

# **City Council Habitat Advice on:**

- **Japanese Knotweed**
- **Ponds**
- **Ragwort**

# Japanese Knotweed

Japanese Knotweed (*Fallopia japonica* or *Polygonum cuspidatum*) is now a serious threat to many natural habitats, especially watercourses and wetlands, because of its vigorous growth which smothers our less vigorous native flora.

## Why is Japanese Knotweed a problem?

Japanese Knotweed was introduced into our gardens early in the 19th century. It was recommended as being suitable for wild gardens and shrubberies, but gardeners must have soon become fed up with its invasive nature and dumped it over the garden fence. It was first noted in the wild in London in 1900, and from there it has spread rapidly through Britain. It is now a serious threat to many natural habitats, especially watercourses and wetlands, because of its vigorous growth which smothers our less vigorous native flora. Once established it is also very hard to eradicate.

On a more positive note, it can act as a shelter for woodland species like Celandines, which flower and seed before the Japanese Knotweed develops in Spring. The flowers also come late in the season, and are likely to be a valuable nectar source for insects. However, conservationists are generally agreed that the harm caused by the plant to valuable wildlife habitats, especially along watercourses, outweighs these benefits.

## Appearance

Japanese Knotweed is a herbaceous perennial - it dies back every year but emerges again from underground roots, or rhizomes, in late spring. The new stems are thick, hollow and mottled red on green, and grow at a phenomenal rate to make dense thickets. Its frothy mass of tiny, creamy green flowers appear in late in summer and autumn. The whole plant dies back after the frosts, but the bare yellowy-brown stems remain conspicuous into winter.

## How does Japanese Knotweed spread?

Its rapid spread across the country is remarkable when you consider that it doesn't form viable seed in Britain, but spreads through bits of the rhizome which become detached from the main root-mass. In fact, all the plants recorded in Britain so far have been female, and any seeds formed are hybrids with another species.

Japanese Knotweed is very common on sites that are disturbed by human activity, like railway lines, old allotments, rubbish tips and derelict land. The main cause of its spread is by transferring loads of soil, rubble and rubbish between sites. It can also spread from site to site through bits of root stuck to machinery and tyres.

It can spread rapidly down watercourses. Floods can easily dislodge rhizomes, which are carried downstream to start new colonies.

## **Legal situation**

Under the **Wildlife and Countryside Act 1981**, any person who plants Japanese Knotweed or otherwise causes it to grow in the wild is guilty of an offence.

Under the **Environmental Protection Act 1990**, Japanese Knotweed is classed as controlled waste and must be disposed of safely at a licensed landfill site according to the EPA (Duty of Care) Regulations 1991.

## **Control and disposal**

To prevent Japanese Knotweed from damaging important habitats, it is sometimes necessary to control or remove it. This is not easy, because it can regenerate from cut stems and tiny pieces of rhizome. There is no simple way to eradicate it. Attempting to dig out the plants either by hand or JCB usually makes the situation worse, unless it is followed up by herbicides. Cutting or pulling stems is not effective against large clumps, and using herbicides can cause harm to adjacent habitats.

Small stands and plants growing amongst other vegetation are best kept under control by repeated pulling of stems. Ideally this should be done several times a year.

Larger clumps will need repeated herbicide treatment. Combined with digging over, this can be very effective. Close to watercourses, the only two herbicides that can be used are approved formulations of Glyphosate or 2,4-D amine; on a nature reserve, Glyphosate is preferable since it is less toxic to other species and is quickly broken down. Permission from the Environment Agency is needed if spraying within 10 metres of a watercourse.

If taken off site, the roots, stems and soils in which it grew must be taken to a licensed landfill site. On site, roots and living stems can either be buried deeply (this is not usually possible) or burned. Dead stems can be left to rot down.

## **Japanese Knotweed along the Riverside**

Japanese Knotweed is found in several places on the Riverside through Leicester. We will prioritise the control of plants growing close to the watercourses, next to important habitats or in the floodplain, because the main means of spread is through rhizomes dislodged by flood. Stands away from the water environment are less of a priority, since there is no risk of them spreading downstream.

The locations of the plant have been mapped on Aylestone Meadows, and its spread is monitored regularly. There are isolated clumps and stems at Aylestone Meadows, especially along the canal, which are regularly cut and pulled to keep it in bounds. There are some large stands on private land near Aylestone which the Council has no powers to control.

The locations of Japanese Knotweed along the rest of the Riverside will also be mapped so that we can develop a plan for its control.

