

Beware Of Insects This Spring

Use endophytic grasses and avoid water stress to reduce chinch bug infestation and injury.

Remove leaf litter prior to adult migration to reduce adult numbers and overwintering cover for Annual Bluegrass Weevil and Black Turfgrass Ataenius.

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Much like turfgrass managers, insects are shaking off the winter chill and getting back to the turf. Some common insect pests you can expect to see this spring are found below. Managers interested in more detailed information are directed to *Turfgrass Insect and Mite Manual* by Shetlar, Heller and Irish or *Turfgrass Insects of the United States and Canada* by Haruo Tashiro.

Sod Webworm

Sod webworms overwinter as caterpillars in soil and will usually pupate without feeding. There is little likelihood that you will see any spring feeding damage from common species. Depending on the species present, adult moths may be seen flying over turf in mid to late June.

Spring Management: None

Chinch Bug

Adult chinch bugs will move from overwintering sites into turfgrass when air temperatures are above 45° F. After mating, females must feed for about two weeks before laying eggs. Eggs are laid in leaf sheaths and take a month or more to hatch in spring. Eggs hatch to a nymph stage that is similar to adult chinch bugs in every way, except for a lack of wings. In May and June all stages of the chinch bug may be present in turf.

Spring Management: Determine the presence of chinch bugs through careful examination of turf and thatch, or by flotation. In general, chinch bugs are a mid-summer problem and are not considered a spring pest of turf. Use endophytic grasses and avoid water stress to reduce chinch bug infestation and injury.

Annual Bluegrass Weevil

formerly Hyperodes

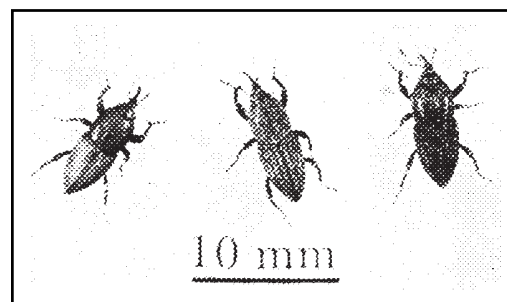
Annual bluegrass weevils overwinter as adults under grass or leaf litter. Adults will migrate from overwintering sites in spring about the time forsythia is in full bloom (about mid-April in southeastern New York). Females will lay eggs in annual bluegrass leaf sheaths and hatching weevils will burrow into stems and feed inside. Larger weevils will emerge from the stems and complete development by feeding on turf roots in the soil.

Spring Management: Remove leaf litter prior to adult migration to reduce adult numbers and overwintering cover. Check for adult weevils in greens mower boxes when forsythia is in full bloom. Because young larvae feed inside annual bluegrass stems, adult populations should be targeted with insecticides when needed. The treatment window is generally that period after forsythia full bloom but before flowering dogwood full bloom.

Bluegrass Billbug

Adult billbugs may be seen wandering on driveways and sidewalks in May and June on sunny afternoons as they move from sheltered overwintering sites into turf for egg laying in July.

Spring Management: Because larvae feed inside grass stems much like Annual Bluegrass Weevil it is the adult stage that is the preferred target to manage. If five to ten adult weevils can be collected in a five minute period by one person, then treatment may be required. Fungal endophytes found in some ryegrasses and fine fescues will reduce billbug feeding damage.



Bluegrass Billbug

Annual White Grub

White grubs are the larvae of Japanese beetles, European chafers, Oriental beetles, Asiatic garden beetles, and masked chafers. Large white grubs will be moving up in the soil into the root zone to feed in early to mid-spring (depending upon grub species). Grubs will feed for a period before moving down in the soil to pupate. Adults may emerge in June.

Spring Management: Under normal conditions spring treatment for grubs is not recommended because grubs will feed for only a short period of time before pupating, rapid turf growth in spring often compensates for moderate grub feeding, large spring grubs are difficult to control with insecticides, and treatment in spring will not reduce fall grub populations. Spring application of insecticides may be warranted if high grub population causing heavy turf damage is detected in early spring. Reduced efficacy should be anticipated.

Black Turfgrass Ataenius

Overwintering adults of BTA are active in late March through April and May. These tiny black adults are often seen swarming in early evening over turf or around lights. Eggs are laid in the soil in May and June, with hatch usually within ten days. It is not unusual to find all developmental stages in the soil in late spring.

Heavy grub populations (> 50 grubs/square foot) may cause general wilting of the turf.

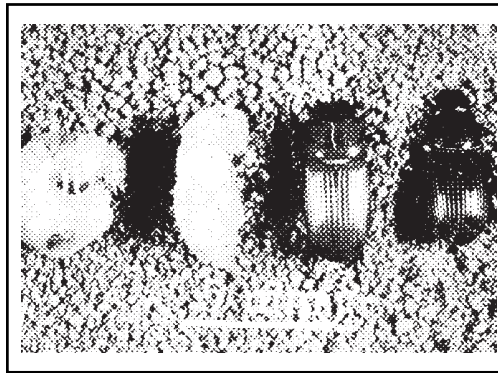
Spring Management: Remove leaf litter prior to adult migration to reduce adult numbers and overwintering cover. Naturally occurring milky disease often reduces ataeenius populations within a year or two of a heavy infestation. High spring populations (>30-50 grubs/square foot) may require insecticide applications.

May and June Beetles

(Phyllophaga sp)

Several species of large grubs have multi-year life cycles. Adults or grubs of May or June beetles may be seen in spring, with feeding damage occurring to turfgrass roots in spring, summer and fall. This situation is different from the more common, annual white grubs.

Spring Management: Five to seven May or June beetle grubs/square foot is generally considered high enough to treat with insecticides. Grubs not controlled in spring feed throughout the summer.



Turfgrass Ataenius

Black Cutworm

This insect will not overwinter in the north-east, but must migrate from more southern regions in late spring. Cutworm adults are often seen around lights in June in New York State.

Spring Management: None

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Fungal endophytes found in some ryegrasses and fine fescues will reduce billbug feeding damage.

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Turfgrass Pest Spring Life Cycles				
Pest	March	April	May	June
Sod Webworm	L	L	L / P	P / A
Chinch Bug	A	A	A / E / N	N / A
An. Bluegrass Weevil	A	A / E	A / E / L	L / P
Bluegrass Billbug	A	A	A	A
An. White Grub	L	L	L / P	P / A
Bl. Turfgrass Ataenius	A	A	A / E / L	E / L / P
May & June Beetle	A / L	A / L	A / L	A / L
Black Cutworm	X	X	A	A

A = adults; E = eggs; L = larvae; N = nymph; P = pupa; X = not present

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CUTT is a quarterly newsletter from the Cornell University Turfgrass Faculty. The purpose of *CUTT* is to bring to you the latest research results from Cornell, as well as other universities, in a timely manner. Each issue, published to coincide with the change in seasons, will help you understand turfgrass better, enable you to manage your turf better, and maintain healthier turf with greater environmental protection ■

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