

## Grub Prevention and Control

**Beetle grubs** are a major cause of lawn damage each spring and fall in our area. Grubs are the larvae stage of beetle cycles. Adult beetles lay eggs from early to mid-summer. In a short time the eggs develop into grub worms which begin to feed on grass roots from mid-summer until fall's cooler soil temperatures force them to seek refuge at deeper soil depths. The grubs then hibernate until spring temperatures warm the soil. They then resume feeding until they pupate or "hatch" into mature beetles anywhere from late May through mid-July.

**The Damage**—The resulting damage (which may not show until the summer) appears as brown patches of dead turf that enlarge as the grubs continue to feed. To check for grubs, pull at a section of dead turf. It will roll back like a swatch of carpet. Dig down at the edge of a damaged area and you will find the grub worms themselves; grayish, white grubs with gray or brown heads, approximately 1/2" to 3/4" long. They will be curled into the shape of the letter "C". Immature grubs are milky gray in color and resemble elongated eggs. They will be about 1/4" long.

**The Control**—The best way to prevent serious grub injury to your lawn is to grow strong, healthy grass. A vigorous, healthy lawn can outgrow or recover from damage without complete renovation. There are many variables in trying to achieve maximum grub control, including the type of grub, the timing and type of insecticide, the amount of thatch, and how well the insecticide is watered into the soil. Remember that maximum control is usually 80% to 90%. An otherwise healthy lawn can tolerate 4-6 grubs /sq ft without showing grub damage. It is essential that any insecticide you apply be watered in immediately and thoroughly after application. Water each area treated for at least one hour.

**The best time to treat** for grubs is mid-April to mid-May and July to mid-September. We prefer 2 insecticides for grub control: Dylox and Merit. Both Merit and Dylox are relatively safe for humans and the environment. The active ingredients in both are very low and are broken down by soil organisms. Yet, Dylox and Merit are both effective grub controls when timely and properly applied. Merit (Imidacloprid) (found in Bayer Advanced™ Season-Long Grub Control) is best to apply from May to mid-August to help protect your lawn in advance. Dylox (Trichlorfon) (found in Bayer Advanced™ 24-Hour Grub Killer Plus) is best to apply when grubs are already present (generally doing damage from August through September). As the summer turns into fall, grubs grow larger and their feedings increase, grub damage is usually worse. Dylox may be applied in early to mid April to kill resurfacing grubs, but since most of the grub damage is done in early fall, hitting grubs then is most effective. A good idea is to rotate these products by using one product one year and the other product the next year so that a resistant population of grubs cannot build up. Come see us for the proper application of Dylox and Merit for maximum grub control!