

Wild Parsnip (Pastinaca sativa)

WI NR-40:

Exotic Invasive

DESCRIPTION:

Wild parsnip is a biennial or short-lived perennial species which can cause second-degree chemical burns upon contact. The sap of wild parsnip is phototoxic, meaning when it gets on skin and is also exposed to sunlight (UV-light specifically) it cause burns in the form of reddened skin and painful blisters. Upon healing the burned area forms a scar that may persist for several months to years (but is usually temporary). This European member of the carrot family was likely imported as a food crop, however cultivated varieties have had the photo-toxic compounds bred out of them. Wild parsnip is abundant and spreads rapidly on roadsides and common in prairies, savannas, old fields, railroad embankments, and many other weedy, sunny places.

IDENTIFICATION:

Wild Parsnip forms a low-growing rosette in its first year. In its second year of life it shoots up to 5' in height with multiple, large (up to 6" across) yellow, flat-topped umbel flower heads.

Wild parsnip is VERY similar in appearance to the native golden alexanders. Golden alexanders are common in the wild as well as in prairie seed mixes and planting, so differentiating the two species is critical. Wild parsnip blooms later and is larger than golden alexanders, but there can be some overlap between the two. The best way to tell them apart is to count the number of leaflets. Wild parsnip always has 7 or more leaflets on its basal leaves (though leaves on upper stem may be composed of fewer leaflets), arranged along a single central stalk (pinnately compound). Golden Alexanders has 3 to 5 leaflets per leaf, spreading in three directions with three leaflets per branch (petiolule) (a bipinnately compound pattern.)

CONTROL METHODS:

It is critical to wear gloves, long sleeves and long pants when handling this species. Sunscreen should be applied to any exposed skin (face, neck, etc.), but is not a suitable substitute for protective clothing. Consider working on controlling this species in the hour before and after sunset to limit UV exposure.

Organic: It is best to treat parsnip after it bolts but before it flowers. Once flowering has begun they can produce seeds even if you kill the plant. So cut or pulled stalks must be removed from the site and disposed of properly if they have begun to flower.

Hand pulling is effective especially in moist soil. Cutting the root about 2" below the surface with a sharp shovel or "Parsnip Predator" is the preferred method for controlling small populations.

Mowing is most efficient on large populations. They should be mown when the plants first begin to flower in mid-June and mowed repeatedly as they attempt to flower again (usually 1-3 times) until root energy reserves are exhausted.

Chemical: Herbicides are most effective on rosettes, early in the spring, or shortly after a burn when they are still small and many native plants are still dormant. A spot application of glyphosate (Round-Up®) is effective, or to reduce collateral damage choose a triclopyr-based herbicide (Garlon® 3A) which is more selective and will not kill grasses. Always read herbicide labels carefully before use and always apply herbicide according to the product label.

NATIVE ALTERNATIVES:

Since this is a full-sun weed we recommend a diverse selection of prairie species to replace and compete against wild parsnip in order to develop a more stable and productive plant community for the site. Contact us for specific recommendations.



