



## Basics of Turfgrass Insect Identification

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## IPM Approach for Insect Management

- Identify the target pest




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## What insects are we dealing with?

- Grubs
- Billbugs
- Chinch bugs
- Cutworm
- Sod webworm
- Fall armyworm
- Crane fly

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## Insect Identification Tools





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## Grub (Scarab family larvae) Identification

- Include larvae of Japanese beetle, masked and European chafers, oriental beetle, May-June beetle, green June beetle, Asiatic garden beetle
- C-shaped
- Cream colored
- 3 Pairs of Legs



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## Japanese Beetle Life Stages



egg    1st    2nd    3rd    pupa    adult  
          instar    instar    instar  
          larva

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## Grub Identification- Raster Patterns

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## Billbug Identification Basics

- Weevil family
- Prominent Snout
- Approximately 3/8"-1/2" long
- Live in the stem and lower leaf tissue

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## BILLBUG SPECIES

**Bluegrass Billbugs:** Will have numerous fine punctures on the pronotum. The insect is found on cool-season turfgrasses and is 5/16 inch in length.

**Hunting Billbugs:** Will have a Y-shaped ridge in the center of the pronotum and a set of parenthesis like ridges on the outer edges of pronotum. It will reach a length of 3/8 of an inch and are larger than the bluegrass billbug.

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### Black Cutworm Identification

### Variegated Cutworm Identification

### Bronzed Cutworm Identification

Photos Courtesy of U. of Nebraska-Lincoln; Dept of Entomology

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## Fall Armyworm Identification

Courtesy of U. of Nebraska-Lincoln; Dept of Entomology

Photo from Iowa State University; Dept of Entomology


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## Sod Webworm

Courtesy: <https://entomology.unl.edu/turfent/docmnts/swebwrms.shtml>

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### IDENTIFICATION HAIRY CHINCH BUG



- Nymphs Will Vary in Size from .9 to 3 mm ; Color Will Vary from Red to Orange
- Adults Are Small (3-4 mm) , Black , Hairy, and Have White Wings With Black Markings
- Short-Winged and Long-Winged Forms

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### Chinch Bug Damage



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### Cranefly




Photo Credit: Alec Kowaleski,  
Oregon State University

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### Managing Common Insect Pests in Cool-Season Fields Tuesday, 11 a.m.

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