

Come Grow with Us!

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A Look at External Parasites Affecting Livestock

Whether or not you have noticed it, you are losing money when it comes to holding up on external parasite treatment. Each year, millions of dollars are wasted by not treating your livestock for external parasites effectively. These pests cause losses in production, reproduction and weight gains. They can also be responsible for the reduction in milk yields and carcass and hide damage. Aside from these important losses some external parasites such as flies and ticks can transmit zoonotic diseases (diseases that can transfer from animal to humans).

The most important pests for cattle and horses are horn flies, face flies, lice, ticks, mosquitoes and several species of horse flies. Below are details on some external parasites that can help you understand how and why we should apply the right amount and frequency of pesticides.

Horn flies – These are one of the most serious pests in Florida. Biting mouthparts cause pain and annoy animals which can affect feeding behavior of livestock. They can cause open sores on the head and underline, which can result in secondary infections. Horn flies can transmit anaplasmosis and other diseases within the herd. Fifty or more horn flies per animal is considered an infestation of economic importance. Large cluster can lead to considerable amounts of blood loss.

Horn fly eggs are laid in fresh cattle manure and their life cycle can be completed in 10 to 14 days.

Dust bags give the best control for this pest. Sprays, ear tags and dips can be successful. Back rubbers and feed additives can also be used but have low success rate.

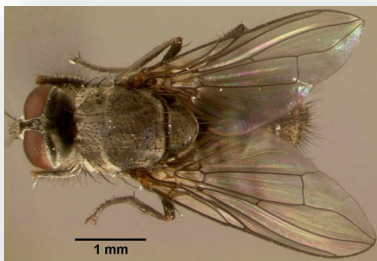


Figure 1. Adult horn fly.
Click on image to enlarge.

Horse and Deer flies

– Also called Tabanids, these flies are strong fliers. Only females bite, and they usually do so in the daytime. Feedings can result in a reduction in weight gain and lowered milk yields due to pain and annoyance.

Tabanids can introduce anticoagulants into the bite wound to prolong feeding. Exposed wounds can become infected. These flies can transmit anthrax, tularemia and anaplasmosis.

Their lifecycles require from 70 days to two years to complete. Florida is home to more than 120 species of Tabanids. These pests are difficult to control in range situations.

Sand Flies and Biting Midges – Sand flies are small in size. They are also referred to as punkies, no-see-ums or biting midges. These flies breed in wet habitats and are difficult to control. One species is a known vector of bluetongue virus in cattle and some are intermediate hosts of helminths. The life cycle of the species that can be a problem in livestock is unknown.

Figure 2. Adult Sand fly.
Click on image to enlarge.



Stable Flies – This fly is similar in size and color to a house fly. Both sexes bite livestock and as deer and horse flies, these too are strong fliers. When biting, they cause irritation and blood loss in severe cases. Similar to other flies, they can transmit various diseases.

Stable flies breed in soggy hay, grain or feed, as well as grass cuttings. Their average life cycle spans from 22 to 58 days, depending on weather conditions. Infestation of greater than 10 individuals per animal is considered economically damaging. Animal treatments are limited to fogging or mist applications of insecticide.

Cattle lice – There are several species of lice found throughout the Southeastern U.S. Some of these lice feed by sucking blood while others bite the skin producing injuries. These tiny arthropods are more abundant in cooler months, especially in late winter. Lice will cause cattle to rub on surfaces to the point of losing hair and damaging buildings.



Figure 3. Long-nosed cattle louse.
Click on image to enlarge.

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Ticks – Several species of ticks are found in the Southeastern U.S. Some of these species have been associated with Lyme disease (such as the Lone Star tick) while others have been found to spread anaplasmosis and pyroplasmosis (known to cause abortion in cattle) and tularemia. Ticks require wooded areas to develop and are most abundant in wooded pastures.



Figure 4. Long star tick.
Click on image to enlarge.



Figure 5. Lone star tick.
With egg mass Click on image to enlarge.

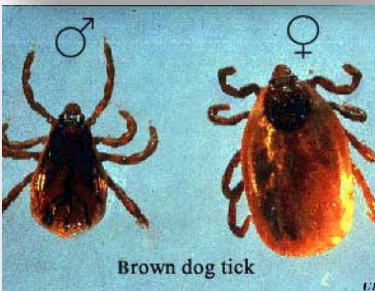


Figure 4. Brown dog-tick. Click on image to enlarge.

Insecticide Safety Precautions

Always read the label before using an insecticide and follow these safety precautions:

1. Do not use more insecticide than recommended.
2. Only use one insecticide at a time.
3. It is important to observe all the precautions and conform to the regulations regarding the minimum time allowed from last treatment to sale or slaughter.
4. Do not use insecticide formulations for livestock treatment unless this use is listed on the container label.

5. Do not use any insecticide in a dip unless it is recommended.
6. When using an emulsifiable concentrate, be sure it mixes uniformly with the water.
7. Do not contaminate feed, food or water troughs when applying insecticide around barns.
8. When possible, contain insecticide run-off and avoid it contaminating surface waters.

There are more external parasites that can affect our livestock than listed in this article. If external parasites are a big problem in your herd, please work with a veterinarian to make a management and monitoring plan suited for your specific conditions.

For more information on this topic, please call the UF/IFAS Extension Hardee County office at 863-773-2164.