

GIANT HOGWEED

(HERACLEUM MANTEGAZZIANUM)



Other publications in this series

FIELD BOUNDARIES ~ PONDS ~ FARM BUILDINGS
HEATHER MOORLAND ~ TREES ~ PESTS



Department of
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AN ROINN

**Talmhaíochta agus
Forbartha Tuaithe**

MÁNNYSTRIE O

**Fairms an
Kintra Fordèrin**

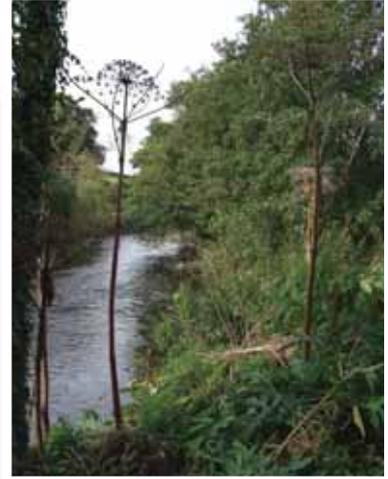
IMPORTANT FACTS

- ~ Giant Hogweed (*Heracleum mantegazzianum*) is an ornamental plant introduced into gardens in the British Isles from the Caucasus (south-west Asia) in the nineteenth century.
- ~ It is a non-native invasive species
- ~ It has spread along roads, railways and wasteland but is found mostly along watercourses. It is especially common along the Lough Neagh shores and the banks of the Upper and Lower Bann, Lagan, Ballinderry, Tempo and Blackwater Rivers.
- ~ Preferred habitats have a good resource supply, high light levels, disturbance and lack of regular management. Regular land use, shading by trees and low soil nutrient levels restrict invasion.
- ~ The sap, when activated by UV light causes the skin to blister approximately 15-20 hours after the original contact. It is important that those who work close to watercourses are fully aware of the dangers of giant hogweed. It is advisable to put up warning notices.

It is important to note that common hogweed and other members of the Umbelliferae family can cause similar skin irritation.

IDENTIFYING GIANT HOGWEED

- ~ The plants can be easily identified by their enormous size, often 3 - 5 m tall.



Giant hogweed – Ballinderry River - July 2009 (left) and September 2009 (right).

- ~ The deciduous leaves are 1m or more wide. They are divided and sharply pointed with soft hairs on the under surface.



Giant hogweed leaf in July

- ~ The rigid hollow stem grows at least 10cm in diameter. It is furrow ribbed and green with dark reddish purple spots.



Giant hogweed stem

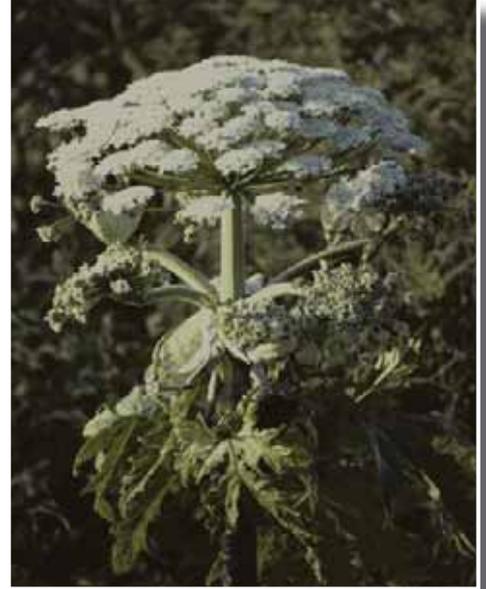
- ~ Leaf stalks are spotted with each spot having a bristle which exudes sap when broken.



Giant hogweed leaf stalk

- ~ Giant hogweed is monocarpic - flowers only once in its lifetime and then dies. Flowering is dependent on the size of the plant the previous year. This is linked to the age of the plant and the time required building up the necessary resources. Flowering occurs later in grazed habitats as this prolongs the time needed to accumulate resources. Giant hogweed is very tolerant and is able to postpone flowering for many years (up to 12 years).

