Escaped in a backyard

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Giant Hogweed

Heracleum mantegazzianum

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Cornell Cooperative Extension
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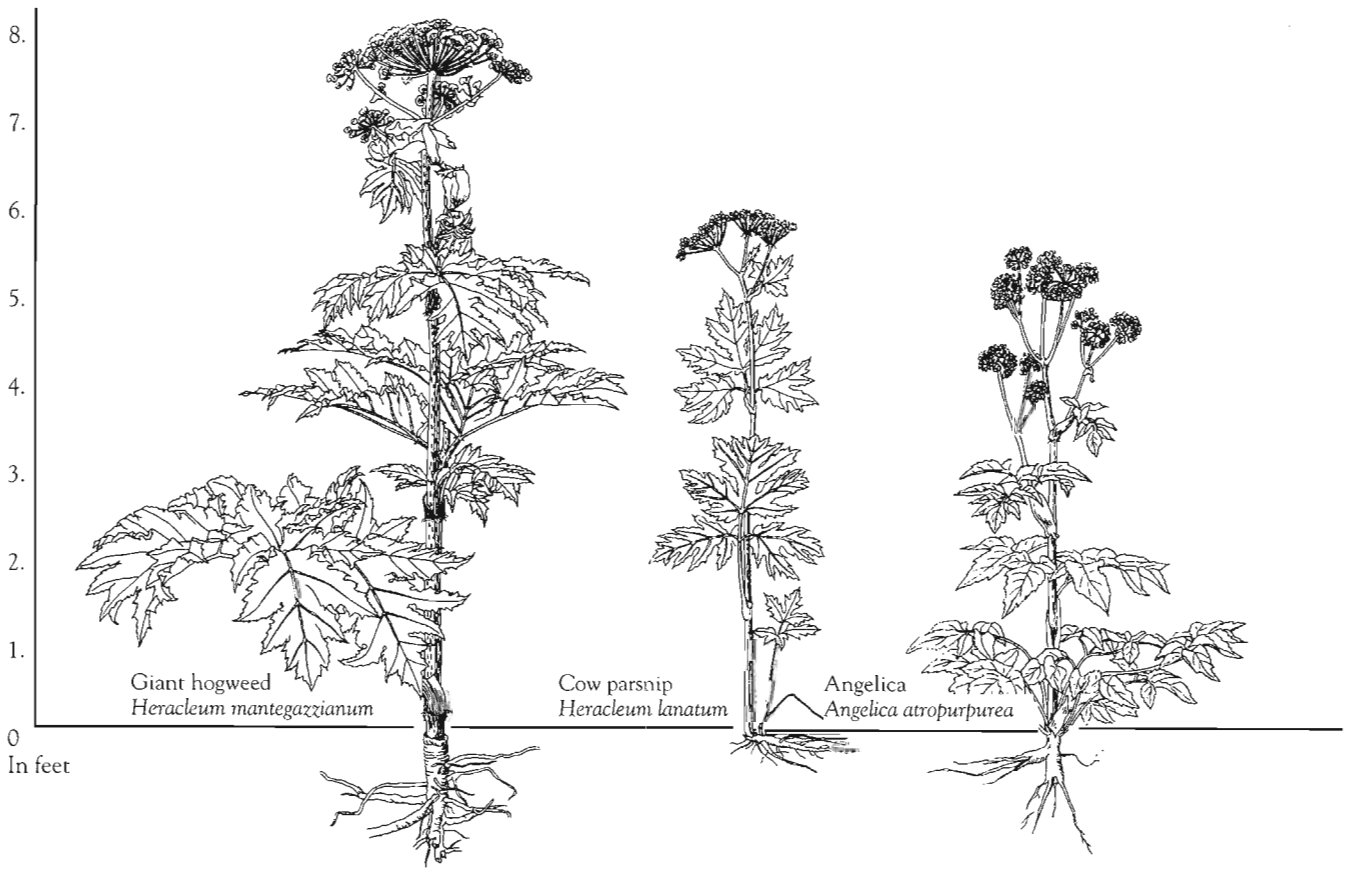
Giant Hogweed: Its Origin and History

