

BRIDE VALLEY INVASIVE ALIEN SPECIES PROJECT

Information for Participating Landowners 2022



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage



The Bride Valley Invasive Alien Species Project

The Bride Valley Invasive Species Project was initiated by the Ecology Office of Cork County Council in association with the Bride Farming with Nature team in 2019. The objectives of this project were to survey and map the occurrence of alien invasive plant species along rivers and streams within the Bride Catchment and to work with landowners to initiate a treatment programme to tackle the most problematic of these species, Giant Hogweed. The survey and mapping phase of the project has been completed and we are now embarking on the active management phase.

This project is funded by the Department of Housing, Local Government and Heritage through the Local Biodiversity Action Plan fund and Cork County Council. Envirico Ltd has been appointed by Cork County Council to work with landowners and to carry out active management for Giant Hogweed within the target area for 2022. Envirico are an ecological consultancy who specialise in the control of Invasive Alien species.

What is Giant Hogweed

Giant Hogweed (*Heracleum mantegazzianum*) is native to the Caucasus region and was



originally introduced to the British Isles in the 1800's as an ornamental plant. In Ireland, it is almost exclusively found along watercourses as it thrives in rich, moist soil. As the name suggests, Giant Hogweed is an enormous herbaceous plant. It can grow up to 5m tall, with leaves up to 3 x 1.5m and a stem diameter of 5 - 10cm. It produces large umbels of white flowers up to 80cm across. The

stem is green with purple blotches and is covered in fine hairs. Unlike our native hogweed (*Heracleum sphondylium*), these hairs are particularly dense at the leaf joints. The leaves also have fine hairs on the underside and are sharply divided.

Giant Hogweed is a perennial plant, living for 3-5 years, after which time it sets seed (around July/Aug) and dies. A single plant can produce up to 50,000 wind-dispersed seeds. It has no vegetative means of reproduction, meaning that it reproduces entirely by seed. The seeds also float and are readily dispersed along watercourses allowing the plant to extend its range rapidly downstream.

Not only is Giant Hogweed bad for biodiversity, it also poses a serious hazard to human health. Its sap contains furanocoumarins which cause a phototoxic reaction in human skin. The furanocoumarins alter the genetic structure of skin they come into prolonged contact with,

eliminating the skin's ability to protect itself from sunlight. The result is that when the affected skin is exposed to sunlight, massive blistering can occur.

In Ireland, Giant Hogweed is classified as a High-Impact Invasive Species with a Risk Assessment Score of 19. It is also listed as an Invasive Species of European Union Concern. There is strict legislation surrounding this species in both Ireland and the EU.

What the Project Covers

Giant Hogweed seeds are readily carried by water and have a germination rate of over 85%. This means that it is important to commence treatment at the location highest up the river catchment where Giant Hogweed has been recorded. A collaborative approach to the treatment along a river catchment is the most successful means of achieving eradication. Not only will landowners with infested areas benefit from clearing their own lands of Giant Hogweed but landowners downstream will also benefit as risk of re-infestation from higher up the catchment is reduced.

The target treatment area for 2022 includes all areas within 3m of the Shanowennadrimina Stream and Bride River extending from Castlelyons, the known primary source of Giant Hogweed in the catchment, to the footbridge at Ballyrobert. The project will fund one treatment of all stands of Giant Hogweed within 3m of the River/Stream within each participating landholding within the target area. An individual method statement and risk assessment will be prepared for each participating landowner, which will set out the details of the proposed treatment for their landholding and may involve chemical and/or manual treatment. Treatment will only be delivered where the landowner has given consent for same. It is planned to commence the treatment programme in mid-March 2022.

Recommendations for Follow on Treatment and Management

Approximately 16,000m² of riparian land will be professionally treated as part of this project. This single treatment will give a head start to landowners who are trying to eradicate this species from their property. While Giant Hogweed responds well to chemical treatment, follow up management will be required for a number of years post the first treatment to keep Giant Hogweed in check. Included with this leaflet is a Giant Hogweed Identification Guide and Best Practice Notes to guide landowners in carrying out treatment going forward.

Giant Hogweed represents a significant health risk to anyone coming into contact with it. Landowners wishing to carry out follow on management should wear full PPE and follow all of the Health and Safety advice included in the attached leaflet. It should be noted that herbicide treatments may only be applied by registered Professional Pesticide Users and that, as the Bride River lies within a Special Area of Conservation, consent must be obtained from the Minister for Housing, Local Government and Heritage before spraying herbicides within 30m of the river (see Best Practice Leaflet for more information).