- ~ The many flowers are small, white and grouped together in clusters, called 'umbels'. Giant hogweed is an umbelliferous plant, named so because of the umbrella-like arrangement of flowers they produce.



- ~ The mericarps (fruit) are oval – elliptical, broadly winged and paper thin. They are 6 – 18mm long and 4 – 10 mm wide and each contains one seed. They are easily dispersed by wind, water, animal or human influence.



Seeds from giant hogweed are generally large with a significant food reserve (Picture left). On average 10,000 – 20,000 seeds are dispersed from each giant hogweed plant (Picture right).

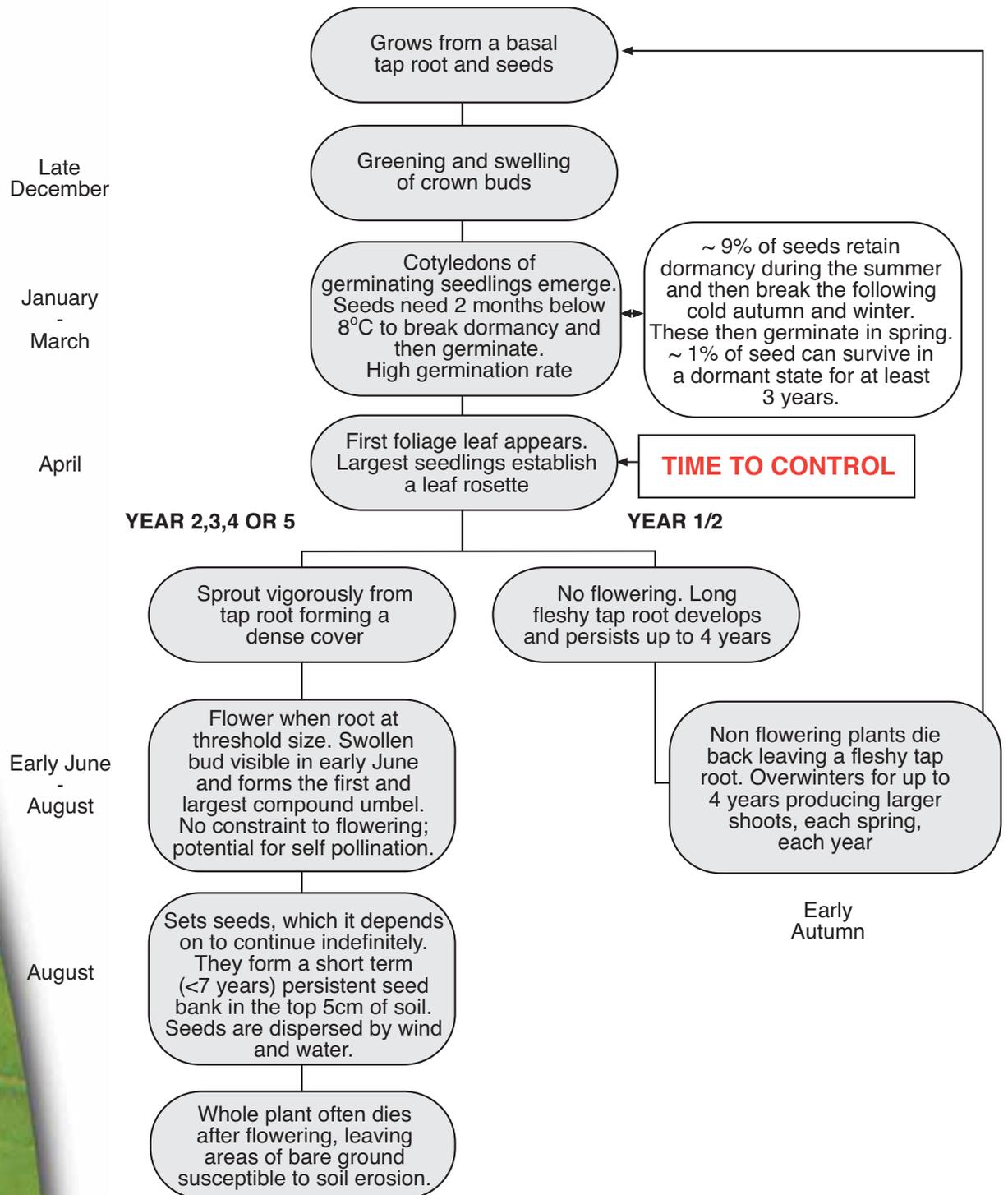
- ~ The majority of seeds fall close to the mother plant. Giant hogweed is a successful invasive plant due to its prolific seed bank and its ability to disperse seeds easily. Humans can influence seed dispersal by moving soil containing seeds, by vehicle transport if seeds are stuck to tyres, or when picking and moving decorative umbels with dry fruit used in flower arrangements.



