Northern Fowl Mite

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With the onset of winter, many external parasites tend to be less problematic. Flies, ticks, and mosquitoes either die or find a hiding place until warmer days. One exception to this rule is the Northern Fowl Mite (NFM). This parasite is problematic beginning in December and hangs around during the colder months. The NFM is the most important parasite of poultry in the United States. The external parasite is extremely common in all types of poultry facilities. Since this mite is so common, backyard poultry producers are unlikely to escape this pesky parasite.

The NFM has an oval body with long legs and is approximately 1 mm in length. The color varies from white to red to black depending on if the mite has consumed a meal of blood. The mites are usually found in the vent area. The mites reside on the feathers, but travel to the skin to feed. Following a blood meal, females will lay 1 to 3 eggs. The life cycle from egg to adult takes between 5 to 12 days to complete. The parasite usually spends its entire life on the host. If the mite is dislodged from the host, it may survive for 2 to 3 weeks depending on the temperature and humidity of the environment. With a short life cycle, populations may increase rapidly. The densities of this parasite are greatest in the winter.

The NFM may be introduced into a poultry facility by a variety of ways. Wild birds and rodents may carry the parasite into the house. Borrowing equipment from another producer is an additional way of introducing the pest to the facility. Allowing newly purchased birds to enter the flock without going through a period of isolation and treatment is an excellent way for the mite to enter the flock.

Clinical signs of NFM infestations vary depending on how many mites are present on the birds. Initially, producers may notice chickens scratching, biting feathers, or rubbing on objects. As the number of mites increase, the chickens become more irritated. The feathers in the vent area look dirty due to becoming soiled with dried blood, excrement, and skin cast. The skin becomes thick and crusty. With large numbers of mites, anemia and death are possible. Because of irritation, chickens infected do not eat well which results in weight loss and decrease egg production.

Producers should be monitoring their birds for infestation on a regular basis. Young birds should be watched closely since the mites prefer them over older birds. Birds should be turned upside down and the vent area examined. A bright light might be needed to examine the animal. Producers should look for dirty feathers and/or red scabby skin. The mites may be seen by parting the feathers and looking for small oval dark objects. When gathering eggs, producers should check to make sure that any small dark spots are not mites.

If chickens are found to be infested with the NFM, producers have several treatment options. One traditional treatment is the use of pesticides. A few are labeled for use in poultry. Producers need to be aware that most pesticides require at least 2 treatments to be effective. Each application of a pesticide should be done with a high pressure spray that applies the spray at a minimum of 130 p.s.i so that the pesticide reaches the vent of the feathers and penetrates to the underside of the birds. One problem with pesticides is the resistance that has developed against some of them. Producers should contact their local veterinarian for what products work best in their area. For organic producers, one option is sulfur dust bags. The University of California, Riverside conducted a study using small cloth bags filled with 30 grams of wettable sulfur. The bags were hung in front of feeders which force the birds to contact the bag. The study demonstrated a reduction in mite counts.

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Controlling NFM begins with a good biosecurity plan. Producers need to work hard at preventing the introduction of this parasite. Newly purchased birds should be isolated, checked for mites, and treated if necessary before entering the flock. Poultry facilities need to be kept clean. Houses should be rested for 4 to 8 weeks before introducing new birds. Producers need to keep wild birds out of their facilities, and practice good rodent control. A chicken’s beak should not be trimmed. This interferes with normal grooming habits that reduce external parasites.

Backyard poultry producers need to monitor their flocks for NFM. If mites are detected, producers should deal with them promptly. For more information about Northern Fowl Mites, producers should go to https://www.veterinaryentomology.org/northern-fowl-mite or contact their local veterinarian or local County Extension Educator.

References


Farm Management Resources — Balance Sheets

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Producers seeking to expand their financial management skill set can find educational resources at the e-Farm Management website. This site contains videos, publications, software tools and webinars for use by farmers and ranchers. Viewers will find information on financial, production, marketing, and risk management topics.

One example is the Balance Sheets video. In this video, viewers can learn how to use a balance sheet to view and track their operation’s change in financial position over time. The video explains the relationship between the balance sheet and other financial statements. Lastly, the video gives an overview of the three major sections found on a balance sheet: assets, liabilities, and owner equity.

To find this video and additional resources on balance sheets, go to: http://agecon.okstate.edu/efarmmanagement/balance.asp.

More information on this and other farm management topics may be found three ways: 1) by contacting the nearest Extension Educator 2) on the e-farm management website (http://agecon.okstate.edu/efarmmanagement/index.asp) or 3) on the OSU Ag Econ YouTube Channel (https://www.youtube.com/user/OkStateAgEcon).