

Pests

Can't stand the thought of insects invading your lawn? Take a minute and consider. Let's face it. It is impossible to have an insect-free lawn, and the fact is that you don't want that too. Many insects and organisms that live in your lawn are beneficial and harmless. Out of hundreds, there are only a handful that are going to really bug you. A couple of aphids or chafer grubs hanging around your lawn aren't going to cause you much trouble. The problem is when they signal all their bug buddies and your lawn becomes a local restaurant. Your lawn can take a certain amount of insect damage and recover just fine, but an all-out assault can do serious harm.

MAJOR PESTS: Leatherjackets, Chafer grubs , Frit fly

MINOR PESTS: Wireworms, Sod webworms, Ants, Moles

PESTS BIOLOGY AND LIFE HISTORY

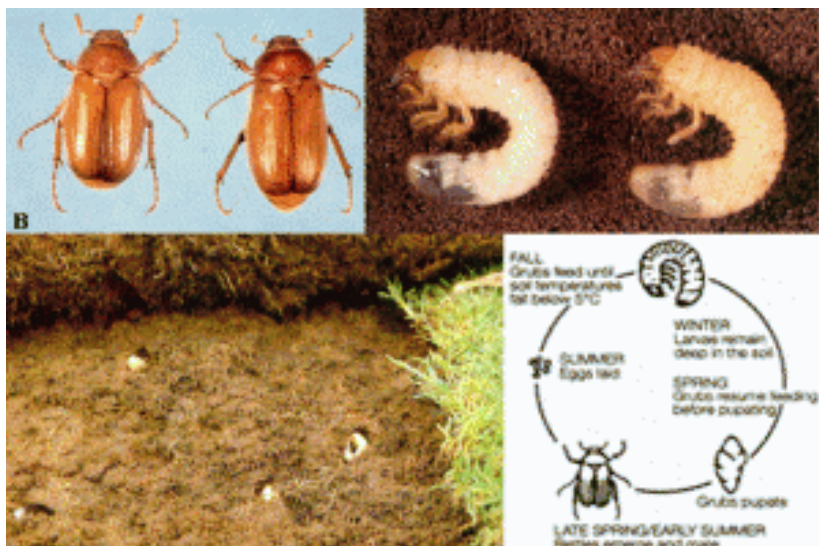
- All insects begin their lifecycles as an egg
- They hatch into an immature feeding and growing stage
- Can be nymph or larva depending on their metamorphosis

Complete metamorphosis - egg, larva, pupa, adult - feed and live in different habitats throughout their lifecycle

Incomplete Metamorphosis- egg, nymphal, adult - insects that feed and live in the same habitat for entire life

Turf Insects live and feed in the thatch, roots or surface of the grass plants.

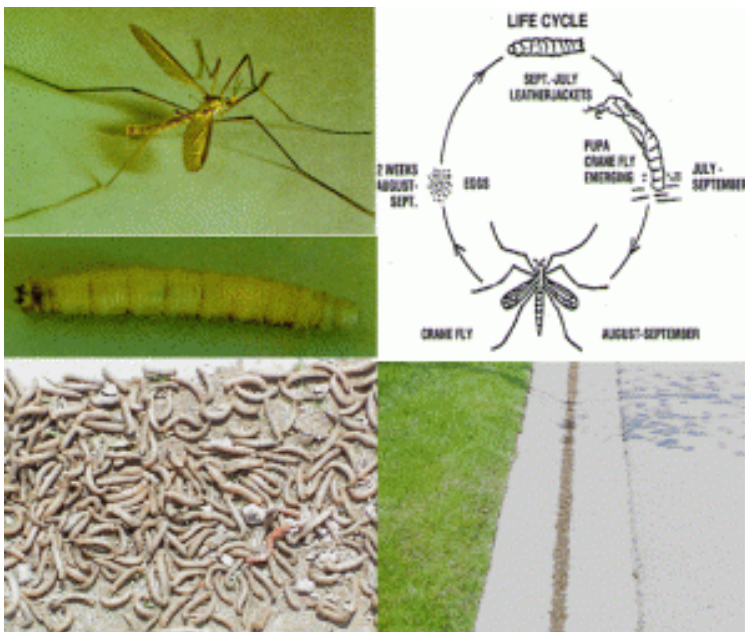
European Chafer Grubs (*Rhizotrogus majalis*)



- complete metamorphosis
- chewing mouthparts
- subsurface pest
- Larvae hatch mid to late July and feed into late fall
- Early stages of the larvae are more easily controlled
- Treatments must be thoroughly watered in order to be successful
- Healthy irrigated turf can tolerate to 5 to 10 grubs per

- square foot without severe damage
- Dead brown patches among green areas of turf
- Skunks and raccoons can further destroy grub infested turf
- Damaged turf lifts up easily as a result of grubs feeding on grass roots
- One generation per year
- Overwinter as 3rd instar grubs
- Feed for a short time in the spring
- Early May pupate
- Adults appear mid to late June
- Congregate and mate in late June - often seen mating near trees, lights