In April seedlings establish a leaf rosette

- ~ Early germination allows seedlings to cover areas of open ground and reach an advanced stage before they are overgrown by adult plants (giant hogweed and other species). The relatively high seedling growth rate allows seedlings to establish themselves quickly and become an important competitor. The seedling stage is the most vulnerable in the lifecycle. Mortality of seedlings is high but comparable with other plants.
- ~ Common hogweed (*Heracleum sphondylium*), is unlikely to be confused with giant hogweed as it is smaller and more widespread, especially along roadside verges and hedgerows.

LIFECYCLE OF GIANT HOGWEED



WHY IS GIANT HOGWEED A PROBLEM?

1. THE MOST IMPORTANT CONCERN OF GIANT HOGWEED IS THE DIRECT HAZARD TO HUMAN HEALTH

- ~ Sap is released from broken stems and broken bristles on leaves, petioles, stems and roots. It is also released from leaf bristles if touched. Its close relative, the common hogweed, and other members of the Umbelliferae family also release sap but in smaller quantities.
- ~ The highest levels of sap have been found in June leaves, hence more severe reactions in spring and early summer.
- ~ The sap of all the Umbelliferae, but especially giant hogweed, contains substances called furocoumarins which, on contact, make the skin very sensitive to light. Exposure of affected skin, even for short periods, induces phytophotodermatitis. This produces reactions ranging from a mild rash, similar to hives, to painful watery blisters which are slow to heal and may require medical treatment. Other symptoms include high temperatures, inflammation, erythema (reddening), hyperpigmentation of skin and mild-severe dermatitis.
- ~ Occasionally, contact with giant hogweed leads to recurrent dermatitis for several years after the original contact. Hyperpigmentation and blistering may reoccur every time sunlight reaches the damaged tissue often years after initial contact with the plant. Seek medical advice if an itchy rash or blisters develops - inform your doctor if you think you have been in contact with giant hogweed.



Rash on back and legs
– skin irritation is caused by exposure to bright sunlight after contact with giant hogweed sap.
*Professor D Burrows, Department of Dermatology,
Royal Victoria Hospital, Belfast.*



Blistering on hands and forearm.

*Professor D Burrows, Department of Dermatology,
Royal Victoria Hospital, Belfast.*

- ~ Children and those with sensitive skin are at high risk. Unfortunately children are attracted to the long hollow stems for use as 'blowpipes' or 'telescopes' causing serious blistering around the eyes and mouth.
- ~ It is advisable to avoid any contact with giant hogweed but if this is not possible appropriate clothing should be worn.

2. HAZARD TO CONTROL

- ~ Anyone attempting to control giant hogweed, especially by cutting, is at risk. The skin blistering is often referred to as 'strimmer's disease'. The strimmer spreads the sap widely when giant hogweed plants are strimmed.

3. PUBLIC ACCESS

- ~ Giant hogweed restricts access to many amenity areas (conservation areas, riverbanks for fishing and recreation) with resultant economic impacts and public safety issues.

