

# Look Before You Leap

Other insects besides the turfgrass ant can cause temporary disruption to a putting surface.

BY BOB VAVREK



One night's worth of ant tunneling can deposit a considerable amount of sand on a green. Other digging insects, however, can produce similar putting surface disruption.

Competition for golfers is intense across the country, especially at popular resorts where many courses have been built. The smoothness and consistency of the putting surfaces considerably influence how golfers judge the quality of a particular course. Consequently, superintendents have no qualms about making as many applications of insecticides to greens as needed to manage insect pests that they believe are causing disruption to the playing surface.

Unfortunately, insect pest damage to greens is often misdiagnosed. For example, unrepaired ball marks or dollar spot disease activity can mask the injury caused by surface feeders, such as cutworms or sod webworms, on greens. On the other hand, anthills are an unmistakable symptom of insect pest activity. The turfgrass ant, *Lasius neoniger*, prefers well-drained sites to build a nest, and a sand-based green or a green with a significant accumulation of sand top-dressing in the upper rootzone is ideal.

Soil or sand deposits on the playing surface generally are attributed to either earthworms or ants. However, the large nightcrawler *Lumbricus terrestris* L. is rarely a problem on greens, likely due to the high sand content of the upper profile and the fact that fungicides are routinely applied to the turf. Mole crickets, green June beetles (*Cotinis nitida* L.), and cicada killer wasps (*Sphecius speciosus* [Drury]) are other digging-type insect pests that are, on occasion, known to disrupt putting surfaces.

Small mounds of sand above aerifier holes that were filled with topdressing have been a concern on a small but increasing number of courses over the past few years. Enough sand is deposited on the surface to affect mowing operations. The problem sometimes is severe enough to warrant matting or poling before mowing. These operations level the mounds, but they may surprisingly reappear within several hours. Superintendents normally blamed the turfgrass ant, but a close inspection of problem areas reveals different causes. On a few

justification for applying an insecticide to control a damaging population of cutworms or sod webworms. These insects are true turf pests that are capable of causing a great deal of damage to a green. On the other hand, ants and in particular the ground beetle may do more good than harm, in spite of their annoying habit of depositing sand on a putting surface.

The ants most commonly found on greens are foragers that cause no direct injury to the turf. In fact, research at several universities indicates that the

beneficial role that ants play in the turfgrass ecosystem.

The take-home message is — *always make an extra effort to clearly identify possible insect pest concerns on greens or anywhere else on the course before making a decision to apply an insecticide.* Get down on your hands and knees, dig around a bit to obtain a specimen of the pest and avoid making a decision based solely on symptoms. When in doubt, consult with the Green Section staff or university professionals. Reducing beneficial insect populations may result in



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courses the excavations were caused by larger harvester ants, *Pogonomyrmex spp.* A single ant was found beneath each mound of sand. The cause of the mysterious mounding at several courses in Minnesota and Michigan was a predatory ground beetle, specifically *Stenolophus comma* (F.), the striped seed corn beetle.

Why make such a fuss over an accurate diagnosis of these problems when a number of insecticides labeled for turf are capable of controlling these insects? On one hand, there is ample

turfgrass ant plays a significant role in controlling more serious pests like black cutworms. The ants consume a significant percentage of cutworm eggs that are deposited on grass blades by the adult moths at night.

The striped seed corn beetle, sampled from greens at a number of courses across the North Central Region, is considered a biocontrol agent that helps reduce the insect pest population of several agricultural crops. Their role in controlling turfgrass pests has not been studied, but it is likely similar to the

increased pressure from more serious insect pests later in the season. The critical prerequisite for developing a successful integrated pest management program for turf or any other commodity is an accurate diagnosis of the pests. Look before you leap.

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