Horse Flies

One of the least welcome sights around the barn are those giant horse flies in determined pursuit of your horse. Their bites can be quite painful and often leave a trail of blood behind on your horse. Many horses will react quite violently if bitten and even run and buck to escape their bite. This can result in unmanageable behavior which can be quite dangerous for the human. Additionally, these flies can result in weight loss as horses try to evade them, and can transmit disease as well. So is there anything that can be done to control these pests?

Scale comparison of one of the larger tabenids. Their bites can be quite painful, for horses and humans alike!

Horse flies and deer flies actually belong to a family of insects called Tabenids. They range in size and color from the smaller “deer fly” marked by the dark pattern on their wings, to green headed horse flies to the giant black flies which can be over an inch long. It is the females which bite livestock, as they use the blood to support egg development. They do not lay eggs in horse manure, but instead in or near water. As a result, feed through control used for stable flies does not work and sanitation around the barn has no effect. Horses are often pastured near ponds, which is quite common in Oklahoma, and thus the flies have easy access to breeding grounds and a blood meal. In most areas, the adult form is only active for about a month, but different species may be pursuing your horse at different times of the year.
Repellants also have little effect on these flies. The short biting time these flies need to complete their meal renders repellants less effective. Use of pyrethroid repellants may decrease overall feeding time, but does not eliminate the pests. Rather, try to provide horses with shelter (tabenids are reluctant to fly into dark or shadowed areas), or have large pastures with non-wooded areas where the predators can be avoided. Many tabenids are ambush predators, and will swarm horses after entering wooded areas. Clearing woods and vegetation can help reduce tabenid burdens. Traps can be used which attract the flies and then capture them. There are a number of different types of traps. These include flight interception traps, chemically baited canopy traps, optically baited canopy traps and “sticky” traps. All of them use a shiny black surface which attracts the female fly looking for a victim. When using these traps, they should be outside of the enclosure or protected by a fence as they are easily destroyed by horses. For design ideas see: http://nfrec.ifas.ufl.edu/ufinsects/tabanids/

This trap is in an L configuration with shiny black adhesive which attracts the flies.
Tabenid traps can be purchased commercially or created yourself with a little ingenuity.
Finally, tabenids do have some natural predators. The female horse guard wasp preys upon tabenids in order to feed her larvae. Unfortunately, there preferred habitats are fairly specific, needing sandy soil to dig their burrows, and have a relatively short active harvesting period. Nonetheless, they can make a significant reduction in tabenid numbers if present in the area. This wasps would be noted by their hovering presence near the horses, and their large yellow and black bodies. So if you see these wasps around your livestock, leave them alone!