HAVE YOU SEEN ME?

A homeowner's guide for Hunting Billbugs

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Adult billbug in Tipton County. Picture credit: Becky Mueller, ANR Agent

01. What are Hunting Billbugs?

Hunting billbugs are a type of weevil that are pests of turfgrass and sod farms in the United States. They are native to the United States and have been widely reported in the Southeastern United States including Georgia, North and South Carolina, west Tennessee, and Florida. Hunting billbugs have multiple generations per year, dependent on the heat/cold associated with growing zones, and cause the most damage as larvae.

02. Identification

Hunting billbugs are recognized by their curved snout. Adult hunting billbugs are 0.3-0.4 inches in length and are black, charcoal gray, or brown in color. Adult hunting billbugs are distinguished by a smooth, non-punctuated Y-shaped area behind their head, with parenthesis-like curved markings. Adults are the most active during the night, and often 'play dead' when disturbed. Adults feed, mate, and lay eggs in the spring.

Adult hunting billbug. Picture credit: Midhula Gireesh, University of Tennessee

03. Lifecycle

Hunting billbug larva. Picture credit: https://pnwhandbooks.org/insect/hort/turfgrass/turfgrass-billbug

- Hunting billbug females lay creamy-white, bean-shaped eggs into turfgrass stems from May to September. Eggs hatch in optimal soil temperatures of at least 65 degrees F, often 3-10 days after being laid.
- White legless larvae go through 5 growth stages (larval stages) over the course of 21-35 days until they undergo pupation in the soil. Larvae are seen from May to October.
- Pupae are found in the soil and are initially cream-colored, but turn reddish brown as they age.
- Adults emerge 3-7 days after pupating in the soil.
- Hunting Billbugs overwinter as adults in leaf litter, mulch, thatch, etc.

04. Damage Caused

- Hunting Billbug damage to turfgrass is often misdiagnosed as nutritional deficiency, drought, and white grub infestation.
- First signs of feeding damage exhibit discoloration or irregular patches that appear scattered throughout the turfgrass. These patches do not improve after irrigation.
- In certain zoysiagrass cultivars, the impact of previous year billbug feeding damage is noticed the following spring as the turfgrass struggles to emerge from winter dormancy.
- In all grass types, first instar larvae feed inside the stem, while later stages feed on the outside of the stem or stolon.

Hunting billbug damage to turfgrass. Picture credit: Terri Billeisen, North Carolina State University

05. Monitoring & Management

Insecticides are the most effective control. ***Before using chemicals, carefully read the label and consult with your local Extension agent when in doubt***. Here is a list of a few recommended insecticides:

- Imidacloprid (Merit)
- Bifenthrin (Talstar)
- Clothianidin (Arena)
- Chlorpyrifos (Dursban)

A simple way of monitoring billbugs is by keeping record of any previous damage. The adult activity can be monitored by regularly searching on mowed lawns and fairways at night using a flashlight. The larval activity can be monitored using the 'tug test' where the stems that have been under heavy infestation will break away easily when pulled. Pitfall traps can also be used to monitor adults. A simple pitfall trap is constructed using a plastic cup or container buried in the soil. Crawling adults fall into the container and get trapped.