

Prevention and Control

If you suspect that giant hogweed is on your property, please call the New Jersey Department of Agriculture and describe the plant so our staff can verify its identity, or if needed, schedule an identification inspection. If the plant is Giant Hogweed, we will make arrangements to visit your property, assess the site and discuss our management strategies with you. Once a control program is initiated, our staff will visit your property periodically to determine the success of the control efforts and to check for any new seedlings that may have sprouted. Hogweed seeds may remain dormant in the soil for at least 5 years; therefore, eradication requires a long-term commitment.

Mowing, cutting and weed whacking are not recommended as a means of control because the plant's large perennial root system soon sends up new growth. Also, these tactics are risky because they increase the opportunities for homeowners or workers to come in contact with the plant's sap.

Giant Hogweed is spread naturally by seeds, which can be wind-blown and scattered several feet from the parent plant. Seeds landing on nearby water can float for three days before becoming waterlogged and sinking, and can therefore travel great distances. Birds may consume the fruits and spread the seeds. Seeds or young plants acquired from family, friends or acquaintances are planted in new locations and then readily escape. The dried fruit clusters are used in decorative arrangements and can start a new patch if discarded outdoors. Dried fruits may also be imported as a spice called "golpar" that is used in Iranian cooking and could be a source of new plants.

The New Jersey Department of Agriculture wishes to especially thank the USDA APHIS PPQ Office and the Pennsylvania Department of Agriculture for permission to utilize the information and pictures in their original brochure on Giant Hogweed and to customize it for our use in New Jersey. We also would like to thank everyone that helped in providing us with current information and photographs.



GIANT HOGWEED FRUIT CLUSTERS



Photos Courtesy USDA APHIS PPQ Archives

GIANT HOGWEED SEEDS



SEEDHEAD REMOVAL AND SPRAYING



New Jersey Department of Agriculture
Division of Plant Industry
Trenton NJ 08625-0330
Phone (609) 406-6939 Fax (609) 406-6960

GIANT HOGWEED

HERACLEUM MANTEGAZZIANUM

AN ATTRACTIVE BUT DANGEROUS
NOXIOUS WEED - HAVE YOU SEEN
THIS PLANT?



Photo Courtesy William Weiss, III, Landscape Architect

Giant Hogweed in Public Garden

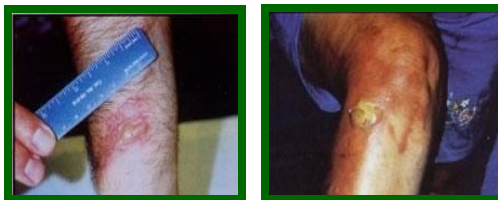
About Giant Hogweed

Giant Hogweed is a member of the carrot or parsley family (*Apiaceae*) that was first introduced into Europe and North America in the early 1900s. It is native to the Caucasus region of Eurasia. Its massive size and imposing appearance made it desirable for arboretums and gardens. Giant Hogweed soon escaped from cultivation and became established in rich, moist soils along roadside ditches, stream banks, waste ground, tree lines and open wooded areas.

According to the National Agricultural Pest Information System database it has been reported to occur in Connecticut, Indiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New York, Oregon, Pennsylvania, Vermont, Washington, Wisconsin and now New Jersey.

Hogweed is Hazardous

Giant Hogweed is a public health hazard because of its potential to cause severe skin irritation in susceptible people. This skin reaction, known as photodermatitis, is due to the Furocoumarins that are present in the sap. The initial symptoms of Giant Hogweed photodermatitis arise within 24 to 48 hours of exposure to the sap and include itchiness, redness, heat, swelling, and blistering. Plant juices also can produce painless red blotches that later develop into purplish or brownish scars that may persist for several years. For an adverse reaction to occur, the skin, once contaminated with plant juices, must be moist (perspiration) and then exposed to sunlight. Contact with the eyes can cause temporary or possibly permanent blindness.



Photos Courtesy Pennsylvania Dept. of Agriculture

**SKIN REACTION TO GIANT HOGWEED
SAP AFTER EXPOSURE TO SUNLIGHT**

DON'T touch or handle plants using your bare hands!

DON'T allow children to play in Giant Hogweed.

DON'T transplant Giant Hogweed, plant its seeds or give away plants or seeds.

DO wash immediately with soap and cold water if hogweed sap contacts your skin.

