<u>Turf Pests Rearing Their Ugly Heads</u> Earlier This Year?



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It will take time to determine if an early spring results in larger insect populations,in turf and ornamental plant pests. ⋈

We're easily two to three weeks early for our annual bluegrass weevil activity and our black turfgrass ataenius adults are off the chart in our light trap (easily a month earlier than last year). However, we haven't seen sod webworm adults or the May-June beetle adults.

While we had a mild and early spring, we are at a high risk for a late season freeze that will damage both insect/mite and plants. Basically, most insects that overwinter by making their own antifreeze-like material have converted that material back into sugars and are active. It subjected to a late freeze, they may not be able to survive if temperatures drop in the 25 degree F range.

Season-long effects?

Also, many of our turfgrass pests are "programmed" to have a set number of generations per year while others may have two or more generations, depending on the weather. Most of our annual grub species will simply come out early, lay eggs early and their larvae, when maturing early will dig down for the winter early

This is important to know when using late-season grub controls. If the grubs have stopped feeding, they are less likely to pick up the insecticide; if they're still feeding, you have a better chance of good control.

We have seen bluegrass billbugs undergo a normal spring generation and a partial second generation with many of the second-generation larvae not

developing sufficiently to emerge before the ground freezes. In longer, warmer seasons they're able to complete the second generation without difficulty. This means that turf managers need to be watchful for damage from a potential second generation.

The hairy chinch bug here in Ohio normally has two generations. A long summer may allow them to attempt a third generation. This will depend on how early they can complete the second generation. If new adults emerge by mid-August, these may attempt to lay eggs.

We haven't figured out all their "triggers," but decreasing daylight seems to be the stimulus for stopping egg laying and preparing for overwintering.

We could have early caterpillar activity and some species can normally complete two to three generations and in a prolonged summer we may see three to four generations.

We captured our first Armyworm adults the first night we set out our light trap (March 14).

Again, this is about three to four weeks earlier than normal. This means that armyworms may be able to complete four generations this summer in Ohio rather than the normal two to three. I suspect that the bluegrass webworm and larger sod webworm will complete three generations rather than the normal two.

Severity of damage

Again, there are lots of other factors other than just the length of the season. Many of our turf pests also have a full complement of parasites, predators and diseases. In mild conditions, especially with high humidity and/or moisture, these natural controls can also survive well and will be starting to take their toll early. In fact, there are cases where these natural controls can eat themselves out of a living if they get started early!

Summer drought is a major factor in many turfgrass insect population dynamics. A drought in late July through August (that caused the turf to enter summer dormancy) virtually eliminated the hairy chinch bug populations, discovered Jen Andon, my lab technician who earned her MS working on hairy chinch biology.On the other hand, if the turf was watered and kept growing during this time, the chinch bugs caused major damage.

Virtually all the white grubs lay dehydrated eggs that need to absorb water from the soil. If they don't absorb this moisture within 24-36 hours, the eggs die. This is why we have major drops in grub populations when we have a late June through July drought and significant increases when we have normal to above normal rainfall during this period.

So, as you can see, there are many other factors other than just the record early spring weather that can determine eventual turfgrass insect pest activity and damage.

Author's Note: Dr. David Shetlar is Associate Professor of Entomology at The Ohio State University. Read his excellent article on turf insect control in <u>TURF</u> <u>magazine's March issue here</u>.