4. SHADES NATIVE SPECIES REDUCING BIODIVERSITY

- ~ Giant hogweed is a good competitor as its leaves grow early in the season and it shades out lower growing species. Large colonies of giant hogweed shade out and eventually exclude the shorter native plants with the resultant loss of dependant insects and other animals. In managed grasslands and woodlands it does not significantly reduce species numbers as it is controlled by management or shading. Encounters in nature conservation areas are infrequent due to poor nutrient status, drought or wet conditions that are not suitable for giant hogweed.

5. RIVER BANK EROSION

- ~ The dense growth of giant hogweed dies after flowering, leaving large areas of bare ground. This area is susceptible to soil erosion especially on steep sites and riverbanks exposed to river floods. Deposition of eroded silt can alter substrate characteristics in rivers and make the gravel unsuitable for salmonid spawning.

6. INJURY TO STOCK

- ~ Grazing has efficiently controlled giant hogweed although cases of photosensitisation injury to animals have been recorded in other countries. Photosensitisation has been reported in cattle, sheep and poultry from furocoumarins in other plant species; it is possible
- ~ Stock may suffer from digestive problems due to over eating giant hogweed and may be affected by the furanocourmarins.

7. CROP DISEASE HOST

- ~ Giant hogweed provides an alternative host for fungi (*Sclerotinia* sp.) which causes diseases of a wide range of arable and horticultural crops

LIMITING THE SPREAD OF GIANT HOGWEED

The reproduction of giant hogweed depends on fruit production which occurs only once in its lifetime, hence the correct timing of flowering is crucial. Giant hogweed either flowers as soon as possible with current resources or postpones flowering until next season when it has more resources and sets more fruits but risks death. When giant hogweed accumulates a minimum level of resources it flowers. Although able to flower in the second year, this only occurs in favourable conditions. When growing in unsuitable conditions giant hogweed will wait until the needed resources are accumulated.

Since giant hogweed can only reproduce via seed, control measures applied before flowering and fruit set will limit subsequent generations.

- ~ Identify and eliminate isolated colonies or individual plants before they can act as sources of seed for invasion of larger areas. Each plant can produce thousands of seeds.
- ~ Giant hogweed has a short term persistent soil seed bank – seeds persist in the soil for at least one year, but less than 5 years. For this reason vigorous control measures are required for several years to deplete the soil seed bank and eradicate the plant.
- ~ The cycle of plants can be broken by systematic control of all vegetative plants and seedlings for a number of seasons to prevent plants reaching flowering. If practised for a number of years it will “flush out” giant hogweed from an area as the seed bank is exhausted.
- ~ For successful control the supply of new seed needs to be prevented. Local control is ineffective if fresh seed supplies continue to arrive from outside sources. All stands and isolated plants should be mapped before control is started. This will help with planning the appropriate control strategy as the extent of the infestation is known.
- ~ Many seeds are shed into flowing water which carries them downstream to establish new colonies. Treatment of riverbanks should be started at the furthest point upstream where giant hogweed is known to occur and then work downstream. This will reduce the likelihood of re-colonisation.
- ~ Contaminated soils should be treated carefully. Ensure soil within 4m of the plants is not transferred to another area and clean contaminated tracked machinery and equipment used at infested sites.

- ~ Successful colonisation of sites results mostly from human land use change and disturbance and especially increased abandonment.
- ~ Control measures are determined by the habitat where the plant is found, number of plants, size of area, size / stage of the plant, distance to watercourses, access to the area, ground carrying capacity, land use and recreational value.
- ~ Giant hogweed has a wide range of chemical and mechanical defence mechanisms. There is some evidence that changes in defence traits might have occurred following the introduction to new environments.
- ~ The degree of control success depends on the methods used, frequency of treatment and the stage of the plant. The ultimate aim is to kill the plant before it fruits. A significant amount of time and money is invested to control giant hogweed. It is important to ensure that economic and labour resources are efficiently used via an integrated control strategy. The preferred control method should be effective and minimise negative ecological, economic and social impacts.

Farmers and landowners need to be very careful when dealing with this plant.

