

# JULY

**Look Before You Treat...  
Know where the pests are!**



### Insects and Surface Damage:

Insects suck juices from plants and cut or snip grass stems above ground. (Insects 1-4)

### Subsurface Damage:

Root system is eaten and plant uptake is disrupted or prevented. Damage appears as wilted turf that does not revive when watered. (Insects 5)

**1**



Cutworms are a gray-brown-black caterpillar that curl into a "c" when disturbed.

**2**



Sod Webworms are a young caterpillar that have black heads. Full grown caterpillars are brown to green, have dark spots, and grow up to 3/4" long.

**3**



Adult Chinch Bugs get up to 1/4" long, have black and white wings that have a black triangle on them.

**4**



Adult Bluegrass Billbugs have snouts; can be seen on driveways and sidewalks migrating to the lawn in spring.

**5**



Grubs: "C" shaped cream to white grubs feed on roots of all grasses. European Chafer: Damage threshold 5-10 grubs per square foot. Japanese Beetle: Damage threshold more than 10 grubs per square foot. Oriental Beetle: Damage threshold 8 grubs per square foot.

**Moles, skunks, and crows...**these nuisance pests feed on grubs, earthworms, and other insects in the soil. Trapping is the best control method. Sample to determine if grubs are the primary problem.



**Look Before**



**You Leap**



**Into Control**

## S a m p l i n g T e c h n i q u e s

### Turf for Grubs:

Cut 3 sides of a 1 square foot area of turf. Peel back and count grubs. Sample a few areas approximately 20 yards apart. Replace sod and water.

### Flotation for Chinch Bugs:

Insert coffee can (with both ends removed) at least 1 inch into soil and fill with water. Insects will float to the surface in approximately 5 minutes.

### Irrigation for Sod Webworm and Cutworms:

Mix 2 - 4 tablespoons of liquid dishwashing detergent with 1 gallon of water and pour over 1 square yard. Insects will come to the surface in approximately 10 minutes. Flush surface water.

### Other Ways to Reduce Chemical Inputs and Protect water Quality

Scout for pests. The earlier a problem is detected, the more control options will be available. Plant the right grasses. Look for endophyte-enhanced grasses that resist surface-feeding insects. Know the pest's life cycle. Insecticides are *ineffective* when the insects are not active or are too large, such as in the spring. For subsurface-feeding insects the pesticide must be watered in immediately after application before it dries on the leaves. Do not apply materials when ground is frozen or saturated to avoid runoff and surface water pollution. To prevent drift and volatilization (which releases pesticide particles into the air) avoid applying materials when temperatures are high or it is windy.

### July is a good time for:

**Mowing:** If your mower has more than 8 hours of use it's time to sharpen the blades.

**Fertilizing:** Should be avoided due to heat and less rainfall.

**Irrigating:** If rainfall has been insufficient, water your lawn deeply (possibly once every five to ten days) to the bottom of the root zone to encourage a deep root system.