

LIVESTOCK PESTS

CATTLE PESTS

FACE FLIES

<http://ohioline.ag.ohio-state.edu/hyg-fact/2000/2110.html>

This species is also a pest of horses, and is similar to the house fly. Face flies, however, are slightly larger than house flies (1/4 inch) and lighter gray in color with noticeably larger eyes. Although they do not bite, face flies are extremely annoying as they crawl on or near the animal's face. They are most often seen feeding on secretions from body openings on the heads of livestock. Face flies are not bloodsuckers, but will feed on blood from open wounds. The flies deposit their eggs in fresh cow dung where the maggots develop and mature.

These pests are abundant during warm, sunny weather and will not enter barns or deep-shaded areas, unless searching for protection from the cold. Therefore, one of the most effective means of protecting animals from these annoying flies is to keep the animals in the barn or to provide deep shade during sunny weather.

Face flies are known carriers of pink eye disease, and are connected with a high incidence of the disease in beef and dairy cattle.

HORN FLIES

http://res.agr.ca/ecorc/program2/entomology/biting_flies/english/flies15e.html

This is the most abundant and economically threatening cattle pest in West Virginia. The horn fly is about half the size of a housefly, or 1/8 inch long, and are rarely seen inside buildings. These small, dark flies collect in large numbers on the backs and around the base of the horns, standing on their heads to feed among the hairs. They pierce the skin and suck blood from cattle; most of their adult life is spent on the host.

The eggs are deposited in fresh cow dung, where the maggots develop. Several generations are produced during the summer; the life cycle is completed in about two weeks.

High numbers of horn flies on dairy cattle can reduce milk production by as much as 20% and adversely affect weight gain in beef animals. The flies pierce the skin to suck blood, causing pain and annoyance and interfering with the feeding and resting of the animals. As a result, weight loss, production losses, indigestion, or other disorders can occur. An infestation of 500 horn flies can drain as much as half a pound of blood per day from an animal. Such infestations are not unusual.

BARN ITCH (Chorioptic Mites)

The white mite is extremely small (about 1/60 inch), oval-shaped, and has eight legs. When these insects feed, barn itch, a skin disease, results. The mites pierce the skin to get to the lymph on which they feed. This skin irritation results in intensive itching and discomfort; lesions also may result. Many cows in a herd may be infested with chorioptic mites, but only certain cows may react to the mites and develop mange conditions.

Mite populations are usually low during the summer, which results in the disease symptoms clearing up on cattle. In late fall, however, the mites increase rapidly in numbers, reaching a peak in late winter, usually around February.

Chorioptic mites may attack the skin on any part of the animal, but are most commonly found on and between the rear legs, around the base of the tail, along the flanks, and the escutcheon area. The lesions on the skin, caused by the feeding of the mites, are usually not noticeable until the disease is well advanced; scabs or scales then form over these lesions. The skin underneath is only slightly swollen and inflamed. When the hair is rubbed off the affected area, the skin appears thick and wrinkled. Cows stanchioned during the winter seem to develop barn itch symptoms more commonly than those in free stall barns.

Observe cattle closely, especially in the fall. One of the first symptoms of barn itch is the animals' excessive licking of the affected areas. Examine the animals, check itchy areas, and look closely for roughened skin. A definite diagnosis can be made by taking skin scrapings from the animals and isolating the mites that cause the disease. A veterinarian is qualified to make this diagnosis; an inexperienced person might not be able to find the tiny mites.

CATTLE GRUBS

<http://www.caf.wvu.edu/~forage/10621.htm>

There are two different species of bot flies attacking cattle in America. One is the bomb fly, or northern cattle grub, and the other is the heel fly or common cattle grub; the heel fly is the smaller of the two. Although the two have different habits, their life cycles and control are similar enough for them to be considered as one here.

The adult fly, a large, yellowish-brown, hairy fly prevalent during June and July, sticks its eggs onto hairs on the legs and bellies of cattle. The adult female fly—who can lay up to 800 eggs—does not bite or sting when laying her eggs, but darts at the animal with much buzzing, causing cattle to run wildly with their tails in the air. This stampeding can injure the cattle. The heel fly is much sneakier in its egg laying. Usually, it goes unnoticed as it quietly tucks its eggs among the hairs on the heels of cattle.

