

# Musings from the Extension Office

Stafford Cooperative Extension Office  
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## Insect Identification



An elderly couple came in to the office complaining of upper body bites. They brought in with them an insect they thought was the most likely culprit. As you can see in the photo, it is about 3 mm long. As pointed out to me by Guy, the key to the identification is the little

horn like structure you see at the end of the red arrow. It is a click beetle and it was not the cause of the client's bites.

Click beetles are elongated, parallel-sided and usually bear backward projections on the side corners of the shield behind the head (pronotum). They are somewhat flattened and range in size and color by species. Smaller species are about 1/4 inches long. Most species are brown to black in color,



although some have reddish and yellowish colors and patterns. When placed on their backs, these beetles characteristically “click”, snapping their thoracic segments (prothorax and mesothorax) to cause their bodies to flip in the air to right themselves. Larvae (see photo above), called

“wireworms,” are usually hard-bodied, brownish, ½ to 2-½ inch long and cylindrical, with three pairs of tiny true legs behind the head and a flattened, and an ornamented shield-like segment on the tail end of the body. The larvae of some click beetles eat roots and seeds, and are significant pests of potatoes, corn and other crops. The click beetle I am most familiar with is the eyed click



beetle, *Alaus oculatus* (Linnaeus)(photo below). It reaches 1-½ inches in length and is beautifully marked with prominent oval eye spots on the pronotum and mottled gray wing covers.

## **Insect Behavior**

A client recently asked Guy about what to do with cicada killers who think his home is a yearly vacation spot. My ears perked up since I have the same problem. The lawn between my house and my neighbors is filled with their nest which you can see in the following picture.



These solitary wasps choose sites with specific characteristics: well-drained, light-textured soils in full sunlight that are near trees harboring cicadas. They may dig along sidewalk or patio edges, in flower beds, gardens, or lawns. As much as 100 cubic inches of soil may be brought to the surface as tunnels are formed. This can be unsightly in highly managed turf and the accumulations may smother grass. Sometimes skunks may dig up areas that have been extensively tunneled by the wasps to feed on cicadas and wasp larvae.

Large aggregations of cicada killers can build up over time. An estimated 40% of the developing larvae (a dozen or more per tunnel) may emerge as adults the following year so numbers can increase rapidly.

Females have significant stingers which they plunge into cicadas to inject venom that paralyzes them. Without doubt, their stings are painful. However, they are not aggressive and do not have the nest-guarding instinct of honey bees and

hornets. You can walk through areas where they are active without attracting attention.



The buzzing noise that the wasps make and the warning colors on their wings and bodies intimidate and discourage predators that see them as a large meal. When attacked, females will use their stinger to protect themselves. Males lack stingers but are territorial. They will approach anything that enters "their area", including walkers, people mowing or using weed-eaters, or riding tractors. They may hover and challenge trespassers but are harmless. That can be easy to forget when staring down a big wasp.

Can cicada killer wasps be controlled? Control may be desirable in situations where physical damage is occurring or the presence of the insects is causing significant distress. The wasps were controlled in a West Virginia study by sprays

of the pyrethroid insecticides (cyfluthrin or cyhalothrin). Applications were made directly into the burrows or only to the entrances where the wasps contacted the insecticides as they entered and left. Broadcast sprays over the area where cicada killers were nesting were not effective in reducing their numbers. If practical, keep their nests wet or regularly churn the sand to discourage wasps from establishing their tunnels.

Will cicada killers every go away? Regretfully, no. These wasps will stay and thrive where their basic needs are met. Even if aggressive control measures kill the inhabitants, the site will remain attractive to new settlers in ensuing years. Bad news for me!

## **Plant Identification**

People are still calling the office about Giant Hogweed (*Heracleum mantegazzianum*). I thought I would review its identification characteristics and talk about lookalikes.



Giant Hogweed

**Don't do this!**

Giant hogweed is an invasive plant that goes beyond the standard practice of taking over native habitats and crowding out the sources of food and cover that our native wildlife species depend upon. They also shade out all competition creating bare earth and an erosion hazard, and are a serious public health threat. Introduced as an ornamental plant from Eastern Europe sometime in the 20th century, giant hogweed prefers moist soils, but does well in many different environments. It is especially problematic along the banks of waterways, as its seeds can float downstream for up to three days.

In general, a mature giant hogweed plant is bigger in every respect than all of its lookalikes. It grows taller—up to fifteen feet, has bigger leaves—up to five feet wide, and has a thicker stem—up to four inches in diameter. The stem has purple blotches that surround hollow spines. The leaves are deeply lobed, and the edges are very serrated and pointy, a bit like a huge exaggerated maple leaf. Look alike species have leaves that are smaller with shallower lobes and more rounded edges, or have compound leaves with separate leaflets. The plant reaches its tallest height when it flowers in mid-May to June after four or more years of growth. The flowers are flat-topped clusters of small white flowers about two and a half feet wide. The plant dies the same year that it flowers, although there are occasionally suckers that survive. The sap of giant hogweed is laced with chemicals





Flowers



Seeds

called furocoumarins. The plant probably evolved with these compounds to help protect against fungal attack, but they also serve as a potent weapon against humans and other animals. The sap is present throughout the plant, and is especially heavy in the base of the stem and in the spines on the stem. Just touching these spines can be enough to get sap on your skin.



If the sap does contact skin, these chemicals eliminate the skin's natural protection from the sun's ultraviolet rays, especially in the first two hours after contact. Without this protection, your skin easily burns, and even brief exposure to the sun can lead to severe injury lasting months. Increased sensitivity to sunlight often lasts for years after contact. The moral of the story is to approach this plant with extreme caution and a full set of protective gear, including long sleeves, pants, and eye protection. Waterproof synthetic gear offers further protection from the sap. The seed heads contain 50,000 or more seeds and should be the main target of control. It is essential that seeds are not allowed to set. Seeds are viable in the soil for up to seven years, although most will have germinated after three.















Excellent short You Tube video entitled Giant Hogweed, Don't Touch. Go to <https://www.youtube.com/watch?v=KaV2jwNT0MQ>.

Excellent PDF on Giant Hogweed. Go to <chrome-extension://oemmndcbldboiebfnladdacbfdmadadm/https://www.warnell.uga.edu/sites/default/files/publications/BW-2018-112%20Rawlins.pdf>.

Till next time. David/Guy

### Giant Hogweed Lookalikes

Plant Name	Height	Stem	Leaf	Flower	Flowering
Wild Parsnip	 Up to 5 feet	 Yellowish-green with full length grooves (no hairs or bristles)	 Compound, pinnate, 5 to 15 toothed leaflets, variably lobed, yellowish-green	 Single flower stalk with flat-topped umbel of yellow flower clusters	late May - early July
Angelica	 4 to 9 feet	 Smooth, waxy purple, 1 to 2.5 inches in diameter (no hairs or bristles)	 Compound leaves that may extend up to 2 feet wide	 Softball-sized and shaped clusters, greenish-white or white	mid May - mid June
Poison Hemlock	 4 to 9 feet	 Smooth and waxy stem with purple blotches, 1 to 2 inches in diameter (no hairs or bristles)	 Bright green, small and fern-like, may appear glossy	 Small and white arranged in numerous flat-topped clusters on all branches	late May - late June