

Giant Hogweed

(Heracleum mantegazzianum)



Family name: Apiaceae (Carrot family)

Common name/s: Giant Hogweed, Cartwheel Flower, Giant Cow Parsnip



Giant Hogweed (*Heracleum mantegazzianum*) is an invasive herbaceous plant known for its large size, umbrella-shaped flower clusters, and toxic sap. In Ireland, it is considered a serious invasive species, particularly along riverbanks and in disturbed habitats. The plant spreads primarily through seed dispersal, making control challenging.

Management strategies include mechanical and chemical control, with strict safety measures to avoid exposure to the plant's sap. If left unmanaged, Giant Hogweed can significantly impact biodiversity, human health, and soil stability in affected areas.

Description - Giant Hogweed is a large, biennial or perennial herbaceous plant known for its impressive size and the danger it poses due to its toxic sap, which can cause severe skin reactions.

The plant has been introduced to various parts of Europe including Ireland as an ornamental plant but has become highly invasive, outcompeting native vegetation and posing risks to human health.

Key characteristics include:

Height: Can grow to heights of 2.5 to 5 metres, making it one of the tallest herbaceous plants.



Leaves: The leaves are large, deeply lobed, and serrated, measuring up to 1.5 metres across.

Leaves are dark green, with a rough texture and can resemble those of other members of the carrot family.

Flowers: Produces large, umbrella-shaped flower heads (umbels) that are up

to 80 cm in diameter, containing small white flowers. Flowering occurs from June to July.

Fruit: Forms flat, oval seeds, which are 4-10 mm long. The seeds are viable for several years and can be dispersed by wind, water, and human activities.



Stem: The stems are thick, hollow, and covered with stiff white hairs, often with reddish-purple blotches.

Stems can reach a diameter of 5-10 cm.

Root: Has a thick taproot that can grow deep into the soil, enabling the plant to survive winter conditions.

Habitat - Giant Hogweed is native to the Caucasus region in southwest Asia but has become widely naturalised in many temperate regions, including Europe and North America. It thrives in:



- Riverbanks and Riparian Zones: Commonly found along riverbanks and streams, where seeds are easily dispersed by water.
- Roadsides and Disturbed Areas: Often establishes in disturbed soils, such as along roadsides, railways, and construction sites.
- Woodland Edges and Open Fields: Can grow in semi-shaded areas, as well as open fields and grasslands where there is sufficient light.

The plant prefers moist, nutrient-rich soils and can tolerate a range of soil types, from sandy to clay-rich substrates.

Status in Ireland - In Ireland, Giant Hogweed is considered a highly invasive species and is regulated due to its risks to both human health and biodiversity. The plant can outcompete native vegetation, particularly in riparian areas, where it may contribute to soil erosion once it dies back in winter, leaving riverbanks exposed.

Reproduction and Spread - Giant Hogweed reproduces primarily through seed production, although it can also regenerate from root fragments:

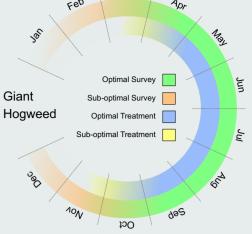
- Seed Dispersal: Each plant can produce up to 50,000 seeds, which can be dispersed by wind, water, or animals, allowing the plant to colonise new areas rapidly.
- Vegetative Propagation: The plant can also regrow from root fragments, although this is less common than seed dispersal. Disturbance to the root system can encourage new growth.

Management and Control - Controlling Giant Hogweed is challenging due to its rapid growth, extensive seed production, and the danger posed by its toxic sap. Control methods include:

 Mechanical Control: Cutting, mowing, or digging up plants can be effective, but extreme caution is necessary to avoid contact with the toxic sap. Protective clothing, including gloves, goggles, and long sleeves, should be worn. Cutting the roots below ground level can prevent regrowth. • Chemical Control: Herbicide application (such as glyphosate) is effective, particularly if applied early in the growth cycle.

Multiple treatments may be needed for larger infestations.

Preventative Measures:
 Monitoring known infestation sites and preventing seed dispersal by removing flower heads before they set seed can help control the spread.



Proper disposal of plant material is crucial to avoid unintentional spread.

Health and Safety Considerations - The sap of Giant Hogweed contains furanocoumarins, which can cause severe skin irritation, burns, and blistering upon exposure to sunlight (photodermatitis).



Contact with the eyes can lead to temporary or permanent blindness. Health and safety measures include:



- Avoiding Contact: Do not touch the plant with bare skin.
- Protective Clothing: Always wear gloves, long sleeves, and eye protection when handling the plant.
- Immediate Washing: If sap comes into contact with the skin, wash the area thoroughly with soap and waterand keep it covered from sunlight.

Seek medical attention if a reaction occurs.

Ecological Impact - Giant Hogweed can have significant ecological impacts, especially in riparian and disturbed habitats:

- Competition with Native Species: Forms dense stands that outcompete native plants, reducing biodiversity and altering the structure of plant communities.
- Soil Erosion: When the plant dies back in winter, it leaves bare ground, which can increase the risk of soil erosion, especially along riverbanks.
- Impact on Wildlife: The loss of native vegetation can affect animals that depend on those plants for food and shelter.

For further information and free advice, please contact:

Japanese Knotweed Control Ltd.



Email: <u>mail@jkc.ie</u> Tel: +353 (0)86 250 8805 Web: <u>www.jkc.ie</u>