The tiny maggots burrow through the skin and muscle tissue, and, six to eight months later (usually February or March), reach the back region. Here they can be readily noticed as cysts or lumps under the skin. The grubs make breathing holes in the skin, and, one to two months later, work their way out and drop to the ground to pupate. As the maggots tunnel through the body and lodge in the back, inflammation and suffering are caused as well as decreases in growth and

production. The quality of the meat and hide is also lowered as the maggots choose the most profitable location in which to reside. The greatest abundance of cattle grubs is in the southwestern area of the state.

Systemic insecticides is an accepted control for cattle grubs on non-dairy cattle. The insecticide is absorbed into the blood stream; very minute amounts are adequate for killing the grubs. This control method eliminates the grubs before they reach the animal's back where they damage the meat and hide.

CATTLE LICE

<http://www.caf.wvu.edu/~forage/lice/lice.htm>

During late winter, cattle may be noticed doing an excessive amount of rubbing or licking. The animals may also have small dark-blue patches on the skin, which at first may look like dirt. A closer examination, however, will show they are composed of lice of all sizes in clusters. Check for small (less than 1/8 inch), gray-blue sucking insects, with crab-like claws on the ends of their six legs. The lice spend their entire life cycle—slightly more than one month—on the animals. Eggs, also called mites, are glued to the hairs. It is common for weaker, poorly fed animals to become infested with lice. The infestation can also result in lower production for beef or dairy animals. During spring, populations of several species of lice decline sharply; lice are almost non-existent during the summer. In late fall, however, the numbers begin to increase.

SHEEP PESTS

SHEEP KEDS (SHEEP TICKS)

<http://www.uky.edu/Agriculture/Entomology/entfacts/livestc/ef503.htm>

Sheep keds are wingless, biting flies C not ticks. They seem to prefer lambs and poorly fed animals to older animals. Keds are bloodsuckers, and, when present in large numbers, will reduce the vigor of infected animals.

Two stages of the wingless fly are seen on sheep: the adult and the pupa. The adult is about 1/4 inch long, reddish-brown, and somewhat pear-shaped. The puparium are brown, nearly round, and about 3/16 inch in diameter. The larvae are retained within the female's body until fully developed, and are then deposited on the wool with glue where they immediately transform into the puparium and then into adults. Keds, which are most numerous during fall and winter months, live in the wool for four to five months.

Large numbers of feeding keds irritate the sheep, and may produce anemia in heavily infested animals.

Normally, the keds move from one sheep to another through direct contact among crowded animals. The irritation to the skin causes the sheep to rub and scratch itself, damaging the wool. Sheep keds also attack goats.

FOOT-SCAB MITES

A chorioptic mite attacks the sheep's skin just above the feet. The tiny, white, oval mites pierce the skin and feed on the lymph, causing intense itching; infested animals constantly bite their feet trying to alleviate the problem. Infested animals are restless. Observe sheep closely, especially in early winter. One of the first symptoms of foot scab is the excessive biting of the legs just above the hooves. The lower several inches of the legs will appear wet around the itchy areas. A definite diagnosis can be made by taking skin scrapings from the sheep and isolating the mites that cause the disease. A veterinarian is qualified to make this diagnosis.

Since the foot-scab mite attacks only the skin near the feet of the sheep, control of the mites is not difficult. Moving the animals through a foot bath containing the correct dosages of an approved pesticide is the practical method for eliminating the problem.

SHEEP SCAB MITE

Scab or scabies is a severe and highly contagious sheep disease. It is caused by a very small (1/50 of an inch) mite that punctures the skin until the lymph exudes and flows over it. As this serum hardens to form scabs, the mites remain underneath, where they continue to feed. Several layers of scabs can result, which lifts the wool out by the roots. The wool will fall out in tufts, and, if the condition is not treated, the sheep will gradually lose body condition, become sickly, and die.

The mites can be seen by lifting the scab and looking for gray crawling specks against a black surface. The disease can be controlled by dipping the sheep, which is most effective after shearing. Strict quarantine of sheep should be observed for one month after dipping.

HOG PESTS

HOG LICE

The hog louse is the largest known existing louse in the state, and is the only species that attacks hogs. A fully grown louse is about 1/4 inch long and dirty-gray to brown with almost black body margins. They spend their entire life on the animal, breeding continuously. The female louse may lay 90 eggs during a 25-30 day period; the eggs hatch in 12-20 days. The eggs are glued to the hairs close to the skin. Young lice become mature in 10-12 days.