Giant Hogweed Identification Sheet



Flowerheads, may be 80cm across



Leaves may be 3m long



Red blotches and hairs on stem



Dead canes - winter

Further Information

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River Bride Invasive Alien Species

Giant hogweed Best Practice Notes for Landowners

This note provides information for landowners who wish to carry out follow on treatment of Giant Hogweed on their land following the initial treatment being carried out by Envirico in 2022.

Safety

- Giant hogweed represents a significant health risk to anyone coming into contact with it. The sap causes severe skin burns, scarring and even blindness.
- Full PPE must be worn at all times when working near Giant hogweed.
- PPE Required: Nitrile gloves, Type 5/6 (spray resistant) coveralls with the hood up, rubber boots and a visor to protect the eyes and face.
- An eye wash kit should be at hand at all times. If sap comes into contact with eyes, thoroughly wash the eyes for 10 minutes, wear sunglasses and see a doctor as soon as possible.
- Soap and water should be readily available should you come into contact with the sap. Wash the skin thoroughly and keep the area covered for at least 48 hours.
- Wash any tools or equipment thoroughly before removing any PPE.
- Wash your gloves thoroughly before beginning to remove your PPE.

Biosecurity

- Giant hogweed is one of the highest impact non-native invasive species in Ireland.
- 95% of seeds are within the top 5cm of the soil and so can easily be transported on boots or vehicles.
- Ideally infestations should be fenced off leaving a buffer zone of 4m around stands - 90% of the seeds are within 4m of the parent plant.

- A cleaning station should be set up when working near/in infestations. Equipment required: a plastic tub (large enough to stand in), a hoof-pick or similar, a stiff bristled brush, soap and water.
- Clothing should be inspected for the presence of seeds before leaving the area.
- A hoof-pick or similar should be used to remove soil from boot treads and boots should be washed with a stiff bristled brush.
- After washing down in the plastic tub, the dirty water should be dumped onto the footprint of the infestation and rinsed out before leaving the site.
- If works took place in water, boots and equipment should be disinfected with Virkon aquatic or Milton. Any Milton washings should be carefully disposed of so that runoff to any waterbody does not occur.
- Inland Fisheries Ireland Biosecurity Protocols should be followed when water or a riparian zone is entered. This is particularly important in relation to the Crayfish Plague. Check, Clean, Dry protocols should always be followed.
- If vehicles come within the 4m buffer zone, the tyres and under parts of the vehicle should be thoroughly washed down before the vehicle leaves the infested area.

Herbicide Application

- Best suited for use where tap rooting is too hazardous due to the size of the plants and/or where large numbers of plants are present.
- Consent must be obtained from the Minister for Housing, Local Government and Heritage before spraying herbicides within 30m of a Special Area of Conservation such as the Blackwater River SAC. A completed Activities Requiring Consent Form should be sent to the local regional NPWS office. Contact details for the local Conservation Ranger are as follows: David Rees, Local Ranger Tel: (085) 8738171 Email: David.Rees@housing.gov.ie
- Herbicides should only be applied by Professional Pesticide Users registered with the Department of Agriculture, Food and Marine.
- PPE: Nitrile gloves, minimum Type 5/6 coveralls, rubber boots and visor / respirator.
- Spot spraying with Roundup Biactive XL – reduces non-target application and therefore reduces risk of recolonization of bare ground.

- Application rate: 5L/ha. This is achieved by mixing 25ml product with 1L water (when spraying 1m swath at walking speed of 1m/s).
- Spray during calm (<11km/hour or 3m/sec wind) weather with no rain forecast for 12 hours.
- **Do not spray directly onto the water.**
- When spraying beside watercourses always work upstream.
- 1st Spray: March or early April. Plants have good leaf growth, 'a rosette' and >15cm tall.
- 2nd Spray: May or June.
- 3rd Spray: July or August. This will catch late germinators/small plants that evaded earlier treatments.
- Make regular checks for plants that are flowering and remove the flower heads with a loppers /slash hook. Macerate the flower head on the ground to prevent seed set and spray the parent plant to prevent further flower production.
- Working in conjunction with other landowners, particularly those upstream from you will increase the efficacy of the treatment programme.
- Treatment will likely need to take place over several years with regular monitoring for any recolonization.

Tap Rooting

- Ideal for dealing with small plants in small colonies (<100).
- PPE: Nitrile gloves, minimum Type 5/6 coveralls, rubber boots and visor / respirator.
- Use a spade to cut through the tap root at a 45° angle, 15cm below ground.
- The cut plant should be removed from the ground and left to decay in situ.