



## April's Weeds of the Month: Giant Hogweed and Wild Parsnip

Prepared by John Condzella and Leslie A. Weston, Landscape Weed Management Team



Photo by David Eagan

Giant Hogweed (*Heracleum mantegazzianum*) and wild parsnip (*Pastinaca sativa*) are both members of the carrot or parsley family and were introduced to the United States as ornamentals from Asia in the late 1800s or early 1900s. Both plants are known to produce a clear, water-like sap that contains toxins called furanocoumarins or psoralens which cause photodermatitis. When skin comes in contact with this sap and is then exposed to sunlight, painful, burning blisters will appear that may develop into purple-colored scars. Severe dermatitis requiring hospitalization can result. Although wild parsnip is small and looks similar to the wild carrot, giant hogweed may reach a height of 10 to 15 ft. The plant's name comes from Hercules, pertaining to its stout appearance.

**Description:** Giant Hogweed has hollow, ridged stems that are 2-4 in. in diameter and anywhere from 8-15 ft tall, with coarse white hairs and purple blotches. The leaves are lobed, deeply incised and up to 5 feet in width. During June and July when flowering, the Giant Hogweed will have many small white flowers which cluster at the very top of the plant forming a large umbel up to 2 ½ feet wide. The Giant Hogweed fruit containing the seed is dry, flat, oval shaped, about 3/8 in. long and is tan with brown lines.

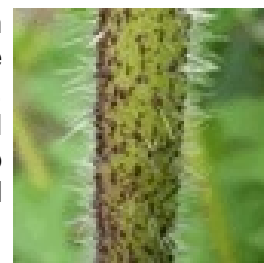


Photo: Wisconsin DNR



Photo: Wisconsin DNR

**Reproduction:** Giant hogweed is a perennial which takes several years from germination to produce the first flowering stalk. Seed longevity is known to be greater than seven years. Reproduction is through seed and vegetative buds formed on the crown and tuberous root stalk. Abundant seed production, a persistent root stalk, and vegetative reproduction are cited as reasons for its capability to colonize rapidly and expand.

**Habitat:** Giant Hogweed is often found along roadsides, in ditches, vacant lots, wooded ravines, waste ground, right-of-ways, streams and rivers. Giant Hogweed prefers rich, damp soils and can grow in varied light conditions. Due to Giant Hogweed's prevalence in riparian areas, some consider it an invasive fresh water weed.



Photo: CT Invasive Plant Working Group

### **Control:**

Giant Hogweed can be controlled via cultural means, including herbicides and even has some potential for biological control. Considering the herbicides; 2,4-D, MCPA and dicamba will kill above ground parts but are not particularly effective on the perennial rootstalks. Triclopyr and glyphosate are considered the most successful herbicides and should be used carefully around desirable

species since glyphosate is non-selective and triclopyr will injure other broadleaf ornamentals. Application during bud stage and while the plant is actively growing is recommended. Trials with selective postemergence products are also underway to evaluate potential control. Giant Hogweed can also be manually removed, with care taken to uproot and remove much of the root stalk. This is not an easy task, and it is vital to wear protective clothing to avoid skin contact with the plants sap. Mowing serves only to stimulate budding on the perennating root stalk, but might be successful if done consistently and persistently, resulting in reduction of the rootstalk. Alternative means of control include livestock such as cattle and pigs that eat Giant Hogweed without any harm. Trampling also damages the plant.

**Sources:**

<http://dnr.metrokc.gov/wlr/lands/weeds/hogweed.htm>

[http://www.ruralni.gov.uk/giant\\_hogweed.pdf](http://www.ruralni.gov.uk/giant_hogweed.pdf)

<http://www.letsogardening.co.uk/Information/GiantHogweed.htm>

<http://www.agf.gov.bc.ca/cropprot/gianthogweed.htm>

### ***Wild Parsnip Identification and Management***



Photo by David Eagan

Parsnip, also a member of the carrot family, is a native of Eurasia that was introduced into North America as a root crop. Wild parsnip (*Pastinaca sativa*) is the naturalized form, which escaped cultivation and is now widespread throughout North America. Wild parsnip can grow to be four to five feet tall. It has many large flat clusters or umbels of yellow-green flowers on a thick stem. The plant is often confused with prairie parsley, an endangered species in some states, or even wild carrot. Prairie parsley has sparse, light yellow flowers, and long leaves branched into leaflets with few teeth.

**Description:** Wild parsnip is a biennial or sometimes a perennial that looks and smells similar to cultivated parsnip. The plant forms leaves during the first year of growth and a thick, white to yellowish edible taproot. Flowering plants produce a single, thick inflorescence that contains hundreds of yellow umbellate flowers. The lateral flowers often overtop the terminal flowers. Wild parsnip stems are compressed during the rosette stage of growth and elongate during the second year. The stems are hollow, except at the nodes, grooved, and slightly hairy. Depending on the habitat and growing conditions, individual flowering plants range to over four feet in height. Leaves are alternate, pinnately compound, branched, and have saw-toothed edges. Each leaf has 5-15 ovate to oblong leaflets with variable toothed edges and deep lobes.

**Habitat:** Wild parsnip is tolerant of a wide range of conditions. Habitats include moist to mesic black soil prairies, savannas, pastures and fields, weedy meadows, areas along railroads and roadsides, vacant lots, and waste areas. Wild Parsnip can invade natural areas, especially sites with fertile soil. Wild parsnip is shade intolerant and flourishes in sunny conditions.

**Reproduction:** Wild parsnip plants reproduce by seed; and generally produce 300-500 seeds per plant. Seeds have about an 80% germination rate during the first spring and

almost 2 years of seed bank viability. Seeds take about 3 weeks from flowering to become viable.

**Control:** Eliminating seed production is the key to controlling wild parsnip. Mechanical removal of flowers and seeds by hand-pulling or digging the root crown is an effective control method, although it can be fairly laborious. Caution should be taken when dealing with wild parsnip due to the psoralens or phototoxins it produces which are prevalent on all the plant parts. Skin contact with the plant, combined with exposure to sunlight can also lead to phytophotodermatitis. This results in a rash, blisters, skin discoloration and burning or scalding-type pain. Herbicide controls are effective, but should be used sparingly around natural areas containing native plants. One method which has been effective is controlled burning of the infested site, followed by spot application of 1-3% active ingredient glyphosate. Immediately after a burn, wild parsnip is one of the first plants to green. Glyphosate can be spot applied to the basal rosette of the parsnip with little effect on other dormant species in early to mid spring.

Sources:

<http://www.dnr.state.mn.us/invasives/terrestrialplants/herbaceous/wildparsnip.html>

<http://www.inhs.uiuc.edu/chf/outreach/VMG/parsnip.html>

[http://www.dcnr.state.pa.us/forestry/invasivetutorial/wild\\_parsnip\\_M\\_C.htm](http://www.dcnr.state.pa.us/forestry/invasivetutorial/wild_parsnip_M_C.htm)

[http://www.fs.fed.us/r9/cnnf/natres/nnis/wild\\_parsnip.html](http://www.fs.fed.us/r9/cnnf/natres/nnis/wild_parsnip.html)