



The first official day of summer is almost here. June 20th marks the start of the summer season. This means a good time for cookouts, picnics, swimming, and grub control. Not exactly what you had in mind for summer fun? Knowing the pest and its habits can help keep you from spending all your summer fun time dealing with grubs.

White grubs are the larvae of a group of beetles called scarab beetles. There are many scarab beetles in Nebraska, but only a few can cause significant damage to turf. The more common ones include the masked chafer, green June bug, Japanese beetle, and the May/June beetles. White grubs all look very similar. They have C-shaped bodies that are cream or white colored, have reddish-brown heads, and three pairs of short legs right behind the head. The only way to tell the differences between the grubs is to look at their rastral patterns, or the pattern that the hairs make on the hind end.

There are minor differences between the species, but they all have the same type of feeding patterns. The grubs feed below the soil surface on the roots of all common turfgrass species. They are capable of destroying the entire root system of the plant if infestations are heavy enough. The first signs of grub damage include areas of pale, discolored, dying grass displaying signs of moisture stress. The adult beetles of these grubs rarely cause much damage and are more of a nuisance than anything.

Damaged areas are small at first, but will grow rapidly as the grubs grow and enlarge their feeding area. The affected areas may feel spongy and can be easily lifted from the soil surface or rolled like a carpet. Another indicator that your lawn may have grubs is small areas that are dug up by animals like raccoons, skunks, or moles foraging for the insects.

A few grubs in your lawn doesn't necessarily mean that insecticidal control is needed. Each species has their own threshold levels that warrant insecticidal control. If you have more than 8-10 masked chafer grubs per square foot or 3-5 May/June beetles per square foot, then insecticidal control is warranted. If you notice the damage later in the season, usually around the first week of August, a curative treatment will be needed. If you have had a history of grubs in your lawn, a preventative insecticide application the third week of June through early-July will have the insecticide in place when the eggs begin to hatch.

Products for grub control have changed over time. Before 1999, grub insecticides were used as curative treatments. They were fast acting, had a short residual activity and needed to be applied within a narrow treatment window. New types of insecticides are now available that offer the opportunity for preventative treatments. These products are slower acting, but they have a much longer period of residual activity and are available for a much wider treatment window.

There are a wide range of products that can be used to treat grubs. Chlorpyrifos (Dursban), carbaryl (Sevin), isazophos (Triumph), Chlorantraniliprole (Acelyprin), Imidacloprid (Merit), and Halofenozide (Mach 2) are just some examples of the products that will work well to control grubs. Trichlorfon (Dylox) can be applied for curative control if white grubs exceed threshold levels later in the season. Be sure to read and follow the label instructions.

Keep in mind that no registered insecticide is 100% effective. On average they usually kill 75 to 90% of the grubs present in any given area. Re-applications may be necessary when grub populations get very high. For best results, make sure to water in the grub treatment with at least ½"-3/4" of water.

Scouting early and catching the problem before the numbers get too high will help allow you to have a worry-free (and grub free) summer.

Elizabeth Exstrom is the Horticulture Extension Educator with Nebraska Extension in Hall County. For more information contact Elizabeth at elizabeth.exstrom@unl.edu, her blog at <http://huskerhort.com/>, or HuskerHort on Facebook and Twitter.