Information and advice

Please [contact the council's Trees and Woodlands Team](#) or telephone (0116) 454 4947 or (0116) 454 4920 for further information and advice.

**Reference:**

Child L & Wade M: The Japanese Knotweed Manual - Packard (2000)

# Ponds

## Background

Many of our ponds in Leicester occur within our Parks and Museums, Local Nature Reserves and private gardens, and provide an attractive feature in the landscape and a unique wildlife habitat for many species of flora and fauna.

Many of the freshwater plants and animal species have become well adapted to the special conditions that the ponds provide and many of the species have come to depend on them.

During the 20th century a great number of ponds throughout the UK were destroyed with an estimated 75% loss across the country. This loss has continued at a rate of 1% a year since the 1980s, mostly through drainage or infilling in agricultural areas or through urban development.

## Designation of Ponds

Some ponds are considered to be of high wildlife value. These include field ponds in rural locations which can be designated as a Local Wildlife Site (LWS) to help protect and conserve them, and guidance on how to manage them to maximise their value.

Ponds can also be designated if they contain large populations of frogs or toads in recognition as important breeding sites; or if they have populations of protected species such as great crested newts. Some ponds in Leicester have been identified and designated for these reasons.

## The Wildlife Value of Ponds

Ponds are important for wildlife as they provide a place for amphibians such as frogs, toads and newts to breed; invertebrates to lay their eggs and to live in the first few stages of their life cycle before emerging as adults (examples of this include dragonflies) and bats and birds to feed.

The loss of ponds in the UK has meant that they have been declared a priority habitat in their own right in the UK Biodiversity Action Plan. Locally, in Leicester, the new City [Biodiversity Action Plan](#) 2011 – 2021 has also recognised this loss and provided a Habitat Action Plan to prioritise the effective management of ponds and the creation of new ponds in appropriate areas across the City.

## Threats to ponds - Drying out

Many of our ponds in Leicester have suffered in recent years from drying out during the summer. In most cases, this is a natural cycle and wildlife has learnt to adapt by visiting the ponds in spring when full of water to enable breeding, and leaving as the

ponds dry out. When the ponds re-fill naturally in the autumn and winter invertebrates lay their eggs which then hatch and enable aquatic fauna to over-winter in the first few stages of their life cycle.

Topping-up ponds should only be done in a sustainable way. Examples include water collected in rain butts or drained off roofs and directed carefully into the ponds. **Topping-up should not be done directly from a tap using a hose or other mechanism to transfer the water.** This will cause increases in nutrients and algal blooms that are bad for wildlife and will make the water turbid and discoloured.

### Further information and advice

For further advice and information please [contact the council's Planning Service](#) .

Also see the following websites:

Pond Conservation

- [www.pondconservation.org.uk](http://www.pondconservation.org.uk) info@pondconservation.org.uk or 01865 483249.

Froglife

- [www.froglife.org](http://www.froglife.org)

Amphibian and Reptile Conservation

- [www.herpconstrust.org.uk](http://www.herpconstrust.org.uk)

# Common Ragwort (*Senecio jacobaea*)

Leicester City Council aims to limit the growth and spread of Common Ragwort on its highways, parks and open spaces in accordance with the Weeds Act 1959.

Follow these links to get more information on Ragwort:

## Appearance and ecology

Common Ragwort is usually a biennial plant - that is, in its first year it forms a low rosette of lobed crinkly leaves, and doesn't flower. In its second year the leaves die back and it flowers in summer, producing a large cluster of small yellow daisy-like flowers at the top of stems up to a metre tall. Many thousands of fluffy white seeds are produced which are dispersed on the wind, and then the whole plant dies. If the flowering stem is repeatedly cut back it can survive in the rosette stage for a number of years.

To survive as a species, Common Ragwort needs patches of bare, open or disturbed ground in which to seed itself. It is therefore very common on road verges, on derelict land or neglected cultivated land (like agricultural set-aside or old allotments). In a lawn or properly grazed pasture it rarely gets established. Pasture which is overgrazed, trampled or poached by livestock makes an ideal seed-bed for Common Ragwort.

Common Ragwort is native to Britain and is a natural part of our environment and ecosystem. Like many other native plants, it is toxic to animals if consumed in large quantities. This is a natural defence mechanism that it has evolved to protect itself from grazing animals. In nature, it is avoided by animals because of its bitter taste. It is only a problem to livestock if they are put in a situation where they can't avoid eating it.

Common Ragwort is host for at least 30 insect species and about a third of these are scarce or rare. Examples of insects include the Cinnabar moth and its black and yellow striped caterpillars. It is of considerable importance to wildlife, and makes a valuable contribution to the overall biodiversity of our environment.

