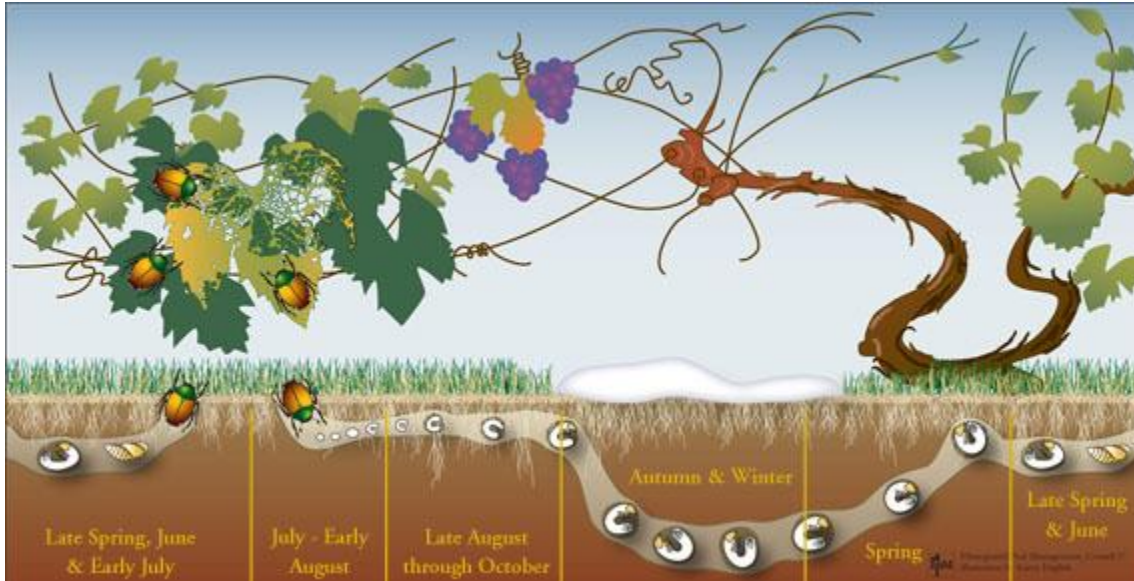


Subsurface Insect & Grubs

The term grubs is a generalization description for subsurface insect larvae that feeds on the roots of grass. June bugs, chafers, Asiatic beetles & Japanese beetles all fall into this category. Feeding and damage can go on for an extended period of time before it is noticed. Yellowing of the turf, spongy feeling underfoot, turf that peels up like a carpet and animal foraging damage are the key indicators that a prompt curative application of grub control is needed.



In late June and early July, Japanese beetle adults emerge from the ground and begin to search for food and mates. The adults can fly as far as a mile and feed on a multitude of plants; their favorites include roses, grapes, and linden trees. Other scarab beetles may go unnoticed at this time because they are not attacking ornamental plants.

In July, female beetles spend 2–3 weeks laying up to 60 eggs in the soil. Depending on soil moisture and temperature, eggs hatch about 2 weeks later. These first-stage ("first-instar") grubs feed on grass roots for most of August. The grubs are small, feeding close to the surface, and vulnerable to biological and chemical insecticides at this time. If possible, control high populations at this stage, before feeding on turf roots is noticeable.

From late August through October (depending on your climate), grubs molt into a second and then a third stage. As they grow, grubs consume more roots. Damaged turf often appears now.

As temperatures drop in autumn, grubs move down in the soil. They overwinter as third-instar grubs below the frost line.

In the spring, they move up in the soil to feed on roots for a very short time. Most of the lawn damage seen in the spring is a result of fall feeding, not spring feeding.

In late spring, grubs stop feeding and turn into pupae that are resistant to insecticides. In late June or early July, beetles emerge from the pupae and crawl out of the soil, completing the cycle.