The lice pester the hogs by piercing the skin to suck blood. Each time they feed, they puncture the skin at a different place. The resulting itching and discomfort causes the animals to scratch with their feet and to rub against feeders, posts, or any stationary objects. The skin of infested areas often becomes thick and tender and may crack. Infested animals are usually restless.

A good time to combat the lice is when the sows are being readied for farrowing. If the lice are controlled on the sows, they will not have a chance to move to the young pigs. Feeder pigs are sometimes infested with lice, in which case treatment of the entire herd may be advisable.

ITCH MITES OR MANGE MITES

A skin disease caused by tiny, white mites causes symptoms similar to those of lice infestations. Hogs will scratch and rub vigorously. The skin around the ears, eyes, and along the top of the neck may be inflamed, scaly, cracked, and very tender. If the inside of the ears are inflamed and scabby, there is a strong possibility the animal is infested with itch or mange mites. The mites are small, whitish parasites with a rounded body about 1/60 inch in length. They may be seen with the naked eye, but a hand lens is useful. A definite diagnosis can be made by taking skin scrapings from the animals and isolating the mites that cause the disease. A veterinarian is qualified to make this diagnosis. A good time to treat the disease is before the sows are placed in the farrowing pens. Feeder pigs may sometimes need treatment. Plan to treat feeder pigs at the earliest sign of symptoms.

HORSE PESTS

HORSE FLIES

<http://www.ag.ohio-state.edu/~ohioline/hyg-fact/2000/2115.html>

There are several hundred species of horse flies in the United States ranging from 1/3 to 1 inch in size. They are mostly black or brown with large, brilliantly colored eyes. Only the female horse flies bite. The males feed on nectar and other such things. The flies lay their eggs on leaves or other organic material.

The larvae fall into water or moist soil and feed on insect larvae, snails, earthworms, etc. They mature into the adult biting fly.

DEER FLIES

<http://www.ag.ohio-state.edu/~ohioline/hyg-fact/2000/2115.html>

Deer flies probably received their common name due to the fact that they are notorious pests of deer and horses. They are usually green in appearance and slightly larger than the house fly. They are pests in suburban and rural areas where both their breeding sites in or near bodies of water and mammal hosts are abundant. Most species of this fly feed during daylight and are seen more often on hot, sunny days. Deerflies and horse flies lay their eggs in a similar manner, but larvae feed on decaying vegetation and the like instead of living matter. The larvae mature in three months to three years into the adult deer fly.

STABLE FLIES

<http://www.caf.wvu.edu/~forage/10627.htm>

The stable fly causes the most injury to horses. One-fourth of an inch long with a long beak-like projection from the head, this insect bites animals, especially on the legs. It may also enter houses and bite humans about the ankles. Animals may be seen stamping their feet to dislodge the flies.

The stable fly takes only one or two drops of blood at a meal, having several such meals a day. When stable flies are numerous, the animal can be the source of hundreds of such meals a day. The bites, which cause significant pain to the animals, result in weight loss and poor production. Eggs are laid and maggots develop in masses of straw, grain, hay, and other materials that are water—logged or contaminated with manure. The adult flies emerge in six to eight weeks.

MOSQUITOES

<http://www.ag.ohio-state.edu/~ohioline/hyg-fact/2000/2058.html>

There are over two thousand species of mosquitoes. Mosquitoes breed only in water, but it takes only a small amount of water to produce great quantities of mosquitoes. These insects are best known for carrying diseases which can be transmitted to the host by biting. They can reach as much as 1/2 inch in length and are easily identified.

BOT FLIES

<http://www.acesag.auburn.edu/department/ipm/hpf3.htm>

Bot flies annoy horses as they dart about the animals to deposit thin eggs. These insects, brownish bee-like flies with slightly spotted wings, do not bite the animal, however. A further source of trouble occurs when the living maggots move into the digestive tract of the horse and feed on the living tissue of the stomach or small intestines. The maggots may reach 2/3 inch in length. They have spikes helping them attach to the intestines. This can cause an inflamed ulcerous condition; food is absorbed, starving the host. Animals infested with bots have a run-down condition and a rough coat.

The bot larvae may be found in feces in the spring months, but this is usually too late to apply effective control measures. The larvae mature in the tract and are passed with the feces as they release their hold on the walls of the animal's stomach. The maggots then burrow into the soil to mature in three weeks.

Face flies and house flies do not bite animals, but annoy them. The face fly is especially bothersome as it crawls near the eye and on the face and muzzle.

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