



**What is Ragwort?**

There are several types of ragwort; the most prevalent being the Common Ragwort (*Senecio jacobaea*) also known as benweed, St James Wort, staggerweed and tansiweed). Ragwort is a poisonous weed that is becoming increasingly common throughout Britain.

It normally takes two years to grow to maturity and then flowers biennially (every second year). However, if the stem is cut or mown, ragwort often becomes an annually flowering plant. Each plant can produce up to 150,000 seeds which have a 70% germination rate and can lie dormant in the soil for up to 20 years.

Ragwort is frequently seen on wasteland, verges and railway land whereby it spreads onto pasture land.

It is one of the injurious weeds specified in the Weeds Act 1959. This act was amended in 2003 by the Ragwort Control Act, giving added protection to animals at risk of ragwort poisoning.

**How does Ragwort affect livestock?**

Equines (horses, ponies, donkeys, mules) and bovines (cattle) are more susceptible to ragwort poisoning than other livestock with young animals being more prone than older ones. Poisoning can occur at any time of the year, generally having a cumulative effect. A very small intake over a long period of time can be just as damaging as a large intake over a short period.

The toxins in the plant damage the liver by affecting its ability to function properly, eventually causing liver failure. Liver failure occurs when approximately 80% of the liver is damaged.

**How do animals become poisoned?**

Poorly managed, overstocked land with sparse grass provides an ideal environment for ragwort to thrive.

Generally if there is sufficient grazing, animals will not eat ragwort when it is present although a few may develop an acquired taste for it. They may inadvertently eat it in hay, haylage or dried grass as ragwort becomes more palatable when wilted or dried due to losing its bitter taste.

**What are the clinical symptoms?**

Symptoms usually only become apparent when liver damage has occurred. There are rarely any warning signs that this has happened. Animals may firstly appear depressed with a loss of condition and poor appetite. They may become constipated, have diarrhoea, become photosensitive (sunburnt) on unpigmented (pink) skin and sometimes appear jaundiced.

Terminal signs include developing strange, nervous behaviours such as restless, aimless and uncoordinated movements. The animal may appear blind, often pressing their heads against solid objects and develop an abnormal gait and stance. Often, when clinical signs of ragwort poisoning are apparent, liver failure has already occurred and little can be done for the affected animal.

**How can it be diagnosed and what treatment can be given?**

A blood sample can be taken for laboratory analysis to diagnose liver failure. Unfortunately, despite the liver's ability to regenerate, the damage will be too severe for this to occur and very few animals survive.

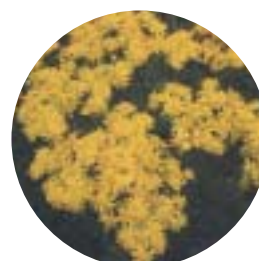
**How do I recognise Ragwort?**



Seedling



Rosette



Mature

Seedlings can appear from autumn onwards - the first true leaves, 10-12mm in length, are hairless and have a characteristic spade shaped blade with a smooth edge. As the plant grows the leaves produced show a gradual increase in the waviness, typical of the older ragwort plants. Leaves also become hairier as the plant gets older.

Rosettes can be found from early spring onwards having a circular cluster of leaves with a ragged appearance, usually deep green on top and underneath covered in a cottony down. The rootstock, base leafstalks and lower parts of the stem may have a purplish/ red colour. (If biennial it will over-winter as a rosette and during the second year send up a single leafy stem that will produce numerous flower heads.)

Mature plants reach between 1-2m in height. The stems are green, tough and often tinged purplish/red near the base, but brighter green and branched above the middle. Flowering occurs May to late October. The bright yellow flowers are daisy-like. Most plants die after flowering, creating a gap suitable for immediate colonisation by seedlings.

### **How can I control Ragwort on my land?**

Control of ragwort is the only way to avoid ragwort poisoning. *The Code of Practice on How to Prevent the Spread of Ragwort*, available from the Department of Environment, Food and Rural Affairs (Defra), can provide further help. To eliminate the danger to your animals it is important to remove all potential sources of poisoning as quickly as possible and a control strategy must be employed. The chosen method of control should be the one least damaging to the environment and human health, whilst still being an effective method of control. Consider employment of a short-term measure when ragwort is first noticed to get rid of existing plants, followed by long-term measures, and improved management to prevent re-infestation.

The benefits of ragwort control methods are short lived unless the pasture is well managed, or re-infestation will inevitably result. Over and under grazing create open patches where ragwort can readily establish itself. Ragwort will not establish where there is a dense grass growth. Such a pasture can be best achieved through controlled grazing and/or regular fertiliser applications. This encourages root development of grasses and makes a valuable contribution to preventing re-infestation.

The following techniques can be used singly or in combination to reduce, control or eliminate ragwort.

#### Pulling / Digging:

Removal needs to be done before flowering has completed and is more easily achieved when the plant is immature (seedling or rosette) or after heavy rainfall when the ground is soft. As ragwort is a biennial, this method will need to be employed for at least 2 years and, if the pasture has a history of ragwort infestation, this will have to be carried out annually due to the remaining seeds in the soil. It is important to remove as much of the root as possible; ragwort can re-generate like docks from its root fragments. Digging out the entire plant will reduce the possibility of leaving root fragments. Rock salt, bought from any agricultural merchants, poured into the hole after digging helps to kill the remaining roots. Tools can be purchased for the job; 'Lazy Dog Tool' or 'Rag Fork' (*shown right*)



Always cover arms and legs, wear gloves and a facemask to avoid the inhalation of ragwort pollen, or other airborne particles, as the toxins can easily be absorbed.