Giant hogweed, *Heracleum mantegazzianum*, is a large and showy plant native to the mountainous Caucasus region of Asia that lies between the Black and Caspian seas. Introduced into Europe and North America early in the twentieth century, *H. mantegazzianum* soon became prized for its bold, dramatic effect and was grown in many arboretums and private gardens here and abroad. In New York State, hogweed was cultivated in Highland Park in Rochester as early as 1917. It is not surprising that giant hogweed became a favorite specimen plant given the Victorians' penchant for excessiveness. With its massive dimensions and huge clusters of white flowers, hogweed has an imposing, indeed, almost an ostentatious appearance.

Although once cultivated as an unusual ornamental, giant hogweed is now regarded as an undesirable weed that poses a serious health threat because the sap of the plant causes a painful and acute skin irritation in many people.

In both Europe and parts of North America, hogweed escaped from cultivation and naturalized along roadsides and stream banks. The plant spread so rampantly throughout England that, by 1970, it had become a prominent feature of the English landscape. More recently, giant hogweed has been found in the Canadian provinces of Ontario and British Columbia, in the states of Maine, Maryland, Pennsylvania, and Washington, and has been reported growing in almost two dozen counties of central and western New York State including Jefferson, Onondaga, Oneida, Madison, Cayuga, Tompkins, Schuyler, Yates, Steuben, Genesee, Oswego, Wayne, Ontario, Orleans, Monroe, Livingston, Wyoming, Niagara, Erie, Chautauqua, and Cattaraugus.

Hogweed prefers a rich, damp soil, and in New York State it is frequently seen growing along stream banks, in roadside ditches, and in moist waste areas. Increasingly, people report that from the single plant grown in their backyard for its ornamental value, an unmanageable patch of hogweed has developed over time. It is here, in the residential garden, that giant hogweed is likely to pose the greatest health concern.



Hogweed's Potential Health Threat

Giant hogweed might not be a weed worth trying to control were it not for its potential to cause severe skin irritations. The sap of the plant, which contains a glucoside called furanocoumarin, can cause painful, burning blisters in susceptible people. The plant juices also can produce painless red blotches that later develop into purplish or blackened scars.

Simply touching the leaves of the weed does not produce this dermatitis, which is known medically as phytophotodermatitis. The blisters or blotches are likely to develop when sap from a broken portion of the plant comes into contact with the skin in the presence of moisture and the skin is then exposed to sunlight. The skin irritation usually appears within a few days after exposure.

Upon exposure to the plant sap, the only known antidote is immediately to wash the skin thoroughly with soap and water. This removes the sap, thereby reducing the likelihood of sunlight producing the irritating reaction.

Close-up of flower cluster

How to Recognize Giant Hogweed

Giant hogweed is not a difficult plant to identify for its huge dimensions make it almost unmistakable. The root meaning of the plant's name stems from the hero Hercules, and hogweed is aptly described as robust in appearance. Its height, the thick hollow stems, its hairy texture, and the wide flower clusters make giant hogweed easy to recognize. With a height of 6 to 14 feet, it is probably the tallest herb found growing in New York State. Its thick, coarse stems range from 2 to 4 inches in diameter, its compound leaves reach a span of 5 feet, and its wide clusters of small white flowers measure up to 2½ feet across. The leaf stalks are blotched with deep purple and the lower stems are ribbed. Each leaflet of the large, compound leaf has many incisions. The small, white flowers of the hogweed are borne in huge, flat-topped clusters at the end of long rays. Hogweed is hairy all over, but the large, coarse white hairs at the base of the leaf stalk are particularly prominent.