There are several similar species occurring in Leicester - Hoary Ragwort (*Senecio erucifolius*), Marsh Ragwort (*Senecio palustris*), Groundsel (*Senecio vulgaris*) and Oxford Ragwort (*Senecio squalidus*).

## Effect on livestock

Common Ragwort can be very toxic to cows and horses and other bovine and equine livestock, causing potentially fatal liver damage. It is also toxic to sheep, goats, pigs

and deer. Fortunately it has a very bitter taste, so horses and other livestock quickly learn to avoid it in their pasture. They will usually only graze it if they are really hungry - for example, if their field is severely overgrazed. As long as there is plenty of grazing for them, it is not a serious health hazard in their pasture.

Common Ragwort gradually loses its bitter taste once it is cut, so it can be deadly in hay or if it is pulled and left lying in the pasture. Ragwort growing in a field being cut for hay is much more dangerous than ragwort in a grazing field.

### **Control of Ragwort**

If Common Ragwort is prevented from seeding, and its seeds are prevented from germinating, it eventually dies out.

In the short term, prevent it from seeding by cutting and pulling just before it flowers, and removing stems from grazing pasture. **If cut or pulled stems are left in the pasture they may poison livestock.**

Spot-treat any rosettes (not flowering stems; it will not be effective against these) with a Glyphosate based herbicide, and exclude livestock until the plant has died away. Do not apply a selective herbicide to the grassland because it will kill all other wild flowers and create patches of bare ground for Common Ragwort (and other weeds) to seed into.

There is likely to be a constant influx of windblown seeds into a grazing field from surrounding land, and seeds can stay dormant for many years. In the long-term, the only form of control is good husbandry and pasture management. Turf which is damaged through trampling, poaching and especially overgrazing creates an ideal seed-bed for ragwort. Pasture should be rested periodically to allow it to recover from grazing.

### **Legislation**

The Weeds Act 1959 empowers Agriculture Ministers to serve notice requiring an occupier of land on which certain specified weeds (including Common Ragwort) are growing to take action to prevent the weeds from spreading. It also empowers officials to carry out inspections of land and to instigate proceedings where an enforcement notice has not been complied with.

Further information is available on the DEFRA website relating to the legal disposal of ragwort. Additional guidance is set out in the PDF document 'Guidance on the Disposal Options for Common Ragwort', viewable from the page:

- [Guidance on the Disposal Options for Common Ragwort \(DEFRA\)](#)

## **Statement of Intent on the control and containment of Common Ragwort on Council-owned land**

Leicester City Council aims to limit the growth and spread of Common Ragwort on its highways, parks and open spaces in accordance with the Weeds Act 1959 and the DEFRA Code of Practice on how to prevent the spread of ragwort. This will be through inter-departmental, cross-organisational and stakeholder co-operation and action.

The Council will seek to do the following to control Common Ragwort:

- Identify land on which ragwort is present.
- Review the risk of spread to land used for grazing or conserved forage production on a six-monthly basis.
- Ensure managed grassland is maintained in a good condition.
- Where appropriate and safe to do so avoid removing ground cover in amenity areas, roadside verges and on railway land unless provisions are made for the appearance of ragwort.
- Pay particular attention to areas of bare or disturbed land.

### **Where a high risk is identified:**

- Take immediate action to control the spread of ragwort using an appropriate control technique taking account of the status of the land.

### **Where a medium risk is identified:**

- Establish a control policy to ensure that where a change from a medium to a high risk of spread can be anticipated, it is identified and dealt with in a timely and effective manner using appropriate control techniques taking account of the status of the land.

### **Where a low risk is identified:**

- No immediate action is required.
- Dispose of ragwort plants in an approved manner.
- Follow safety guidelines.
- Monitor the impact of clearance action to ensure its effectiveness for up to six months or to the end of the growing season if sooner.

The Council will constantly look to improve control measures and take advice on other methods of control with reference to relevant health and safety legislation (e.g. Control of Substances Hazardous to Health (COSHH) regulations), the Council's Eco-Management and Audit System (EMAS), and guidance from the Department for Environment, Food & Rural Affairs (DEFRA).

### **Further information and advice**

For further information and advice, please [contact Parks Services](#), or the Council's Nature Conservation Officer.

You can find much more information in the following government publications:

- [Code of Practice on How to Prevent the Spread of Ragwort \(DEFRA\)](#)
- [Guidance on the Disposal Options for Common Ragwort \(DEFRA\)](#)