



# Still feeling the BURN

Wild parsnip is well-traveled in Wisconsin, now documented in all 72 counties.

DAVID J. EAGAN

## A WILD PARSNIP WARRIOR REVISITS THE NASTY INVASIVE, JUST IN TIME FOR ITS WARM-WEATHER RETURN.

*David J. Eagan*

Over the years, I've become "Mr. Wild Parsnip" to friends, colleagues and even total strangers. It's not such a bad rap; there are few plants I find more interesting and under-appreciated than wild parsnip.

The reason for that moniker is simple. Eighteen years ago, in June 1999, I wrote "Burned by wild parsnip" for this magazine, with a follow-up article, "Wild parsnip II," in 2000. (See sidebar for these and other recommended resources.)

The first article was reprinted in several magazines, and borrowed and repeated on many websites, bulletins, posters and news outlets. Better Homes and Gardens magazine even called me to contribute to a story in 2006.

For most of those years, an internet search for "wild parsnip" brought up my article at or close to the top. It contin-

ues to drive traffic to this magazine's online archives, with "Burned" generating the most views for five straight months in 2014. As recently as August 2016, it brought seven times the page views as the next highest-viewed article.

Why all the fuss? Well, to anyone who has been burned by this plant or has seen the blistered skin of someone else who has, the answer is obvious. For many people around the world, wild parsnip has made quite an impression.

**Time for another article**  
Since 1999 there is a new generation of



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KEVIN ALBERT

outdoor enthusiasts — and readers — who may never have heard of wild parsnip. Among those who do possess some knowledge, I've found that many hold sketchy or inaccurate information.

To be fair, a lot more people know about wild parsnip now than 18 years ago. But each year, the plant is spreading into new places and putting more skin at risk. Plus, there is much new information to share about wild parsnip's biology, distribution in Wisconsin and methods of control.

Another reason: My inbox holds more than 1,000 emails from readers who, over the years, have generously responded to my invitation to share their wild parsnip stories — telling where it grows, how they got burned, suggestions for skin treatment, questions about control and much more.

My sincere thanks to all who have written to me about wild parsnip, including those responding to my June 2015 query in this magazine. Several of the 2015 writers helped me to locate wild parsnip populations in Wisconsin that confirmed the plant's presence statewide. One writer was alarmed at its rapid spread in their area, noting it had gone from a few plants to a half-mile stretch along a road in three years.

No surprise, most people reported learning about wild parsnip the hard way. A writer from Ticonderoga, New York, was classic: "I wish I had read your articles over the 'net *before* I had my experience with wild parsnip!"

Unfortunately, there isn't room here for even a tiny fraction of these reports and photos sent from across the U.S. and overseas. But this new article will address some of their collective questions and concerns, and will help readers better understand wild parsnip's complicated relationship with us.

### Wild parsnip 101

Wild parsnip (*Pastinaca sativa*) is a member of the parsley or carrot family. In the U.S., it is an alien, a non-native species with Eurasian origins. It's thought to have escaped from colonial-era gardens, eventually becoming wild in all but four southeastern states.

Worldwide, this family has many edible members — carrot, parsley, celery, fennel — as well as many that are deadly poisonous, including water hemlock and poison hemlock, which both grow wild in Wisconsin. Wild parsnip is the same plant as garden or cultivated parsnip. Both are equally edible, and equally capable of causing burns on exposed skin.

So how to identify wild parsnip? Here are some key characteristics:

- There are two growth stages. The first year features non-flowering "rosettes," a whorl of several leaves at ground level. That is followed usually in its second year by flowering plants 3 to 6 feet tall, with long-stalked flower clusters branching out and upward.
- Compound leaves have a central stem

and five to seven pairs of stemless, toothed and lobed leaflets.

- The flowers are yellow, with five tiny, curled petals in flat-topped clusters called compound umbels.
- Flowering stems are green, hairless and deeply grooved.
- It blooms mid-June to mid-July, with flowers and ripening seeds often on the same plant.
- Flowering plants turn brown and die in late summer, scattering flat oval seeds.

### About those burns

Anyone can be burned by wild parsnip, though some tend to be more sensitive to the chemicals than others. "Burned by wild parsnip" has details on the sunlight-mediated burn reaction, as well as how it differs from poison ivy's immune-response rash.