Giant Hogweed is a Federal Noxious Weed making it illegal to bring into the United States or move across state lines. It also is listed as a State Noxious Weed by several states. The New Jersey Department of Agriculture, in cooperation with the USDA, is currently surveying for this weed, and eradicating it when it is found.



Photo Courtesy Randy Westbrooks, U.S. Geological Survey

**PERENNIAL GARDEN TAKEN OVER BY
GIANT HOGWEED PLANTS**



**GIANT HOGWEED IN PASTURE
MENDHAM, MORRIS COUNTY**

We need your help in locating new sites of Giant Hogweed in New Jersey. If you see this weed, please report its location or occurrence by calling the New Jersey Department of Agriculture. Information will be taken upon receipt of your call, or you will be contacted within a few days.

**NEW JERSEY
DEPARTMENT OF
AGRICULTURE
(609) 406-6939**



FLOWERING STEMS

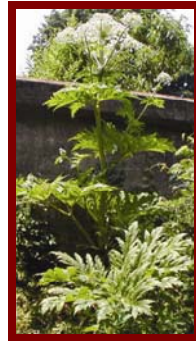
GIANT HOGWEED PLANT IDENTIFICATION AND CHARACTERISTIC FEATURES

GIANT HOGWEED is a biennial or perennial herb growing from a forked or branched taproot. Plants first sprout in early spring from the roots or from seeds.

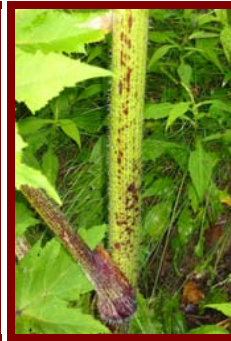
HOW TO RECOGNIZE GIANT HOGWEED

The best time to identify Giant Hogweed is when it's blooming from mid-May through July.

- **Flowers:** Giant hogweed produces flat-topped, compound, umbrella shaped flower heads up to 2½ ft. across. Each flower head is typically composed of 50 or more small, white flower clusters or umbels.
- **Stems:** Hollow, ridged, 2-4" in diameter, 8-15 ft. tall, with dark reddish-purple blotches and coarse white hairs. The hairs that circle the stem at the base of the leaf stalks are especially prominent.
- **Leaves:** Sharply and coarsely lobed, deeply incised and up to 5 ft. across. Hairs on the underside of the leaf are stiff, dense and stubby.
- **Fruit:** (Containing the seed) is a dry, flattened, 3/8" long oval with a broadly rounded base and broad marginal ridges. The fruits contain brown, swollen resin canals up to 1 mm wide. Seeds germinate from early spring throughout the growing season.



Tall Robust Plant 1



Purple Blotched Stems 2



Very Large Leaves 3



White Flat-Topped Umbel 4



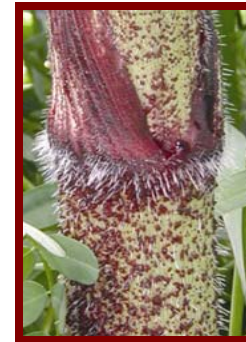
Seedhead with Fruit 5



Mature Seeds 6



Large Clusters of Small White Flowers 7



Stiff Hairs Around Stem 8



Fruits Containing the Seeds 9

GIANT HOGWEED GROWTH STAGES

SEEDS



10

Seeds remain viable in the soil for at least five years. They can be wind-blown or float on water.

SEEDLINGS



11

Seedlings develop during the spring and summer from the roots or from seeds.

YOUNG PLANTS



12

Leaf clusters sprout from the overwintering roots each year for 2-4 years until the plant flowers.

MATURE LEAVES



13

Mature leaves are lobed, and deeply incised. They can be up to five feet across.

FLOWERING



14

Plants bolt and flower in early to mid-summer

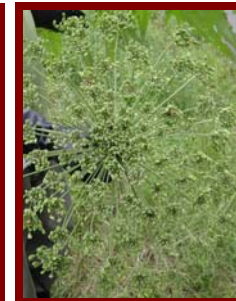
MATURE PLANTS



15

Large stands develop from an extensive rootstock and the seedbank and can out compete the native plants.

SEEDHEAD



16

Seedheads develop in late summer producing numerous fruits that contain the seeds.

DEAD STEMS



17

After the seeds mature in the fall, the plants die, leaving stems standing into winter.

