



STOP!

**The spread of
invasive species and
harmful pathogens**



**Best Practice for Control of
Giant Hogweed
*Heracleum mantegazzianum***



Iascach Intíre Éireann
Inland Fisheries Ireland



caisie





Scope

This best practice document provides guidance to stakeholders on effective measures to control the highly invasive riparian plant Giant hogweed *Heracleum mantegazzianum* based on a method used by IFI during the EU LIFE+ funded Control of Aquatic Invasive Species and Restoration of Natural Communities in Ireland (CAISIE) project.

Identification

Tall plant (to 4 m) with hollow, red-spotted and hairy stems and large umbrella-shaped, white flower head **[Fig.1]**. Leaves are up to 1.5 m wide and sharply divided **[Fig.2]**. An identification sheet and video can be found here: <http://www.fisheriesireland.ie/Invasive-species-list/curly-leaved-waterweed.html>

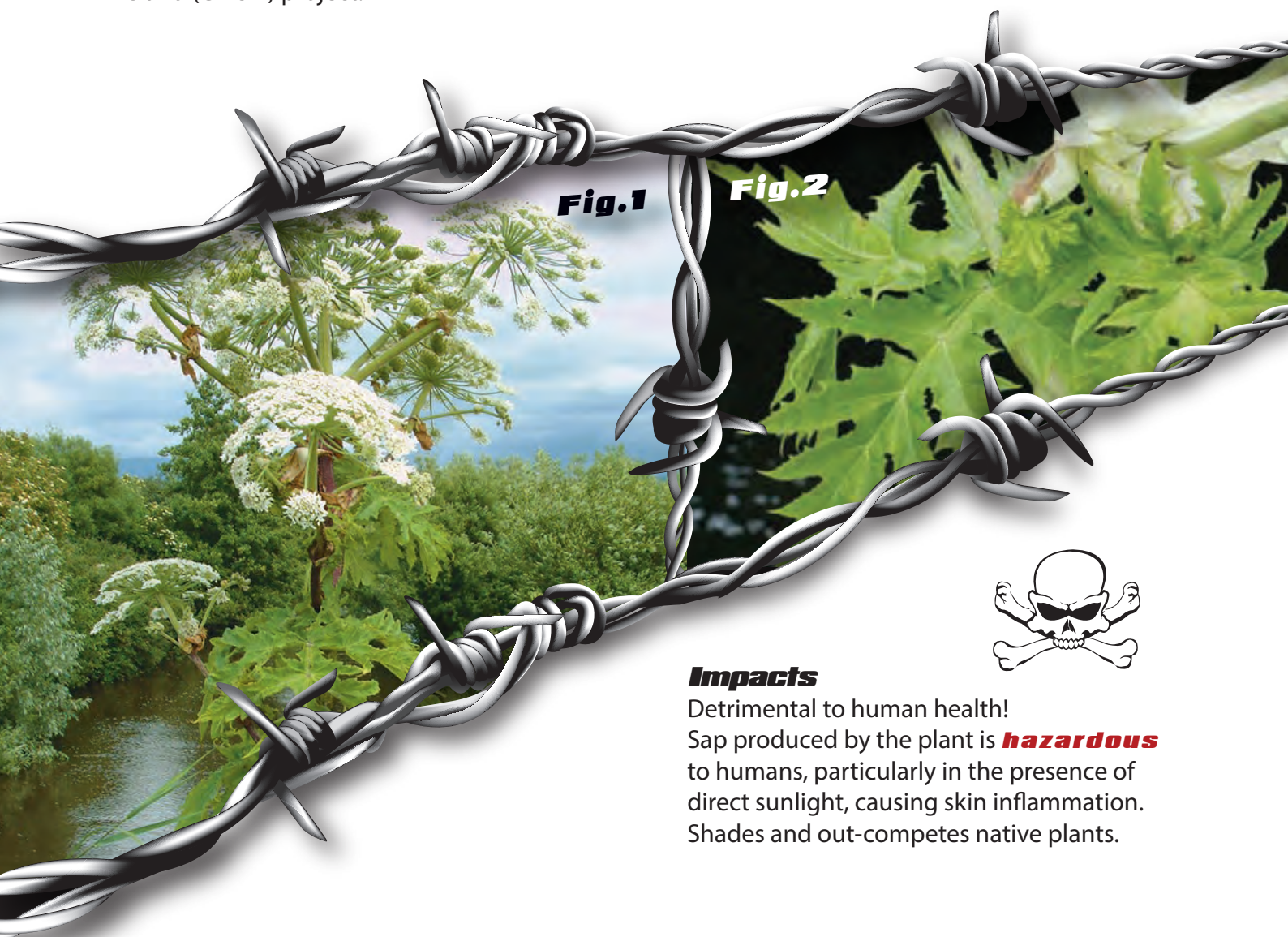


Fig.1

Fig.2



Impacts

Detrimental to human health!
Sap produced by the plant is **hazardous** to humans, particularly in the presence of direct sunlight, causing skin inflammation. Shades and out-competes native plants.