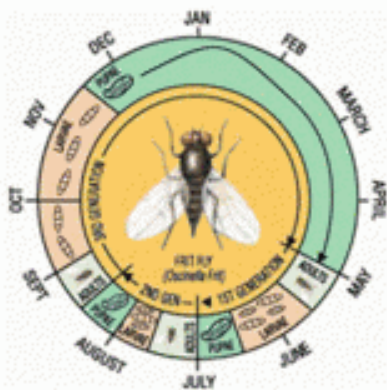
Leatherjackets - European Crane Fly (Tipula paludosa Meigen)



- marsh fly, leatherjackets
- complete metamorphosis
- larvae gray with leather texture
- one generation per year
- overwinters as 3rd instar larvae
- adults emerge from previously infested turf usually in late July or August
- mate and lay their eggs in one night
- females usually lay about 150 eggs but can lay up to 350
- Eggs hatch rapidly and 1st and 2nd instar larvae develop within 2 months.
- By November 3rd instar larvae prepare to overwinter in the turf

- If daytime temperatures remain above 10C larvae can remain active
- Larvae resume feeding in March and April
- They continue to mature into 4th instar larvae and feed into July
- Pupate in July before becoming adults
- prefer moist shady locations
- feed on root hairs, roots and the crowns of grass plants
- damage is most severe in the spring when larger larvae are present
- feed at night consuming stems and leaves
- damaged areas appear yellow or wilted
- destruction of roots allows turf to lift easily
- Control should be implemented in the spring and fall when larvae are present
- 20-25 larvae per square foot would warrant a control

Frit fly (*Oscinella frit* L.)



- Larvae are yellowish-white in colour and can grow up to 5mm long.
- There are usually 3 generations per year, and the third generation which emerges in late August/early September is the most damaging.
- Eggs are laid on or near grass plants and the larvae tunnel into the centre of grass and cereal plants causing dead-hearts. They may then move to another tiller or plant, even if the field has been ploughed.

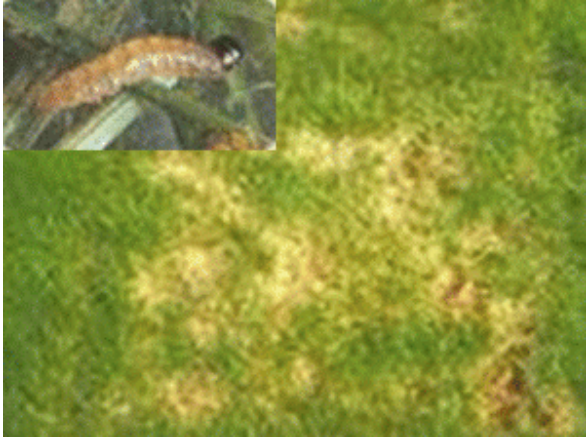
Wireworms



- Lay eggs in spring in turf ; larvae emerge soon after and begin feeding on plant roots.
- Remain as feeding larvae for two to six years.
- Most often found in moist soils.
- They damage to the lawn resembles grub damage: irregular patches of turn brown and die.
- Dead turf is easily lifted from the soil.

- Wireworms are the hard-shelled larvae of Click Beetles.
- They grow to about 1 1/2 inches in length and the adult beetles are 1/2 - 3/4 inch long with flattened dark brown bodies, often with darker markings.
- Overwinter as adult beetles or pupae

Sod Webworms



- Dead patches are 1-2 inches wide, with grass blades chewed off just above the thatch line.
 - Usually prevalent in the hottest, driest areas of the lawn.
 - Larvae are slender, black spotted grayish caterpillars approximately 3/4 inch long and sluggish in their activity.
 - They hide during the day in shelters constructed of bits of grass and debris.
 - Overwintering larvae emerge and feed at night or on overcast days in spring.
- They mature into moths in early summer and lay eggs, which hatch into larvae and repeat the cycle.
 - There may be as many as three generations per season.

Ants



- Large mounds of soil, 1-2 feet in diameter and more than 1 foot high, appear throughout the lawn.
- Ants are reddish in colour and up to 1/4 inch long.
- The head is normal size, but the last segment of the antenna is longer than that of other ants.
- They are most often a problem in sunny sites and clay soils.
- saturate the mound itself with insecticidal soap, or call Weed Man to help you.

Moles



- Moles are rodents that live underground.
 - They feed on earthworms, grubs and other insects.
 - Cause damage to lawn by severing grass roots, raising turf.
 - Moles are 6-8 inches long with velvety gray to black fur.
 - When moles are present you will notice raised ridges, 3-5 inches wide, that crisscross the lawn.
- These ridges sometimes turn brown because tunnels have destroyed the grass roots.
 - Moles are hard to control because of the temporary nature of their tunnels, but when you get rid of their food source, the animal will no longer stay there.

STAYING ON TOP OF THE PEST PROBLEM

A healthy lawn is your best defense against pest damage. You can't keep them out, but a lawn that is in good shape will both enable and show less pest damage and will recover more quickly when the pest are gone. **Proper watering, fertilising and mowing practices can keep your lawn from becoming infested in the first place.** Often, insects like to live in a thick layer of thatch, so aerating your lawn when the thatch gets too thick will discourage these pests. Monitoring your lawn and keeping an eye out for early signs of pest damage will allow you to control the situation before it gets out of hand.