CONTROL MEASURES

A. CHEMICAL METHODS

Chemical control is one of the most widely used methods against this plant, especially in large infested areas and in long term control programmes. Herbicide application is recommended early in the growing season (April when rosettes sprouting from tap roots are about 10cm tall before the plants become too large to treat effectively and safely; and before the plant flowers and sets seed). The damage to non target surrounding plants would be less when spraying early as few have emerged. Seedlings germinated after the first treatment should be spot sprayed each month. Dry weather for at least 6 hours after spraying is desirable for the greatest herbicidal effect.

Total control is usually only achieved after many years of spraying and if the control strategy is meticulously run along a river course or within a river catchment.

SUITABLE HERBICIDES:

Glyphosate and triclopyr are both systemic herbicides with little or no residual activity in the soil. Triclopyr is *NOT APPROVED FOR USE NEAR WATER*.

A. *Glyphosate:*

- ~ Good control of giant hogweed and common hogweed can be achieved by applying glyphosate during April-May when the plants are actively growing but still small enough to be easily treated. Treatment at the recommended doses will effectively control giant hogweed for the full growing season.
- ~ Glyphosate is non-selective so care must be taken when applying it close to desirable plants. Re-colonisation with grasses and herbaceous plants is slow and, where doses are heavier, complete vegetation recovery may not be achieved in the season of treatment, resulting in bankside erosion. Hence, only the recommended dosage by the manufacturer should be used and it may be necessary to reseed the treated area with grass and other native plants. This will help reduce the rate of re-colonisation by giant hogweed seeds. Repeated herbicide treatments could be replaced with cutting methods to promote the growth of grazing tolerant species (see later).

- ~ Glyphosate is available in various products, including Barclay Gallup (Barclay) and Roundup Pro Biactive (Monsanto).
- ~ For professional use, apply glyphosate by knapsack sprayer fitted with an appropriate jet, using the manufacturer's recommended rate. Ensure thorough wetting of the foliage but without run-off onto surrounding vegetation.
- ~ In some situations, seedlings may germinate after application and a follow up treatment may be necessary.
- ~ All the glyphosate products mentioned are currently approved for use near waterways.

B. Triclopyr

- ~ As before, good control of giant hogweed can be achieved by applying triclopyr during April-May when the plants are actively growing but still small enough to be easily treated.
- ~ Triclopyr is a selective herbicide which is safer to use with grasses but most woody and broadleaved plants are susceptible.
- ~ This chemical is *NOT APPROVED FOR USE NEAR WATER*.
- ~ Triclopyr is sold as Garlon 4 (Dow), Nomix Garlon 4 (Nomix Enviro) and Timbrel (Dow)
- ~ Use recommended doses of triclopyr in spring or early summer as an overall or spot treatment to effectively control for the full growing season.
- ~ Treatment in early May produces a significant kill of giant hogweed. A wide range of grass and herbaceous species will rapidly colonise the ground and help suppress young giant hogweed seedlings.

Research has shown that glyphosphate near watercourses and triclopyr in adjacent infested areas provide the most effective seasonal control. It is recommended that herbicides are applied strictly following pesticide product labels by a trained competent individual.

METHOD OF APPLICATION

A. SPOT TREATMENT –

- (1) By knapsack sprayer fitted with a fan nozzle. Suitable when isolated plants are mixed along with other species, reducing the damage to adjacent vegetation. Other vegetation can then develop a cover suppressing giant hogweed seedlings in later years of the control programme. This method requires fewer chemicals, is easier to apply and is the preferred method where possible.
- (2) **Hand held weep wipers** – sponge like attachment on the end of a knapsack sprayer lance. These are stroked in 2 directions over the leaf surface. These are less effective than an overall spray but are suitable for isolated plants growing amongst sensitive vegetation and in the locality of watercourses.

B. BLANKET SPRAY –

Using machine mounted spray booms. This is suitable for large stands but reseeding may be necessary and may be unacceptable in amenity areas. Not possible in most situations where giant hogweed occurs, for example along riverbanks - there are statutory buffer zones on a pesticide product label for tractor mounted boom sprayers.

