

Michigan Turfgrass Insects Pests in 1985 and in the Future

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In 1985 the most important lawn insect pest was the chinch bug, followed by billbug, Japanese beetle and European chafer (Table 1). Dry weather conditions contributed to chinch bug damage to fescue and ryegrass lawns. Chinch bug damage to bluegrass lawns seemed more unusual. Lawn care companies throughout the state consistently reported chinch bug as their biggest problem this year. Japanese beetle, European chafer, June beetles and sod webworms occasionally damaged home lawns. Although these insects were not frequently reported as a problem, they caused considerable damage to isolated home lawns.

The major insect problems on golf courses continued to be Japanese beetle and European chafer. Japanese beetles were found most extensively in irrigated fairways while European chafers were found in fairways and non-irrigated rough areas. European chafer problems were limited to Grand Rapids and Detroit areas. Black cutworms were a constant problem on golf course greens throughout the state. Most superintendents seem well informed and capable of managing the cutworms. Turfgrass *Ataenius* was found on almost every golf course, but in few cases were populations dense enough to cause damage.

Unfortunately, we can expect to continue to have grub problems on turfgrass in the future. In the eastern United States three additional beetle species have become major turfgrass pests. The northern masked chafer, oriental beetle and asiatic garden beetle are important turfgrass pests that we should be aware of and looking for in Michigan (Table 2). The northern masked chafer, a major pest in Ohio, has been observed in Michigan. Other potential insect pests include greenbug, winter grain mite and annual bluegrass weevil. These insects and mites have not been adequately studied in Michigan. More observations and research is needed to determine their pest status. In particular, the annual bluegrass weevil should be evaluated to determine the extent of damage to annual bluegrass on golf courses.

Table 1. Common insect pests of Michigan turfgrass.

Chinch bug (<u>Blissus leucopterus hirtus</u>)	Widespread damage to drought-stressed fescue and ryegrass lawns.
Bluegrass billbug (<u>Sphenophorus parvulus</u>)	Widespread damage in localized areas around the state. Thinning out of bluegrass common drought-stressed lawns infested with billbugs.
Japanese beetle (<u>Popillia japonica</u>)	Occasional lawns and golf courses damaged in Detroit area, Grand Rapids and Kalamazoo. Infestations are localized.
European chafer (<u>Rhizotrogus majalis</u>)	Caused extensive damage to a few lawns in Detroit area, Oakland County and Grand Rapids. Range is expanding.

Table 1 (Cont.)

June beetles (<u>Phyllophaga</u> spp)	Serious damage to isolated lawns in Grand Rapids and Detroit suburbs. Also causes extensive damage in the upper peninsula.
Sod webworm (<u>Crambus</u> spp)	Commonly found throughout most of Michigan. Little damage was reported this year. Several species were collected. Lifecycle may vary.
Black cutworm (<u>Agrotis ipsilon</u>)	Found on golf courses throughout the state.
Black turfgrass Ataenius (<u>Ataenius</u> spp)	Commonly found throughout state. Few problems reported.

Table 2. Potential insect pests of Michigan turfgrass. Of these insects, only the greenbug has been reported as a problem in Michigan.

Greenbug aphid (<u>Schizaphis graminum</u>)	Observed to cause damage at 2 locations in Grand Rapids.
Northern masked chafer (<u>Cyclocephala borealis</u>)	A serious problem in Ohio.
Oriental beetle (<u>Anomala orientalis</u>)	A major problem in New York.
Asiatic garden beetle (<u>Maladera castanea</u>)	A turf pest on the east coast.
Winter grain mite (<u>Penthaleus major</u>)	Reported to cause injury in early spring in Ohio. Damage is similar to winter injury.
Annual bluegrass weevil (<u>Hyperodes</u> sp.)	A major pest of annual bluegrass in the eastern U.S. This weevil is probably active in Michigan also.