Pre-control assessment

Establish the distribution and abundance of the weed in the target area: Mark the location of all weed stands present on a map or using a GPS and record the area of infestation. The percentage cover and speciation of any native vegetation encountered should also be recorded. Data should be entered into a GIS mapping system if possible.

Effective control measures

Herbicide treatment using glyphosate (as Round-up Biactive) has been successfully used by IFI during the EU LIFE+ CAISIE project **[Fig.3]**. A catchment approach to treatment must be taken and spraying must commence at the farthest upstream site from which the plant is recorded. Spraying should commence in March or early April, when the plants have expanded their leaves and reached a height of >15 cm. Experience in Ireland has shown that young seedlings and small plants (<15 cm) are less susceptible to glyphosate than their larger counterparts. An application rate of 5 litres per hectare is sufficient to kill treated vegetation. Sections treated in March/April should be retreated in May, or later, if required.



Requirements:

Glyphosate herbicide; personal protective equipment, qualified contractor / operators, knapsack sprayer and long-lance, long-reach hedge clippers, bags for disposal of vegetation, stem injection gear.

The whole catchment must again be surveyed in July and any plants that have flowered, or are likely to flower, should be deheaded or chopped down before seeds are produced **[Fig.4]**. The cut umbels must be removed from the area and destroyed. Any regrowth should be sprayed with glyphosate as the plant will again attempt to flower and set seed. A further glyphosate treatment in September throughout the catchment will kill late-developing plants or seedlings that survive earlier treatments. Treatment will be necessary over a four (or more) year period to achieve eradication.

Herbicide application should only be carried out by suitably qualified contractors or operators with strict reference to the product label, local land use, health and safety considerations and any pertinent regulations. Land use, health and safety considerations and any pertinent regulations. Herbicide should be applied in a manner (e.g. using spot treatment when possible) to minimise drift to any adjacent non-target native plant species present. Knapsack sprayers are most appropriate for bankside work with long-lances useful for treating hard to reach areas. Stem injection of herbicide may be used to complement knapsack spraying.



Post-control monitoring

In order to properly evaluate the efficacy of the control measures implemented and to monitor the natural recovery of the native habitat, post-control assessment is necessary. Such monitoring should initially be conducted in July (as described in the previous section) to assess the need for further control and additionally on at least an annual basis. Re-survey the treated area in the same manner used during the pre-control assessment and compare the results. Consider appropriate remediation measures to enhance habitat recovery, if required, in consultation with appropriate experts and agencies. This may include the re-planting, re-location or transplantation of extirpated native species.



Further information

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www.fisheriesireland.ie/invasivespecies
www.caisie.ie

Additional considerations

An appropriate risk assessment, which includes Health & Safety considerations, should be carried out before any control or survey work is undertaken. Permission or licences from the appropriate authorities may be required to carry out invasive species control work in some locations such as Natural Heritage Areas, Special Areas of Conservation, Special Protection Areas and some waterways. The requirements listed under each control method are not prescriptive and only provide information on the principal items required.

It is important that suitable protective gear is worn to cover all exposed areas when working with Giant hogweed as contact with its sap can cause severe inflammation of the skin, including burns and blistering.

Caffrey J.M. (2001). The management of Giant Hogweed in an Irish river catchment. Journal of Aquatic Plant Management 39:28-33.
<http://www.botanicgardens.ie/gspc/pdfs/heracleum1.pdf>
<http://www.fisheriesireland.ie/Invasive-species-list/giant-hogweed.html>





The CAISIE Project is an EU Life+ funded programme co-financed by the National Parks and Wildlife Service.

The primary purpose of the project is to control and possibly eradicate aquatic invasive species in Lough Corrib and the Grand Canal and Barrow Navigation, the development and dissemination of effective control methods and raising the awareness of such species through stakeholder engagement.

Please report aquatic invasive species sightings to info@caisie.ie or Lo-Call 1890 34 74 24



Be biosecurity aware!

<http://www.fisheriesireland.ie/invasive-species/invasive-species.html>

For information and to report

LO-CALL: 1890 34 74 24

The CAISIE project is coordinated by Inland Fisheries Ireland and funded with the contribution of the LIFE financial instrument of the European Community, with co-financing from the National Parks and Wildlife Service.