C. STEM INJECTION –

This new method works by injecting herbicide into the main stem of giant hogweed using specialist equipment specifically designed for this purpose. Unlike traditional herbicidal treatment, which is applied to the plants leaf, stem injection delivers a controlled quantity of herbicide to the giant hogweed alone. It is therefore less risky to the environment, as the injected herbicide has no effect on surrounding vegetation and is also safe to be used near watercourses and in environmentally sensitive areas.

Stem injection can only be carried out when the young stem is emerging. Due to difficulties with the timing of application and the potential safety risk of contact with the large leaves this method requires specialist safety equipment.

Under licence, Stem Injection Systems is the only UK supplier of the pioneering stem injection equipment. One stem is injected per plant about 12 inches above the root crown. The manufacturers recommended rate should be used. Any stems missed during the process will be visible within a few weeks and a re-application can be carried out as part of the treatment process.

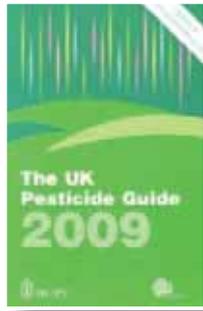


Stem Injection Systems (www.steminjectionsystems.com)

ADVANTAGES OF STEM INJECTION OVER CONVENTIONAL SPRAYING

1. Stem injection is not weather dependant - traditional spraying methods are severely compromised by weather conditions and cannot be applied during heavy winds or rain.
2. Stem injection has no impact on the surrounding vegetation or wildlife - traditional spraying and mechanical removal methods are not suitable, and will result in severe damage.
3. Stem injection is carbon neutral – eradication via soil removal has a negative impact on the environment.

LEGISLATION FOR SPRAYING



The UK Pesticide Guide (2009) summarises legislation on approval, storage, sale and use of pesticides in the UK. This is also available to online subscribers at www.plantprotection.co.uk. All pesticides used on Northern Ireland farms must be on the UK list of approved products (www.bcpc.org).

Under the Food and Environment Protection Act (FEPA) anyone using agricultural pesticides must take reasonable precautions to protect the health of humans, animals and plants and to safeguard the environment – in particular to avoid water pollution. It requires that anyone using pesticides must have received adequate instruction and guidance in their safe, efficient and humane use. All contractors and spray operators born after 31 December 1964 must hold a recognised Certificate of Competence issued by the National Proficiency Tests Council. Any herbicide treatment must be carried out by an experienced and competent operator. The College of Agriculture, Food and Rural Enterprise (CAFRE) provide training in the application of pesticides and can arrange competence testing. Contact Greenmount campus on 028 9442 6704 or visit their [website](#) for more details.

Always follow guidance within the *Code of Good Agricultural Practice for the Prevention of Pollution of Water, Soil and Air, DARD*.

In addition to any action taken by the [Northern Ireland Environment Agency \(NIEA\)](#) against a farmer in breach of Groundwater Regulations, a reduction in Single Farm Payment (SFP) may also result. The Cross-compliance Statutory Management Requirement (SMR) 3 requires those in receipt of SFP to protect groundwater against pollution. It is a requirement of SMR 10 that only approved pesticides are used on crops for which they have been approved, at the correct dosage levels.

B. MANUAL METHODS

Although chemical control is effective and cheap there is increasing public opposition to their use. Their use is controversial due to the possible effects on ground water quality. The [EU Water Framework Directive \(European Commission, 2000\)](#) sets out to achieve good standards of ground and surface water. Manual control may be preferred for small stands because chemical control creates open sites for the establishment of other invasive species, involves risks of contamination of nearby waters and can cause unwanted plant community changes. Treatment with chemicals can be regarded as a first step, followed by sowing grass mixtures and the use of manual methods or combined chemical and manual methods to re-establish a dense vegetation cover. Unfortunately giant hogweed plants have a high regeneration ability which allows them to survive some manual control measures. Time and frequency of treatment and cutting height affect the degree of control.

