

# TURF PESTS I



1. White grub



2. True white grub



3. Annual white grub



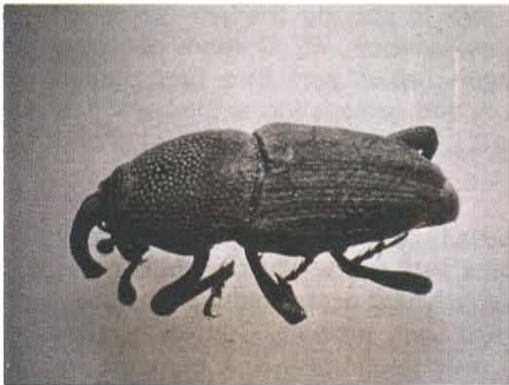
Japanese beetle



4. Black turfgrass Ataenius



5. Sod webworm



6. Bluegrass billbug



7. Cutworm



8. Greenbug



9. Ant



10. Chinch bug

## TURF PESTS I

1. **White Grub** larvae are C-shaped and about 1 inch long when full grown. They damage turf by feeding on the roots. Most of the damage occurs in the fall, starting in August. Damaged turf will turn brown and can be peeled back like a carpet due to root pruning. The larvae burrow deeper into the soil for the winter and migrate upward into the root zone in the spring. The adult beetles lay their eggs in the soil during midsummer. They prefer the softer soil associated with watered lawns. There are three kinds of large white grubs that prey on turfgrass in the Midwest: **True White Grub**, **Annual White Grub**, and **Japanese Beetle**.

2. **True White Grubs** usually have a 3-year life cycle. The grubs hatch from eggs and feed in late summer of their first year, feed all summer during the second year, and feed for only a few weeks in the spring of the third year before pupating. Adult beetles (about 1 inch long) emerge in summer of the third year, mate, and lay eggs for the next generation.

3. **Annual White Grubs** and **Japanese Beetles** have a 1-year life cycle. The grubs hatch from eggs and feed in late summer and fall. After feeding for a while in the spring, the grubs pupate, and then turn into adult beetles. Annual white grub adults are about 3/4 inch long; Japanese beetle adults are about 5/8 inch long. Adults lay eggs during June and July for the next generation of grubs.

4. **Black Turfgrass Ataenius** is a small white grub that also feeds on the roots of grasses. Full-sized larvae are only about 1/2 inch long and cause most damage in late June and July. Damaged turf turns brown and can be rolled back like a carpet. Adult *Ataenius* beetles are black and about 1/4 inch long; they lay their eggs in the spring.

5. **Sod Webworm** caterpillars hide in the thatch during the day and come out at night to feed on grass blades. Damaged lawns are brown because the green grass blades have been removed, allowing the brown thatch to be more noticeable. Because the roots have not been damaged, the grass is firmly rooted. Caterpillars overwinter, and are about 3/4 inch long when mature. There are two to three generations per year. Adult moths are about 3/4 inch long. When disturbed, they usually will fly in a dipping manner no more than 3 to 5 feet above the turf and a distance of less than 30 feet before landing again on the grass. The presence of large numbers of moths is an indication that caterpillars will probably be numerous enough to

cause damage.

6. **Bluegrass Billbug** eggs are laid in the leaf sheaths of grass where the grass blade joins the stem. The legless larvae burrow into the stem and live in the stem and rhizomes of the grass plant. They leave the rhizomes to feed on the roots when they grow larger. Fully grown larvae are about 1/2 inch long and 1/4 inch in diameter. Billbug damage appears as brown areas of turf during June and July. Heavy damage will destroy roots so that the turf can be rolled back off the soil like a carpet. Sawdustlike debris can usually be found on the thatch in damaged areas. Adult billbugs are about 1/4 inch long, are long-lived, and may be found throughout the year.

7. **Cutworm** caterpillars feed on grass blades during the night. Although they are usually present throughout the summer in most turf areas, damage is rare in home lawns but may occur in highly managed turf areas such as golf courses. Both the caterpillars and adults are about 1 inch long. Adult moths, when disturbed, usually fly at least 20 feet above the ground and a distance of 100 feet before landing.

8. **Greenbug** damage usually occurs in late summer in midwestern turf. Damage is caused by these pinhead-sized aphids sucking the sap out of the grass blades. Large numbers, 40 or more per grass blade, cause orangish brown turf that first appears under tree canopies and spreads across the lawn. The aphids will be most plentiful at the edges of the damaged area.

9. **Ants** usually do not damage turf, and may kill and eat some turf pests. Their anthills may be considered unsightly and occasionally are large enough to interfere with lawn mowing. Control is rarely necessary and is only temporary. New colonies are started within weeks of the elimination of previous ones.

10. **Chinch Bugs** feed by sucking the sap out of grass blades, causing the blades to turn brown. They overwinter as 1/8-inch-long adults that become active in the spring and lay eggs in turf. The eggs hatch into pinhead-sized red nymphs that may stay red or turn black as they get older, depending on species. They tend to be more common in dry and sunny areas. Chinch bugs can be detected during the summer in turf by inserting a bottomless bucket into the thatch and filling it with water. The nymph and adult chinch bugs will float to the water surface.