

## Annual Bluegrass Weevil: Not on Your Radar Yet, But Be Aware!

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Although most likely not currently anywhere near Wisconsin, the annual bluegrass weevil (ABW), *Listronotus maculicollis*, may be one of the most troublesome insect pests of golf courses in the northeastern United States. Formerly referred to as the *Hyperodes* weevil, ABW was originally identified as a serious insect pest of highly maintained annual bluegrass (*Poa annua*) in the metropolitan New York region. Although annual bluegrass is its primary host, ABW has also been reported to lay eggs on, feed and damage creeping bentgrass and perennial ryegrass (*Lolium perenne*). ABW is now damaging turf in all of the Northeastern states as far south as Virginia, as far west as eastern Ohio and as far north as southern Ontario and Quebec provinces in Canada. Most recently, damaging populations of ABW were reported in the mountains of North Carolina.

ABW adults spend the winter in protected sites near fairways, putting greens and tees. In the spring as early as late March, typically when Forsythia is in mid- to full bloom, ABW adults will move to shorter-cut turf including fairways, putting greens, tee boxes and surrounds from adjacent overwintering sites. Adult female



**Bluegrass Weevil Damage.** Photo Courtesy of Gregory Byrne, Golf Course Superintendent at Chambersburg Country Club, PA.

ABW will begin laying eggs in the inside of leaf sheaths of individual grass plants from mid-April through May. The tiny legless larvae hatch after about a week and spend five larval stages feeding and growing. Smaller (younger) larvae feed inside the leaf sheath, and larger larvae migrate (chew their way down) the plant downward to feed on the crown, feeding damage from larger larvae becomes very apparent. The larvae pupate in the soil for about a week before emerging as adults in June and July, and this cycle is repeated for a second (summer) generation. Larvae typically develop more quickly in the summer compared to the spring. This is one of the reasons that it is so difficult to track the development of ABW populations in the summer months because of the overlap between insect stages. Thus, it is not uncommon to find small larvae, medium larvae, large larvae, pupae

and adults all in the summer.

Monitoring for ABW is fairly easy and yet very important for making appropriate management decisions. Adults can be readily observed moving on the surface of putting greens, collars, tee boxes and fairways on sunny days throughout the summer. ABW adults can also be easily brought to the turf surface by using a soap disclosing solution (one or two tablespoons of lemon-scented dishwashing detergent in two gallons of water). Larvae and pupae can be easily sampled by cutting a wedge in the turf or pulling a core out of the turf, ABW larvae look like grains of rice with a brown head, and pupae are all white with a diamond shape.

Again, ABW is currently not known to be in Wisconsin! But, because of the destructive nature of this important turf-grass pest, it is certainly an insect that we must have awareness and an understanding of its biology (behavior, life-cycle, etc.) and management. 🌱



**Adult Bluegrass Weevil**