A member of the carrot or parsley family, hogweed flowers from mid-June to mid-July. After flowering, green fruits appear that quickly turn brown and dry. The seeds then separate from the plant and either blow away, are carried away by a stream, or drop to the ground at the base of the plant. Every fall, the shoots of the plant die back, leaving the hollow stems bearing what is left of the fruiting cluster. The plant now takes on a skeleton-like appearance, with its long rays of now-dried flower heads shooting out from tall brown stalks against the winter landscape.

Giant hogweed is sometimes mistaken for two native plants: the closely related cow parsnip, *Heracleum lanatum*, and another member of the carrot family, purple-stemmed angelica, *Angelica atropurpurea*. Cow parsnip, usually found in woodland sites, is a shorter plant, reaching a maximum height of 6 feet. Like the hogweed, its flower clusters are flat-topped, but they are less than a foot across, and the leaflets on the compound leaf are smaller and less incised. The stem of the cow parsnip is also smaller and, unlike the hogweed plant stem, has little purple in it. Although cow parsnip is a hairy plant, the hairs are finer and give the plant a fuzzy rather than a coarse appearance.

Angelica is easily distinguished from hogweed by its uniformly purple, smooth, hairless stems and its round clusters of white flowers that are less than a foot in diameter. Like cow parsnip, angelica is a shorter plant, rarely approaching its maximum height of 8 feet.

Controlling Giant Hogweed

Although hogweed can spread when its seeds are blown away or carried away by water, people are usually responsible for dispersing the plant long distances. Patches of hogweed almost invariably begin from just a single plant or a few scattered seeds. Some people pick the dried fruit clusters and use them for decorative arrangements. Some patches have been started, albeit unwittingly, by casting aside these fruit clusters, which contain viable seed. Seeds gathered from a friend's garden or one young plant dug up from a roadside ditch and transplanted to a backyard are other ways that people disperse giant hogweed throughout the countryside.

Hogweed is primarily found along the roadside and, more and more frequently, in private gardens. But it has been discovered in orchards, pastures, barnyards, at the edges of lawns, and other places where the land is not under regular cultivation. Although there is no evidence that the weed invades cropland, hogweed may have the potential for becoming an agricultural pest.

Once hogweed becomes established, it can be extremely difficult to eradicate by nonchemical means. Giant hogweed is probably an herbaceous prennial—a hardy, nonwoody plant that dies back to the ground in the fall and sends up new shoots in the spring. The root of the plant is large and tuberous and apparently has the capacity to send up new shoots every year. Cutting off the flower heads before they go to seed will prevent the plant from self-sowing. But the roots of the plant can persist for years and, like many perennials, the roots spread and grow larger each year. Starving the roots by close-cropping the shoots and leaves may help, but this must be done diligently to have any effect. If cutting back the plant after the flower heads have formed seeds, it is important to avoid scattering the seeds on the ground or you may, inadvertently, create a new patch of hogweed.

The chemical glyphosate (Roundup) is effective in controlling hogweed. Glyphosate, however, is a nonselective weed killer; it will kill not only the hogweed but adjacent plants as well. If this pesticide is used, it should be applied while the plant is in active growth, usually during the summer months when the plant is at or beyond bud stage. If you want to replant the area, wait one week after applying the glyphosate. As with all pesticides, use glyphosate carefully and according to package directions.

A weed of huge dimensions

In Summary

People have cultivated hogweed in New York State since the early 1900s, but is is only recently that the plant has been found in its naturalized state. Botanists are still discovering characteristics of this species of plant, but there is enough information available about the hogweed to offer a few suggestions.

- Children often are attracted to the hollow stems of the plant, which make natural telescopes and peashooters. They should learn to recognize the plant and be instructed to avoid it.
- Not everyone is susceptible to the skin irritation produced by the sap of the plant; but because it is difficult to predict immunity, everyone should avoid contact with the giant hogweed.
- If you are exposed to the sap of the hogweed, wash immediately with soap and water to remove the sap.
- Hogweed is an attractive plant, but avoid the temptation to cultivate it in your garden. What begins as a single specimen plant might, in a few years' time, become an unmanageable patch of weeds that will be difficult to eradicate.

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