens have a safe place to lay eggs.

If all other options have failed to prevent severe feather pecking or cannibalism, a careful beak trimming program may be a final alternative. Beak trimming makes the beak blunt by removing a small portion of the beak, similar to clipping fingernails. Public concern for the practice has made its use limited in many backyard flocks, but in some situations it may be the best option. If you choose to beak trim your birds, the best time is between 7 and 10 days old. Only properly trained personnel using the correct equipment should do the procedure (Scheideler and Shields, 2007). Beak trimming done incorrectly may fail to solve the cannibalism problem and can result in unnecessary pain and suffering.

## Summary

Backyard poultry provide satisfaction and pleasure to countless families across the country, and interest in backyard flocks continues to increase each year. However, severe feather pecking and cannibalism within the flock can be a dark cloud over what should be an enjoyable experience for everyone in the family. Take nothing for granted. Remain vigilant for signs of bad behavior from some members of your flock. Select your genetic stock carefully and manage the flock appropriately. Preventing cannibalism is much easier than curing it once it becomes established. Focus your management program on sound practices that limit bird stress and provide an optimum environment. Then relax and enjoy your backyard poultry experience!

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