

Number 13 – August 8, 2016

### **Green June Beetle**

Green June beetle adults are stocky, green, and about three-fourths inch long. They make a loud buzzing sound when they fly and apparently prefer to fly into upright objects, including people. They are most active on warm, sunny days and are present throughout Illinois. They used to not be present north of Peoria, but they were found this week in Oregon, IL in Ogle County. Green June beetle adults feed on flower pollen and are commonly found on flowers. They also feed on soft fruits, causing severe damage to ripening peaches.

Their larvae live on dead grass, being common in piles of grass clippings, piles of horse manure, and in turf. The larvae grow to about two inches long and appear similar to white grubs except that they are less likely to be C-shaped when found. They have an interesting habit of foraging above ground at night where they are sometimes spotted on sidewalks. They have shorter legs than other white grubs, so they flip over and crawl on their backs. They use long setae on their backs to grip the surface as they crawl.

When feeding in turf, they tend to be present in higher numbers under trees. They leave one-half inch diameter holes in the soil when they come out of the soil to forage at night. Because they feed on dead grass blades, they do not do direct

damage to turf but can loosen the roots as they feed. If treatment is needed, watering in an application of carbaryl (Sevin) or applying a white grub insecticide application will provide control.

Areas with green June beetle grubs commonly have large numbers of scoliid wasps whose larvae feed on them. Scoliid wasps are black and red with yellow spots on the abdomen. They are about one inch long and have bluish transparent wings. They are quite active during the day flying low over the turf. Although fearsome looking, they are reluctant stingers. (*Phil Nixon*)

### **Cicada Killer**

We are receiving calls about cicada killers and sand wasps. These are solitary wasps, the female of which digs a 6- to 10-inch burrow (with a diameter of 1/4 to 1/2 inch) in the ground. She locates and stings a large insect such as a cicada or katydid, drags it to a chamber in the burrow, and lays an egg on it. The female covers up the burrow, digs another one, and repeats the process.

The egg hatches into a legless, grub-like larva that eats the paralyzed insect, pupates, and emerges the next summer as an adult. Research has shown that this stung, paralyzed host "wakes up" weeks later if taken from the female before she lays her egg on it. Of course, in nature, the host is eaten before it has a chance to wake up.

Male wasps establish aerial territories and patrol for intruders. Someone walking into the territory typically is confronted with a large wasp hovering in front of the face, zipping to the side and to the back before leaving.

A male cicada killer drives off males entering his territory and tries to mate with female cicada killers that enter. Apparently, after determining an intruder is neither, he ignores the person. Unfortunately, in walking across a lawn, fairway, or other area where these wasps are nesting, the process is repeated as a person walks through each male's territory.

These wasps are unlikely to sting. Wasp and bee stingers are modified egg-laying devices, so males are not equipped to sting. Females sting if crushed, as when stepped on or grabbed by bare hands. As a boy, I spent hours trying to stomp cicada killers coming to their nest or run them over with my bicycle tire and was never stung--I always wore shoes.

Cicada killers are about 2 inches long and black, with yellow band-like marks. The head and transparent wings are brownish red. There are several common species of sand wasp, which tend to be black, with yellow, white, or orange banding. Sand wasps are typically 1 to 1-1/2 inches long, with black transparent wings.

Though these wasps are not dangerous, they are intimidating. In home lawns, educating the human residents may foster tolerance. Wasps are more common in bare soil areas, so sodding, planting ground-covers, or mulching may greatly reduce the problem.

Nesting areas in public areas can become a major problem. Individual bur-

rows in dry areas can be treated by applying carbaryl (Sevin Dust) or deltamethrin (DeltaDust) alongside burrows where the female wasp will track through it. She will be killed after ingesting the dust while grooming.

If sand boxes, volleyball courts, and other infested areas can be covered with a tarp during many of the daylight hours, the cicada killers will leave without the need for insecticide use. When the females are killed or leave, the similar-appearing males will leave. Sand used below children's swings, jungle gyms, and other playground equipment can be replaced with bark mulch or shredded tires. (*Phil Nixon*)

### **NIOSH N95 Holiday**

The NIOSH is celebrating N95 Day on September 6, 2016. More information on the event is at <http://www.cdc.gov/niosh/npptl/N95Day.html>.

The National Institute for Occupational Safety and Health (NIOSH) is the U.S. federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. NIOSH is part of the Centers for Disease Control and Prevention (CDC) in the U.S. Department of Health and Human Services.

The Occupational Safety and Health Act of 1970 established NIOSH. It has the mandate to assure "every man and woman in the Nation safe and healthful working conditions and to preserve our human resources." NIOSH has more than 1,300 employees from a diverse set of fields including epidemiology, medicine,

nursing, industrial hygiene, safety, psychology, chemistry, statistics, economics, and many branches of engineering. NIOSH works closely with the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration in the U.S. Department of Labor to protect American workers and miners.

NIOSH is familiar to pesticide applicators as the certifier of respirators and other personal protective equipment (PPE) used in the application of pesticides. For instance, N95 is the NIOSH designation for a respirator that filters at least 95% of airborne particles but it is not resistant to oil. (*Phil Nixon and David Robson*)