#### Cutting

Cutting at the early flowering stage reduces seed production. Is acceptable in an emergency situation, but generally is not recommended since it encourages more vigorous re-growth.

#### Mechanical pulling

The pulling of ragwort by machine can be more appropriate for large areas of ragwort. For the machine to work effectively there has to be a significant height difference between the ragwort and other plants.

#### Herbicides

Herbicides can be an effective method of ragwort control if used at the appropriate time of year. Careful consideration should also be taken to ensure the most suitable product and method is used to limit the grazing and environmental implications. For advice on the choice of herbicides and suitable application technique, seek advice from a BASIS trained agronomist by contacting your local agrochemical distributor (see Yellow Pages). Users must follow both product label advice and codes of practice to ensure that the product is used safely and effectively. Please note that two common label statements on the products likely to be used for ragwort control are: -

1. Exclude livestock from the treated area until specified.
2. Palatability of treated ragwort plants is increased therefore removal of all dead plants is essential.

#### Alternative Herbicides

Alternatively, there are a range of natural non-toxic herbicides now on the market, such as Barrier H produced by Barrier BioTech Ltd, which is a fully licensed agricultural herbicide.

## How do I dispose of Ragwort?

Disposal options will depend on the amount of ragwort and whether your land comes under domestic, such as a private owner, or non-domestic classification for example, equestrian premises.

Ideally it should be disposed of on site but as this is not always a viable option, we would advise that you contact Defra for a copy of their *Guidance on the Disposal Options for Common Ragwort*.

For small amounts of ragwort the simplest method is to burn the wilted or dead plants (check with your local authority if this is permissible). Do not leave the ragwort where animals can get access to it as they will eat it and die. As ragwort is able to seed, even after removal from the ground, it should be placed into an enclosed container or secured bags (this must be done if it is being transported or moved). Using paper sacks which can be burned will not only prevent seed dispersal but also reduce handling requirements.

Other disposal methods include: rotting down, composting, incineration and landfill.

## What can I do if my land is being threatened by Ragwort from an external source?

Defra advises that the best course of action is for the complainant to seek a solution with the occupier of the infested land through constructive dialogue and persuasion; ask the occupier of the land, who is responsible under the Weeds Act 1959 and Ragwort Act 2003 (England and Wales only), to remove the ragwort. Should you be unsuccessful, a Weed Act form would then need to be completed through Defra.

**England and Wales;** the Department of Environment and Rural Affairs (Defra) is responsible for enforcing the Weeds Act 1959 and the Ragwort Act 2003. Forms and further information can be obtained from:  
Defra Helpline: 08459 33 55 77 (Monday to Friday 9.00 am to 5.00 pm) Website: [www.defra.gov.uk](http://www.defra.gov.uk)

**Wales:** the nearest Welsh Office Agricultural Department (WOAD).

**Scotland:** Scottish Executive Environment and Rural Affairs Department (SEERAD), Conservation Branch, Pentland House, 47 Robb's Loan, Edinburgh EH14 1TY. Website: [www.seeradonline.gov.uk](http://www.seeradonline.gov.uk)

**Northern Ireland:** Department of Agriculture and Rural Development (DARD), Dundonald House, Upper Newtownards Road, Belfast BT4 3SB. Tel: +44 (0)28 9052 0100 Website: [www.dardni.gov.uk](http://www.dardni.gov.uk)

**The Highways Agency** should be contacted for ragwort that is growing on the verges of motorways or trunk roads:  
Information line: 08457 50 40 30. Website: [www.highways.gov.uk](http://www.highways.gov.uk)

Contact your local Highway authority for ragwort growing on the verges of minor roads.

**Network Rail** for ragwort growing on land associated with railways can be contacted at: Network Rail, 40 Melton Street, London NW1 2EE. Tel: 020 7557 8000 or 08457 11 41 41 Fax: 020 7557 9000 Website: [www.networkrail.co.uk](http://www.networkrail.co.uk)

### Useful literature:

The following publications are available from Defra: Code of Practice on how to prevent the spread of ragwort (June 2004); Injurious Weeds and the Weeds Act 1959; Ragwort Control Act; Guidance on the disposal options for common ragwort.

### Other useful contacts:

**Rag-Fork.** 110 Sunderland Street, Tickhill, Doncaster DN11 9ER. Tel: 01302 743146 Website: [www.rag-fork.co.uk](http://www.rag-fork.co.uk)  
Also available from most agricultural suppliers, tack & saddlery stores and equestrian mail order catalogues such as Ride-Away Tel: 01347 810443 Website: [www.rideaway.co.uk](http://www.rideaway.co.uk)  
Robinsons Leisure Tel: 0870 420 3100 Website: [www.robinsons-uk.com](http://www.robinsons-uk.com)

**Lazy Dog Tool Company,** Hill Top Farm, Spaunton, Appleton-le-Moors, North Yorks YO62 6TR Tel: 01751 417351 Website: <http://www.lazydogtoolco.co.uk>

**Barrier Animal Healthcare,** 36/36 Haverscroft Industrial Estate, New Road, Attleborough, Norfolk NR17 1YE Tel: 01953 456363 Website: [www.barrier-biotech.com](http://www.barrier-biotech.com)

**The Henry Doubleday Research Association** (organic gardening, including weed control), HDRA Advisory Department, National Centre for Organic Gardening, Ryton-on-Dunsmore, Coventry CV8 3LG Tel: 024 7630 3517 [www.hdra.org.uk](http://www.hdra.org.uk)