Here is a quick review of the basics and some "news you can use" about the plant's hazards:

**Plant juice, sunlight and time:** If fresh juice/sap from a broken stem or leaf gets on bare skin exposed to sunlight, even for only a few minutes, the reaction can happen. Wild parsnip juice makes skin hypersensitive to the sun, which can lead to phytophotodermatitis (plant caused and ultraviolet light-activated skin inflammation). Within 24 to 48 hours — not right away — redness and blistering can occur. The reaction is basically a second-degree burn and should be treated the same. Affected skin will heal as with any burn, but likely will cause a noticeable change in pigmentation (pinkish/brownish skin color) for a while, even up to a year or two.

**Not an oil:** When dry, wild parsnip's watery juice is no longer a hazard. It doesn't spread from pet fur or clothing like the oils found in poison ivy. Remember, you can touch the plant without

harm if no juice is released. Dry, dead plants are harmless.

**If you are burned:** As with other such burns, Dr. Paul Biere of Iowa County recommends "symptomatic care." This means keeping the rash and blisters cool and clean, away from heat and sunlight. If blisters leak or pop, remove loose skin and clean with soap and water, then apply Vaseline or moisturizing cream and cover with a non-stick pad to seal in moisture and speed healing. For most burns, antibiotics are not needed. Products that dry the skin do not help, as many readers have noted.

**Biochemical warfare:** Wild parsnip sap is most potent when the plant is flowering, with increased amounts of psoralens (the active chemicals) throughout the plant. Why? That's when it most needs to protect itself from munching insects, which usually are killed by the reaction of sap in the presence of sunlight. Continue reading, however, to learn about a nemesis of the plant, parsnip webworms.

**Readers write:** Some who have contacted me reported what can only be interpreted as an allergy to wild parsnip. These are rare cases, but humans can develop allergies to just about anything. Also, writers mentioned that the residual bruise-like hyperpigmentation from parsnip burns on children have been mistaken for evidence of child abuse. For both issues, keep good records of plant exposure and its evolving reaction.

### What's new?

Wild parsnip is now nearly everywhere in Wisconsin, documented in all 72 counties. In 2015, I collected specimens in the 20 counties not already in state records. Wild parsnip is especially common — and spreading — in southern and southeast counties where it thrives in alkaline/limestone soils. Complete records of wild plants collected in the state are kept by the Wisconsin State Herbarium at the University of Wisconsin-Madison.

A new project to map occurrences of wild parsnip and many other existing and new plant invaders is underway through UW-Extension, led by weed scientist Mark Renz. Plant data is used to create maps showing exact locations of plants throughout the state. Sightings from citizen scientists are invited. Species can be reported through the Great Lakes Early Detection Network.

On the internet, you can find an



STEVEN ZOROMSKI



Handling wild parsnip, which can grow more than 5 feet tall (this overachiever was 10 feet), requires being well-covered with long pants and sleeves, socks, and gloves that cover the wrists. Work at sundown is ideal to further reduce the chance of developing a reaction.

ROB BALLER



Damage to wild parsnip can be caused by caterpillars of the parsnip webworm, which feed on the plant's flowers and developing seeds.

DAVID J. EAGAN

ever-expanding collection of fact sheets, articles, medical details, field guides and YouTube videos, plus hundreds of images of the plant and its burns (many not very pleasant to see). However, there also is much misinformation online, so beware of “fake facts” about wild parsnip.

One recent article said the burns are “third-degree.” Wrong. As noted, they are second-degree burns and hence much less dangerous. Another article said all that is needed for the skin to burn is “contact” with the plant. Again, only the juices from broken stems or leaves, with exposure to sunlight, can result in burns.

Some websites still insist that the wild plant is poisonous to eat. Actually, parsnip roots can be safely harvested and eaten. While wearing gloves and long sleeves, dig first-year plants (rosettes) in autumn or early spring. Scrub the roots and use like store-bought parsnips. With all wild foods, be sure you know exactly what you are eating. Most of wild parsnip’s cousins have white taproots — and some are deadly.

