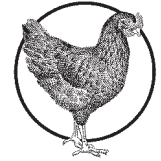




External Parasites



All birds are susceptible to infestation by external parasites. In the Northeast the most common external parasites of poultry are lice and mites. There are two common types of lice, the Head Louse and the Body Louse, as well as four types of mites, the Northern Fowl Mite and the Common Chicken Mite and the less common Depluming Mite and Scaly Leg Mite.

External parasites in large commercial poultry flocks have been all but eliminated due to the bird's limited contact with wild birds and other parasite vectors. In small flocks it is more difficult to control contact with wild birds and rodents that may be carrying external parasites that can infest chickens. Because this isn't a significant problem of large commercial poultry production, there are few control materials registered for use. On the other hand, because of their limited use, the products registered to control external parasites have maintained their effectiveness, as the pests haven't developed resistance to the active ingredients in these products.

Lice

There are two types of lice: biting and sucking. Blood-sucking lice attack mammals only, while biting lice can infest both birds and mammals. The biting lice that infest chickens feed on skin flakes, feathers and scabs, and fresh blood if it is available on the skin surface. Poultry lice are specific to poultry and will not bite humans.

Head lice are very common in all parts of North America, including the Northeast. As the name implies, the head louse is found on the head and neck of the bird. Usually found at the base of the feathers, they are oblong, grayish in color, and about 1/10th-inch long. They attach their eggs to the down or base of the feathers. Head lice spread from hen to chicks, especially in the heavily feathered breeds like Polish and Cochin. A young bird with a heavy infestation will be lethargic and droopy and may die before reaching one month of age.

The body louse is found on the body of the bird. Body lice are straw-colored, fast movers and scatter when the feathers are spread to examine for parasites. Body lice will chew through the skin to reach growing, blood-rich quills. Evidence of body lice includes numerous scabs and pearl-colored egg masses at the base of the feathers. Body lice are commonly found around the vent, breast, head, and under the wings. They are located close to the skin in sparsely feathered areas.

Life cycle

A louse lives for several months; it completes its entire life cycle on the body of the bird. Off a host bird's body, a louse can survive for a few days. Upon reaching maturity, a female louse lays eggs, called *nits*, and attaches them to the feathers with a glue-like substance. A single female louse will lay about 300 eggs in her lifetime. The nits remain attached to the feather until hatching in 4-7 days.

Young lice, called *nymphs*, look like miniature adults, except they are transparent. As they grow and molt they develop the adult color. Just before reaching maturity, nymphs mate on the bird and begin to produce nits. One generation takes about 3 weeks.

Lice are transmitted from bird to bird by crawling from infested feathers, equipment, or infested wild birds. Louse infestation is usually worse in the fall and winter. Birds will be so irritated by the biting of the lice that they scratch themselves incessantly. Stress from lice infestation can lead to reduced feed intake, reduced egg production, increased susceptibility to other disease and, in severe cases, even death.

Mites

Mites belong to the same family as spiders; they have a single-segmented body and four pairs of legs. Mites are very small and can be difficult to see, as they are about 1/25-inch long. Mites have piercing and chewing mouth parts; depending on the species, they eat blood, skin cells and feathers.

The **common mite** (also called chicken mite, or red mite) is the most common mite. It is most active during the warm months, making it more of a problem during the summer. The chicken mite lives and lays its eggs in cracks and crevices of the coop. They are more common in floor birds than in caged birds, as cages have few cracks and crevices for them to live in.

Red mites get their name because they turn red from ingesting chicken's blood. They can live for 6 months off a host bird, so an infested coop remains infested long after the birds have left. Red mites feed at night, so inspect the birds and coop at night. You may see mites crawling along perches or on the birds. Severe infestations may lead to death of chicks and brooding hens. Red mites can infest the roof of the hen's mouth, leading to severe anemia.

Red mites are best controlled by cleaning up the environment, treatment of individual birds is not effective as the mites live off the birds. If warranted treat the cracks and crevices of the coop to eliminate this pest. Repeat treatment in 5 to 7 days to control newly hatched mites.

The **northern fowl mite** is the most serious pest of chickens in cool climates. These mites are most active in cooler weather and are more of a problem in the fall and winter. The northern fowl mite completes its lifecycle in less than a week, so infestation spreads rapidly. The northern fowl mite can live for only about a month off a host bird. Because it spends its entire life on the bird, it does more damage than the red mite. During severe infestations of northern fowl mites you may see large numbers of mites on the birds during the day, or have mites running up your arms when you handle the birds and crawling on your hands when you gather eggs from the nest boxes. The skin around the vent of an infested bird may be dark and scabby; on light-colored birds the vent feathers will be dark.

Treat individual birds with an approved pesticide and repeat in 5 to 7 days.

The **scaly leg mite** is much smaller than the other mites, about 1/100-inch long. It crawls under the scales on the chickens' legs and chews the tissue under the scales. The legs of infested chickens get thick and crust over; in severe cases the swelling gets so bad that blood supply to the toes of the bird is compromised and it may lose toes. More frequently a problem of older birds, scaly leg mite can also affect young birds kept with infested older birds. The scaly leg mite spends its entire life on the bird. Once a bird is infested it is difficult to impossible to eliminate the infection. Cull severely affected birds. In less severe or early infestations; coat the bird's legs with vaseline or mineral oil weekly to smother the mites. Treat all birds in the flock to prevent re-infestation from other birds.

The **feather or de-pluming mite** is also very small and difficult to control. It burrows into the skin at the base of the feather, where the irritation causes the bird to scratch and pull out its own feathers in an

attempt to eliminate the source of the irritation. Because this mite is difficult to control it may be best to cull affected birds to reduce the spread of this parasite.

Prevention and treatment

Prevention is always better than cure. Many parasites can be controlled by good management, including good sanitation, proper housing, and optimum nutrition. Inspect your birds monthly for external parasites. It is best to inspect birds after they have roosted for the evening. Birds will be calm and easy to catch when they are roosting, and you will cause less distress and loss of egg production that might result from chasing hens around the coop or yard.

Examine around the vent and under the wings for body lice and mites; examine the head and neck for head lice. Also examine the roosts and nesting boxes for mites. Remember, body lice move quickly, so work fast. You can also examine the feathers for evidence of nits. If one bird has lice or mites, chances are they all do. Unfortunately, once a flock is infested the only way to eliminate a parasite problem is with pesticides.

Effective treatment may involve treating all the birds or the coop with an insecticide approved for poultry. *Be sure to read and follow all label instructions including attention to detail regarding protective equipment and possible withholding time for consumption of meat and eggs from treated birds.*

A pinch of pesticide dust under each wing and near the vent, as well as dusting the litter and bath sites, will help to keep parasites in check. No insecticide will kill nits, so if treatment is warranted, it should be repeated in 7 days and again in 14 days to remove all of the newly hatched nits.

Organic pyrethrum (derived from chrysanthemums) is fairly safe for humans and birds but highly toxic to insects. Powder the vent area and under the wings, using a puff bottle; treat cracks and crevices in the coop as well. Allowing the birds to dust themselves in diatomaceous earth is a common organic treatment. Diatomaceous earth has sharp edges reported to pierce the parasite's body, leading to desiccation and death. One drawback: diatomaceous earth is very harmful if inhaled (by bird or human) and may pose a threat to your flock's respiratory health. Research is still divided as to the efficacy of this product for parasite control.

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