SIMILAR PLANTS COMMONLY MISTAKEN FOR GIANT HOGWEED

Cow Parsnip (*Heracleum lanatum*), a native perennial, is most likely to be confused with Giant Hogweed. Cow Parsnip is smaller, reaching a height of 4 to 9 feet. The stem may be entirely green or have a slight purplish cast, is deeply ridged and only up to 1-2" in diameter. Hairs on Cow Parsnip are fine, soft and fuzzy, rather than coarse. The compound leaves are wooly hairy, with three coarsely toothed leaflets and can be up to 2-2.5 feet in diameter. It produces a flat-topped compound umbel 6 to 12" wide that has 10 to 30 small, white flower clusters or umbels. It flowers from early June to August. It is capable of causing photodermatitis like Giant Hogweed, although less severe. Acrid sap also can cause blisters on contact.

Purple-Stem Angelica (*Angelica atropurpurea*), a native perennial, is easily distinguished from Giant Hogweed by its uniformly waxy green to purple, smooth hollow stems and compound, globular, softball-sized clusters of white or greenish-white flowers 4 to 9" in diameter. Angelica is shorter than Giant Hogweed, attaining a height of 4 to 8 feet. The double compound leaves can be up to 2 feet wide and have dozens of small leaflets. This plant typically flowers from mid-May to August.

Poison Hemlock (*Conium maculatum*) is a multi-branched, non-native biennial ranging from 4 to 9 feet tall. The light green waxy stem has purple blotches and the entire plant is smooth. The finely dissected compound leaves can be up to 2 feet long. They are bright green, glossy, and appear fern-like. Small white flowers are arranged in numerous, small, flat-topped clusters on all the branches. It has a disagreeable "mousy" odor, and the entire plant is poisonous if ingested. It generally flowers from June through August.

Wild Parsnip (*Pastinaca sativa*) is a non-native biennial that ranges from 2 to 5 feet in height. The branched stem is hollow, grooved, hairy and yellow-green. Small yellow flowers form small clusters in a flat-topped compound umbel 4 to 8" wide. The leaves are compound with 5 to 11 leaflets that are shiny, oblong and coarsely-toothed. This plant typically flowers from May through September. Wild Parsnip also has the ability to cause photodermatitis and should be avoided or handled with caution.

PHOTO CREDITS:

Pennsylvania Department of Agriculture: 1, 8, 20, 26, 27, 28, 29, 30

USDA APHIS PPQ Archives: 6, 10

David Swaciak, Cornell Cooperative Extension: 2, 14, 31, 32, 33, 34

Dr. Les Mehrhoff, IPANE: 4, 5, 9, 18, 19, 21, 22, 23, 24, 25

Massachusetts Department of Agricultural Resources: 11, 12

Donna R. Ellis, Univ. of Connecticut: 15

Randy Westbrook, U.S. Geological Survey: 17

Jon Wagar, Conservation Resources, Inc.: 7

COW PARSNIP

PLANT 18



Height 4 - 9'

LEAF 19



Lobed, Toothed 2 - 2.5'

STEM 21



Grooved, Hairy, More Green

FLOWER 22



White, Flat Clusters 6 - 12"

PURPLE-STEM ANGELICA

PLANT 23



Height 4 - 8'

LEAF 24



Double Compound 1 - 2'

STEM 25



Smooth, Waxy, Purple

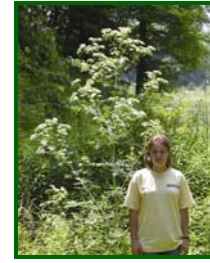
FLOWER 26



White, Round 4 - 9"

POISON HEMLOCK

PLANT 27



Height 4 - 9'

LEAF 28



Dissected, Compound 1 - 2'

STEM 29



Smooth, Waxy, Blotches

FLOWER 30



Numerous, Small, White, Flat Clusters 1 - 3"

WILD PARSNIP

PLANT 31



Height 2 - 5'

LEAF 32



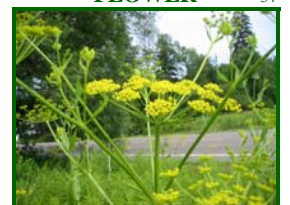
Yellow-green, 5-11 Leaflets

STEM 33



Grooved, Yellow-Green

FLOWER 34



Yellow, Flat Clusters 4 - 8"