

*June 13, 2012 June 13, 2012 Yard and Garden – 06-16-2012 - Ted Griess / Extension Horticulture Assistant*

I have recently been reminded of a movie which I watched long ago titled, *Run Silent, Run Deep*. The World War II movie starring Clark Gable and Burt Lancaster was based on a novel that had been written a few years earlier by Commander Edward I. Beach. The title, *Run Silent, Run Deep*, refers to a submarine stealth tactic — silent running. By remaining submerged deeply in the ocean with engines off, submarine commanders were able to avoid being detected by enemy ships on the surface. Only strategically placed depth charges could destroy submarines.

Similar to stealth-like submarines, a destructive enemy of your turfgrass may be running silently just below the surface of your lawn. If you plan to destroy them before they destroy your lawn, now is the time to consider dropping depth charges. However, in this situation one's choice of munitions might be imidacloprid rather than TNT.

The dreaded enemies of your turf, which are running silently, are masked chafer grubs, May/June beetle grubs and black turfgrass atenioides larvae. All three are what we commonly call white grubs. Rather than sending out torpedoes to destroy ships on the surface, these destructive enemies are ready to dine on the roots of your turfgrass, resulting in total destruction of your lawn.

All white grubs are similar in appearance with cream-colored, C-shaped bodies, reddish brown heads and three pairs of short legs located directly behind the head. White grubs are among the most destructive insect pests to turfgrass. They feed below the soil surface on the roots and rhizomes of all commonly grown turfgrass species and can eliminate the plant's entire root system. When abundant, they can destroy large areas of turf in a very short time. The first evidence of their presence is localized patches of pale, discolored, dying grass displaying symptoms of moisture stress. Small at first, the damaged areas grow rapidly. A lawn damaged by grubs is easy to detect. Not only does the grass appear dead on the surface, but if one grabs a clump of the dead grass, it will lift up like a cheap toupee.



Masked chafers are annual grubs. Usually, the adult beetles lay their eggs in turf during June and July, and the eggs usually hatch before August. Immediately, the grubs begin feeding on grass roots. Damage generally occurs in late summer and early fall. With the onset of colder temperatures, the grubs move deeper in the soil and overwinter. In the spring, they return to the root zone, feed lightly and emerge as adults.

May/June beetle grubs take three years to complete their cycle. The adult beetles are not destructive to turf; rather they mate during the months of May and June and lay their eggs in the soil of the lawn. A few weeks later the eggs hatch, and small grubs feed on turfgrass roots. They, like the Masked Chafer grub, will move more deeply into the soil for the winter and re-emerge the following spring, actively feeding and growing in size. Again, they move deeply into the soil for the winter. On their third season, they travel to the surface to feed on the roots of

grass; then they pupate, changing to the adult beetle. The adults emerge during May and June to start the cycle again. The adult beetle can easily be seen flying around lights at night.

Black turfgrass ataenius beetles deposit their eggs in the soil of turfgrass as early as March and April. The larvae feed on the roots of grass for three to five weeks, pupate and emerge as adults to start a second generation. Damage by this insect has primarily occurred on golf course fairways.

Generally, damage from white grubs is most apparent in mid-August through early September; thus, in most years, the first week in August is the optimum time to control white grubs in turf. Due to the most unusual early spring we experienced, experts from the University of Nebraska are encouraging homeowners to treat for grubs now.

White grubs, like submarines, are now running silently just below the surface of your lawn. Although they may presently go undetected, if defensive action is not taken, soon their destruction will be apparent. It is time you start dropping depth charges. Avoid using TNT; rather use an insecticide such as imidacloprid granules and follow the label directions. The battle begins.