

# *Beauty &*



Wild parsnip

Frank Knight

# *the Burn*

By Gloria VanDuyne

*Could something related to the **scrumptious carrot and parsnip** found in grocery stores and farm stands cause **a second-degree burn**?*

**I**t was a beautiful July 4<sup>th</sup> morning. I cut and gathered garden flowers into a bouquet for our kitchen table. Searching for something else to give the colorful centerpiece the right fullness and balance, I found the perfect plant in our wild field. While I was not familiar with it, the plant's yellowish-green clusters of multiple flowers would provide the depth and interest I was looking for in the arrangement.

Two days later I noticed I had a burn on my forearm, but couldn't remember touching anything hot. The spot was an inch long by an half-inch wide and blistered the next day. I dismissed the first suggestion from an acquaintance that it could be wild parsnip.

It turns out, I was wrong.

**Wild parsnip** (*Pastinaca sativa*) is a member of the carrot family (*Apiaceae*) which contains about 300 genera and more than 3,000 species, including carrots, parsley, cumin, dill, fennel, celery, Queen Anne's lace, poison hemlock, and their relatives. Some of these species, such as wild parsnip, contain chemicals called furanocoumarins, which, when combined with sunlight on the skin cause phytophotodermatitis (a toxic skin reaction). The chemicals prevent the skin from protecting itself from ultraviolet rays. The result is basically a sunburn. Damage can be as mild as skin discoloration, or as severe as large, extremely painful blisters. Heat and moisture (e.g. sweat or dew) can enhance the skin reaction.

Native to southern and central Europe, wild parsnip is believed to have been brought to North America as either a root crop by colonists as early as the 1600s, or as an accidental transplant with an immigrant. It has naturalized in the wild and has spread throughout North America. As with many non-native species, it thrives in disturbed areas and along roadsides, but it doesn't limit itself to the harsh conditions along roads. This plant is just as happy in open fields and lawns as it is sprouting through a crack in a parking lot. It is spreading and can out-compete many native plants.

Another toxic weed spreading across New York is **giant hogweed** (*Heracleum mantegazzianum*). Like wild parsnip, the sap from giant hogweed combines with sunlight and perspiration to cause phytophotodermatitis. However, the effects caused by giant hogweed can be much worse than those of wild parsnip, with some wounds resembling third-degree

burns. Scarring can be permanent and contact with eyes can cause blindness. As its name suggests, giant hogweed can get huge, growing to more than 12 feet tall with flower clusters that can measure up to two and a half feet across! Some have described it as Queen Anne's lace on steroids.

Giant hogweed is a native of the Caucasus Mountain region between the Black and Caspian Seas. It was introduced to Europe and the United Kingdom in the late nineteenth century, and to the United States in the early twentieth century as an ornamental garden plant. It has become established in New York, Pennsylvania, Ohio, Maryland, Oregon, Washington, Michigan, Virginia, Vermont, New Hampshire and Maine. The Department of Environmental Conservation (DEC) collects data on giant hogweed distribution in New York. As of December 2007, giant hogweed has been recorded at 364 sites in 28 counties.

Giant hogweed can be found in a variety of habitats; it easily becomes established on waste ground, near houses, in vacant lots, and along railways and roads. It prefers moist soil and can quickly dominate ravines and stream banks. In addition, giant hogweed can decrease plant diversity and cause soil erosion. The plants tend to grow close together and their large leaves may completely shade out the ground below so that other plants can't grow. Then, when the hogweed dies back in winter, the bare ground below is prone to soil erosion, especially along streambanks. Giant hogweed's dried fruits may be imported as a spice or food called golpar. Its seeds may be distributed by waterways and unwitting gardeners, and can remain viable for more than 10 years.

If you encounter wild parsnip or giant hogweed, make sure you avoid skin contact with either plant. Wear long sleeves and pants, rubber gloves, and for giant hogweed, face protection. Sap can be released by brushing against and breaking the stem, bristles on the stem, and its

courtesy photo



## Dealing with Wild Parsnip and Giant Hogweed

If you suspect you have either of these plants in your yard, the first thing you should do is make a positive identification. While there are many plants that look similar to giant hogweed, it is hard to confuse wild parsnip if it is in bloom. Wild parsnip reaches 5 feet tall and has flat-topped clusters of yellowish-green flowers. In addition, it has a hairless green stem with vertical grooves, and compound leaves that resemble large celery leaves. In contrast, giant hogweed has large clusters of white flowers. There are coarse white hairs on the green stem, as well as purple blotches. Giant hogweed is an enormous plant, reaching more than 15 feet tall. Its huge leaves are highly incised and deeply lobed.

Controlling these plants can be difficult. Wild parsnip can be controlled by digging or cutting the root below ground level. In some soils it can be pulled. Giant hogweed is more difficult and dangerous to remove due to its size, but it can be eradicated after repeated control efforts. It is best to start control projects early in the growing season.

Visit [www.dec.ny.gov](http://www.dec.ny.gov) and search "hogweed" for more information about giant hogweed or wild parsnip. If you think you have giant hogweed, DEC wants to hear about it. E-mail us at [lflands@gw.dec.state.ny.us](mailto:lflands@gw.dec.state.ny.us) or call 518-402-9425.

courtesy photo



An enormous plant, giant hogweed reaches more than 15 feet tall and has huge, incised, deeply lobed leaves. Giant hogweed's large clusters of white flowers have between 50 and 150 flower rays.

leaves. If accidental exposure to the plant sap occurs, wash the affected area thoroughly with soap and cold water as soon as possible. Protect the exposed area from sunlight for at least 48 hours. If you have a reaction, see a physician.

Although burns from wild parsnip and giant hogweed are often mistaken for a reaction from the better known poison ivy, there are several differences. Wild parsnip and giant hogweed burns are painful for a few days at most, whereas a poison ivy rash can itch for weeks. To get a poison ivy reaction, a person usually needs to be sensitized by a prior exposure. Poison ivy causes an allergic response and people's individual sensitivity varies. Wild parsnip and giant hogweed will cause burns in anyone and can cause more serious injuries with longer-lasting effects.

My encounter with wild parsnip made me aware of how common this plant has become and of the lack of public knowledge about it. I was lucky it wasn't worse; I could have encountered giant hogweed. Even so, the scar on my arm lasted for more than a year.

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## Don't get burned!

For the past seven years, DEC and the NYS Department of Agriculture and Markets have collaborated to track the distribution of giant hogweed throughout New York, by recording public reports of hogweed and conducting on-site inspections.

Seasonal field crews comprised of college students or recent college graduates visit suspected giant hogweed sites to confirm its presence. The field crews are trained to identify giant hogweed and discriminate it from other plants with which it is commonly confused. Armed with cameras and global positioning system devices, the

crews visit as many public reported sites as possible. Without touching the plant, crews identify the plants in question; they also take photos of the distinguishing characteristics for visual records.

To view DEC's Giant Hogweed distribution map, visit: [www.dec.ny.gov/animals/41952.html](http://www.dec.ny.gov/animals/41952.html)