A. *Cutting:*

- ~ Do not cut plants more than 5cm above ground level since this encourages vigorous regrowth from the base of the plant. If a stem or part of a stem is left, then giant hogweed branches and produces new flowering shoots. Above ground cutting of the vegetative (rosette) stage extends their lifespan by postponing the time of flowering. Cutting the stem has only a cosmetic effect as it is seldom effective since the substantial root reserves allow regeneration and cutting during seed setting helps to spread the seeds even further. Cut flowering stems often have sufficient reserves to allow setting and maturation of seed heads, and production of viable seeds.
- ~ All methods entailing cutting the stem should be considered potentially dangerous.

B. *Root Cutting*

- ~ Individual plants may be killed by cutting at a 45 degree angle 15cm below ground level with a spade in April or May. At this time root cutting is ideal when the soil is moister and softer than in early summer and before flowering. This will damage the root and prevent regrowth from the base, hence a single treatment is effective. However, cutting is laborious and plants may be missed. It is not practical for control of dense colonies but ideal for single plants and small stands. Soil erosion may have deposited extra soil on top of the plant base and so these plants should be cut at a greater depth. Cut parts should be pulled out of the soil and left to dry.

- ~ It is most effective between flowering and setting seed as the root reserves are exhausted in flower production but this is unsafe to do so.
- ~ Root cutting and chemical control should eradicate giant hogweed plants within 4 - 5 years.
- ~ Full protective clothing, including rubber gloves and boots are required. It is very important to prevent the plant or the sap coming into contact with the skin, especially the face. A face shield is recommended. Cut material will remain active and sap phototoxic for a period. Cutting is not recommended as the best cover method.

C. Strimming

- ~ This should not be carried out as it spreads the sap, which causes blistering, hence the nickname "trimmer's disease".
- ~ Common hogweed and other members of the Umbelliferae may be present in areas along with giant hogweed. Since these plants can cause similar skin irritation, their sap should be prevented from coming into contact with the skin.

D. Ploughing

- ~ Ploughing normally gives total control where seedlings and young plants encroach onto agricultural land. It will induce the germination of broadleaved species from the soil seed bank and minimises risk of re-invasion whereas if chemically treated the number of broadleaved species decreases. Unfortunately ploughing is not possible in most situations where giant hogweed occurs, for example along riverbanks. Ploughs and tractors would need to be thoroughly cleaned after due to seeds sticking to them.

E. Grazing

- ~ Grazing should begin when early foliage appears in April and should continue until early autumn when re-sprouting stops. Grazing can be at a very high stocking rate for several short periods over the grazing season in dense stands or continuous with an appropriate stocking rate in open stands. It will exhaust the root resources and prevent giant hogweed plants from flowering. Eradication from a site takes 5 – 10 years of grazing management until the seed bank is depleted and root stocks die from exhaustion of resources.

- ~ A beneficial side-effect of grazing is tramping causing substantial damage to the plants and tap roots preventing them from growing. Careful grazing management is required so that no poaching occurs as this will provide good conditions for germination of giant hogweed seeds.
- ~ All livestock grazing giant hogweed should be familiar with the plant as animals not acquainted will tend to overeat the plant and be subject to poisoning or digestive disorders.
- ~ If grazing in dense stands the high organic matter digestibility (OMD) and crude protein content of giant hogweed causes gas in the guts of large herbivores and bloat may occur. Irritation and inflammation of the gut and diarrhoea may also occur due to the high crude protein content. These livestock should be offered straw as the high fibre prevents the conditions mentioned.
- ~ Giant hogweed has a bitter taste; horses in particular, and to a lesser extent, cattle avoid bitter plants.
- ~ If stands of seeded giant hogweed are grazed by sheep they can transfer seeds in their fleece if moved to another site. It is not known if seeds can survive after passage through livestock intestines therefore ingestion may possibly spread seeds from one pasture to the next. Stock should then be held in pens for 2 days before transferring to another pasture but this will not prevent translocation in the fleece. Grazing should therefore begin in early spring to prevent the fruit developing.
- ~ Ingestion of furanocoumarins from giant hogweed have been found:
 - (1) to affect the balance of the steroid hormones promoting production rates in livestock
 - (2) to interfere with the fertility of female livestock
 - (3) in milk of livestock producing an unpleasant smell. Hence cows, sheep or goats producing milk for human consumption should not be used to graze giant hogweed.
 - (4) to perhaps cause light hypersensitive dermatitis in livestock. Densely haired and dark skinned breeds of livestock should be used for grazing giant hogweed to reduce the contact of exposed skin with the plants furanocoumarins and decrease the likelihood of light – hypersensitive dermatitis. If dermatitis does develop in grazing livestock the animal(s) should be removed and kept in the shade until the dermatitis is cured.

