PNW0429

GIANT HOGWEED

(*Heracleum mantegazzianum* Somm. & Lev.)

Giant hogweed, also called giant bearclaw, grows as a native in the Caucasus Mountains, a region of Asia that lies between the Black and Caspian seas. A plant of sizeable proportions, it derives its generic name from Hercules or Herakles. Planted as a curiosity in arboretums and private gardens in Europe and North America early in the twentieth century, it soon escaped and naturalized in surrounding areas, especially riparian and urban sites. In Europe it has been particularly aggressive in England, Scotland, Scandinavia and Germany. In Canada, giant hogweed has been found in Ontario and British Columbia. States reporting the weed in the United States include Maine, Vermont, Connecticut, New York, Pennsylvania, Maryland, Michigan, Oregon, and Washington. Oregon populations have been found in Clackamas, Clatsop, Columbia, Lane, Linn, Marion, Multnomah, Polk, Tillamook, Washington, and Yamhill counties. In Washington, giant hogweed has been found in Whatcom, San Juan, Skagit, Island, Snohomish, Clallam, King, Kittitas, Lewis, Clark, and Klickitat counties; and Grays Harbor, Thurston, and Pierce counties report more than ten acres of giant hogweed. The weed has not yet been found in Idaho.

A single giant hogweed plant can become an unmanageable, dangerous pest in the garden.

Giant hogweed constitutes a public health hazard. Its clear, watery sap contains a glucoside called furanocoumarin which causes phytophoto-dermatitis. Skin contact with the sap, followed by exposure to sunlight produces painful, burning blisters that may develop into purplish or blackened scars. Both Washington and Oregon list giant hogweed as a Class A noxious weed. As it has not been reported in Idaho, it is not listed as noxious in that state. Because giant hogweed is on the federal noxious weed list, it is illegal to introduce it in the United States through imports and to move it between and within states.

Stout stems are blotched with purple.

Its gigantic size separates giant hogweed from cow parsnip.

IDENTIFICATION

A member of the carrot or parsley family (Apiaceae or Umbelliferae), the most impressive characteristic of giant hogweed is its massive size. It resembles cow parsnip (*Heracleum maximum*), a native plant which grows in riparian areas in the Pacific Northwest. Giant hogweed reaches 10 to 15 feet in height, while cow parsnip normally grows 3 to 4 feet tall, but not taller than 8 feet. Giant hogweed's hollow stout stems, 2 to 4 inches in diameter display dark reddish purple spots and pustulate bristles. The hairy, ribbed stems produce large, coarse white hairs at the base of the leaf stalk. Smaller cow parsnip stems have less prominent purple mottling and finer, fuzzy hairs. Giant hogweed leaf stalks are also purplish, each purple spot surrounds a blister-based hair. Deeply incised compound leaves of giant hogweed often expand to 5 feet in breadth. Lobes on cow parsnip leaves are shallower and more rounded than the deeper sharper lobes of mature giant hogweed

leaves. Seedlings and immature plants may be difficult to distinguish. Check the hairs on the undersurface of the leaf. On giant hogweed these hairs are stiff, dense and stubby, only about .25 mm (.01 inch) long. On cow parsnip these hairs are soft, wavy, shiny, and 4 times as long—about 1 mm (.04 inch).

Numerous white flowers cluster in an umbrella-shaped inflorescence (compound umbel), up to 2.5 feet in diameter across the flat top. Similar inflorescences on cow parsnip expand to less than a foot in diameter. Giant hogweed flowers produce flattened elliptic dry fruits marked with swollen brown resin canals 1/25-inch in diameter. These 3/8-inch long fruits display a broadly rounded base and broad marginal ridges that extend well past the midpoint of the fruit. The slightly smaller cow parsnip fruits are narrower at the base and broader toward the notched tip.

BIOLOGY AND ECOLOGY

Most sources report that giant hogweed is a biennial or perennial. Probably most plants are monocarpic; they die after they flower and produce seed. It may take four years or more from the time a seed germinates until the plant produces a flowering stem. Side shoots arising from the crown of some flowering plants continue to grow after the flowering portion of the plant dies. Giant hogweed flowers from mid-June to mid-July, followed soon after by green fruits that turn dry and brown as they ripen. In the fall the shoots die back to the tuberous roots. Tall hollow stems bearing the remnants of fruiting clusters mark the location of hogweed populations over winter.

Giant hogweed fruits split into two winged parts, each containing one seed. The wings, ineffective for long distance wind dispersal, allow seeds to glide away from the parent plant. Seeds which land on nearby water can float for three days before becoming waterlogged and sinking. Waterborne fruits can travel great distances, especially during floods. Gardeners have spread giant hogweed intentionally by planting it, and others have spread it unintentionally by collecting dry inflorescences for floral decorations.

Giant hogweed prefers rich damp soil. It grows most commonly along roadsides, ditches, other rights-of-way, vacant lots, streams and rivers. In New York it also flourishes in gardens, orchards, pastures, barnyards, edges of lawns and other places the land is not regularly cultivated. In England, stands of giant hogweed create shade so dense along streams and rivers that other plants fail to survive. When hogweed dies back in the fall, it leaves banks unvegetated and vulnerable to erosion.

CONTROL

Large tuberous roots, rapid growth and abundant seed production make giant hogweed difficult to control. Manual control is practical only for small infestations. If you dig plants, wear protective clothing to avoid getting the sap on your skin. Dig out the entire root or plants may grow back. Although not everyone experiences skin irritation, be prepared to quickly wash sap off thoroughly with soap and water. You can prevent giant hogweed from producing seed by repeatedly mowing it during the growing season. Mowing also weakens plants, but the tuberous roots remain alive for many years when plants are kept from flowering. In addition, seeds in the soil continue to germinate. How long seeds survive in the soil is not known, but seeds kept dry at room temperature remained viable after 7 years.

Repeated cultivation controls giant hogweed. In Europe, land managers have used grazing and trampling by cattle and pigs to suppress hogweed without harming the animals.

When chemical control recommendations become available, weed specialists will publish them in the *Pacific Northwest Weed Control Handbook*, an annually revised extension publication available from the extension bulletin offices of Oregon State University, Washington State University, and the University of Idaho.

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