Hover flies are just annoying; bite of horse fly is memorable

During the Hancock County Fair, I had many inquiries about the prevalence of sweat bees this year. However, in most situations, these are not bees, but a fly known as the hover fly.

To most people, hover flies resemble sweat bees. They are generally small, about three-eighths to a half-inch long, even though some species can be over an inch in length.

The abdomen of a hover fly is yellow and black, giving the striping pattern of a bee.

However, like all flies, they cannot sting and only have two wings (one pair). Bees have four wings (two pairs).

Flies also have different antennae and eyes compared to bees. Flies' antennae are short — bees' antennae are long. Their eyes are large for the size of the head — bees have normal-sized eyes.

Unlike other flies, hover flies do not bite. The salt from our sweat may attract them to land on us but they will not bite or sting. They "hover" in mid-air by vibrating their wings rapidly.

Hover flies spend most of their time feeding on nectar and pollen and looking for their favorite egg-laying sites — aphid populations.

Eggs will hatch in two to three days. The slug-like larvae will feed on aphids, thrips and small caterpillars for two to three weeks. They will then pupate in the soil and later emerge as adult flies. Hover flies can have as many as six to seven generations per year.

Farmers often find hover flies in their fields and homeowners in their gardens and flower beds (white and yellow flowers attract them, especially dill and yarrow). Both places will often have food sources for their young.

Hover flies will not harm you. They are more of an annoyance, hovering around you and on occasion, landing to slurp up some of your sweat. However, they are beneficial insects since their larvae feed on aphids and adults pollinate flowers.

The other fly associated with summer is the horse fly. Like the hover fly, it can be annoying, but it is much more sinister than its small cousin. Its large size in itself will make an impression (many species being more than 1 inch in length), and unlike the hover fly it will bite.

The female horse fly has to have a blood meal to produce eggs and it is known for a painful bite. She targets large objects by sight, and perhaps thermal imaging, including cattle, horses, deer, and people.

Once the female horse fly has landed on her target, she will use razor sharp mouthparts to cut the skin. Along with the bite, she injects saliva that prevents clotting and allows her to lap up free-flowing blood. Blood will continue to flow for a short time until the effects of the saliva stop.

The female horse fly will lay eggs on vegetation or other objects near water, or in manure. Eggs will hatch in five to 12 days and the emerging larvae will burrow into moist soil, feeding on organic debris, insects, snails, and earthworms. They may also eat each other.

Larvae will become adults in one to three years. Before becoming adults the larvae will move to dryer soil and pupate for six to 12 days depending on temperature. As soon as they emerge they will immediately begin the search for mates and blood meals.

Fortunately, most species of horse flies are only seen for about one month, but there can be an overlapping succession of species during the summer. They have not been as prevalent this year, but the recent rains may bring about more activity.

Little can be done to prevent horse flies from biting. They like targets near water, which include swimming pools, lakes and streams. They generally search out targets in sunlight and not shaded areas.

Light clothing may be less attractive than dark. Insect repellent, such as those containing DEET, will not prevent them from landing but may discourage biting.

Looks can be deceiving, even in the insect world. The hover fly looks like a bee, but cannot sting and is actually a beneficial insect. It does not even bite, but that is not true for its cousin the horse fly. It looks menacing and its bite will be a memorable event.

Additional information may be found on the hover fly at http://ohioline.osu.edu/factsheet/ent-73 and for the horse fly at https://entomology.ca.uky.edu/ef511 and https://extension.ent.purdue.edu/publichealth/insects/tab-nid.html

Lentz is extension educator for agriculture and natural resources for the Ohio State University Extension Service in Hancock County. He can be reached at 419-422-3951 or via email at lentz.38@osu.edu.

Lentz can be heard with Vann Wickerham on weekdays at 6:35 a.m. on WFIN, at 5:43 a.m. on WKXO-FM, and at 5:28 a.m. at 106.3 The Fox.