#### A notorious invasive

Not just an innocent “weed,” wild parsnip ranks high on the list of plants that can invade high-quality natural areas, driving out desirable species. In Wisconsin, it now is classified as a “restricted” plant under NR 40, the DNR’s invasive species rule. This means plants and

seeds cannot intentionally be spread into non-infested areas. Wild parsnip is high on the hit list of many state and local agencies and weed-management organizations that target problem plants.

How to eliminate wild parsnip? I am often asked the best ways to control populations of the plant. Manually, it can be mowed, the flowering tops cut off and disposed of, pulled, dug up or its taproot severed. A favorite tool for digging or slicing the root below-ground is the Parsnip Predator, a narrow-bladed spade with a notched tip developed by members of The Prairie Enthusiasts.

Herbicides, typically containing glyphosate or 2,4-D, can be applied during the rosette stage or when plants begin to bolt, but timing is important. Whatever the method, take care to avoid getting plant juice on skin during daytime. The best time to work is at sundown because by the next morning any exposed skin will no longer be sensitized.

Whenever working with parsnip in the daytime, always wear long pants, socks, long sleeves and gloves that cover the wrists.

Some patches of wild parsnip are damaged by the caterpillars of a non-native moth, the parsnip webworm (*Depressaria pastinacella*). They spin webs to conceal themselves in the flower heads, feeding on flowers and developing seeds. Unfortunately, they rarely seem to kill the plant, preventing only a few flower heads from going to seed.

#### Still a medical mystery

Although better known lately, relatively few medical professionals understand the full story about the burns from wild and garden plants, including wild parsnip. Fewer still can identify the plants in the field. Parsnip burns are still mistaken for poison ivy, leading to incorrect treatment.

But some medical folks have become experts. To help new physicians learn about phytophotodermatitis during their residencies in Wisconsin, Dr. John Beasley, a UW-Madison clinical professor, has a unique approach. He brings large, freshly pulled flowering parsnip plants to mentoring sessions, which, he says, “always gets their attention.”

Wild parsnip appears to be here to stay, but like most other hazardous plants, it has its charms. Tackle it where you can, and always take the right precautions. Learn more about wild parsnip and other plants that can cause the same sun-induced burns, such as the natives cow parsnip and angelica, garden plants gas-plant and rue and the notorious but uncommon invasive giant hogweed. And, as always, help spread the word. 

*David J. Eagan is a freelance writer, naturalist and botanist based in Shawano who consults with homeowners and others to help them discover and value the wild “nature” of their land.*



#### RECOMMENDED RESOURCES

- **“Burned by wild parsnip,” by David J. Eagan**  
[dnr.wi.gov/wnmag/html/stories/1999/jun99/parsnip.htm](http://dnr.wi.gov/wnmag/html/stories/1999/jun99/parsnip.htm)
- **“Wild parsnip II,” by David J. Eagan**  
[dnr.wi.gov/wnmag/html/stories/2000/jun00/parsnip.htm](http://dnr.wi.gov/wnmag/html/stories/2000/jun00/parsnip.htm)
- **Wisconsin DNR fact sheet and photo gallery**  
[dnr.wi.gov/topic/invasives/fact/wildparsnip.html](http://dnr.wi.gov/topic/invasives/fact/wildparsnip.html)  
[dnr.wi.gov/topic/Invasives/photos](http://dnr.wi.gov/topic/Invasives/photos)
- **Wild parsnip video, by Mark Renz of UW-Extension**  
[www.youtube.com/watch?v=ozqdU6\\_T1uU](http://www.youtube.com/watch?v=ozqdU6_T1uU)
- **Management of Invasive Plants in Wisconsin: Wild Parsnip**  
[learningstore.uwex.edu/Assets/pdfs/A3924-15.pdf](http://learningstore.uwex.edu/Assets/pdfs/A3924-15.pdf)
- **Great Lakes Early Detection Network (GLEDN)**  
[www.eddmaps.org/Midwest](http://www.eddmaps.org/Midwest)
- **Online Virtual Flora of Wisconsin**  
[wisflora.herbarium.wisc.edu](http://wisflora.herbarium.wisc.edu)
- **Invasive Plants Association of Wisconsin (IPAW)**  
[www.ipaw.org](http://www.ipaw.org)