- ~ It has been shown that giant hogweed is effectively controlled by cattle and sheep grazing. Managed animal grazing is an efficient control measure for larger areas infested with giant hogweed, inaccessible areas for machines and difficult areas to manage by manual methods. In Britain cattle, sheep, goats and pigs have grazed giant hogweed without harm. Although cases of photosensitisation of cattle, sheep and poultry have been reported from other plant species that produce furocoumarins and there is a chance that similar symptoms could occur from intake of giant hogweed.

F. Pulling

- ~ Not suitable for mature plants as the tap root is too large. If the plant breaks the tap root will regrow.

G. Reseeding following eradication of large stands –

- ~ Successful eradication of giant hogweed stands leads to increased vulnerability to reinvasion by giant hogweed or other invasives, especially in riverside areas where giant hogweed seeds are distributed by water. Sowing mixtures of native grass species helps to restore the original vegetation and aids post control management of affected sites. A grass sward established in autumn will compete with germinating giant hogweed seedlings in the following spring.
- ~ Re-vegetation on riversides would be labour intensive and could be impractical for larger areas. However grass coverage close to river areas reduces the risk of erosion and re-invasion.

C. BIOLOGICAL CONTROL

Biological control is the use of natural enemies of invasive plants for their control. It offers a long term, sustainable solution as the introduced agent can reproduce and disperse controlling all populations of the invasive species wherever it occurs without further intervention. Some insects feed on giant hogweed but to date none have been found to feed exclusively.

The potential (severe damage, efficient dispersal) and safety (high specificity) of fungal pathogens has been more documented recently. While a range of fungi were found to be associated with giant hogweed in Europe they had an insignificant impact on the plant.

Associated herbivores or pathogens only delay the onset of flowering. As soon as flowering begins they are no longer significant as the plant has sufficient resources it can rapidly utilise for flowering. Neither insects nor fungal pathogens exhibited sufficient specificity to be considered safe for introduction into Europe.

More research is needed before any form of biological control can be contemplated.

After an infestation has been dealt with, regular surveys for at least 5 years must be undertaken and action taken to eradicate any new giant hogweed plants.

WHAT IS OFFICIALLY PERMITTED?

Agri-environment scheme participants and/or landowners in receipt of Single Farm Payment must comply with Cross-Compliance. Cross-Compliance states that “you must prevent encroachment by invasive species such as Giant hogweed which degrade the agricultural and environmental value of the land”. If you manage a riparian zone along a farm waterway as part of your NI Countryside Management Scheme (NICMS) agreement, one of the management requirements of this option is the removal of invasive species, for example giant hogweed.

The UK is bound by international agreements such as the Convention on Biological Diversity and the EC habitats and Species Directive, to prevent the introduction of, or control, non-native species. It is an offence, without a licence, to plant or otherwise cause to grow in the wild any alien plant listed on Part II of The Wildlife Order (Northern Ireland), 1985, which poses a threat to our native flora. This also

COUNTRYSIDE MANAGEMENT PUBLICATIONS

GIANT HOGWEED

includes seeds and as such it is an offence to move contaminated soil material to new sites. For information on how to dispose of this waste safely contact [NIEA Waste Management Unit](#) (028 9056 9353).

FURTHER INFORMATION

For advice on any issue relating to countryside management contact:

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