

## POISONOUS PLANTS; RAGWORT KILLS

---



**THE DONKEY  
SANCTUARY**

### WHAT IS RAGWORT?

---

Common ragwort (*Senecio jacobaea*) is a poisonous weed that is becoming increasingly common in Britain. It is regularly to be seen growing along roadsides, on waste ground and areas of poor land management, spreading easily onto pastures and farms. Ragwort is a wild flower native to Eurasia but now found throughout the world. It is sometimes known as benweed in Ireland and in parts of the USA it is generally known as tansy ragwort, or tansyweed, although its resemblance to the true tansy is superficial.



### HOW DOES RAGWORT AFFECT LIVESTOCK AND HOW DOES POISONING OCCUR?

---

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 poison itself does not accumulate in the body, but over time more and more liver cells are destroyed, affecting the proper functioning of the liver, eventually resulting in liver failure. Liver damage can be very insidious, and may go by unnoticed for months/years, even decades before it is detected, by which point the liver may be down to 20% of its functioning capacity. Liver failure occurs when approximately 80% of the liver is damaged. Ingestion of a large amount of ragwort in a short space of time can also cause acute poisoning, resulting in death in a matter of days.

Despite its bitter taste, equines will eat ragwort especially during times of sparsity, overstocking or poor land management. Ragwort becomes more palatable when dried in hay, haylage or dried grass and can be difficult to distinguish from other plant species in the bale. For this reason it is important to **split and examine every bale fed to your animals** for any evidence of ragwort – discard any suspicious bales.

## WHAT ARE THE CLINICAL SIGNS OF RAGWORT POISONING?

---

**Unfortunately ragwort poisoning is rarely identified before the liver has undergone irreversible damage and symptoms will only become apparent at this late stage. There are no early warning signs.**

Symptoms first seen may include:

- Depression
- Loss of condition/poor appetite
- Diarrhoea or constipation
- Photosensitivity (sunburn) affecting unpigmented (pink) skin
- May have a jaundiced (yellow) appearance (mucous membranes such as gums and the conjunctiva or soft tissue surrounding the eyeball)

Progressing to more terminal signs including:

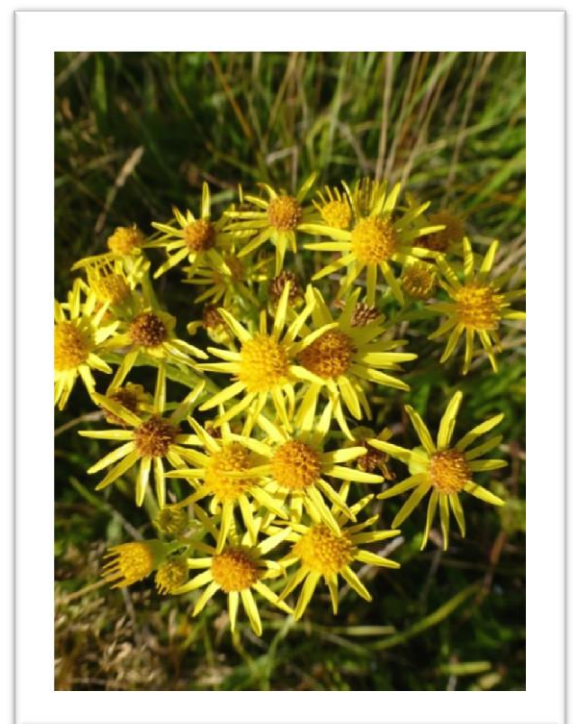
- Strange nervous behaviours
- Restless/aimless and uncoordinated movements/repetitive circling
- May appear to be blind
- Head pressing against solid objects
- Abnormal gait and stance
- Haemorrhage
- Loss of consciousness

Once clinical signs are seen it is too late for treatment in the vast majority of cases as the liver will be irreparably damaged. A blood sample can be taken to confirm liver failure, although there is no diagnostic test available to confirm the causal factor.

## HOW CAN I IDENTIFY RAGWORT?

---

Flowering ragwort can be identified by its mass of bright sunshine yellow daisy-like flowers measuring 1.5 - 2cm across. A mature plant usually stands anywhere between 30-100cm tall, but can sometimes reach 2m in height. The lower leaves, stems and roots may have a purple/red tinge. Harder to identify are young plants and those gone to seed.



Ragwort is usually biennial, taking two years to reach flowering and maturity, although in some circumstances it can flower in the first year of growth. 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 covered in a cottony down underneath. The rootstock, basal leaf stalks and lower parts of the stem may have a purplish/ red colour. (If biennial it will overwinter as a rosette and during the second year send up a single leafy stem that will produce numerous flower heads.)

Flowering occurs May to late October. Ragwort produces masses of tiny seeds from each flower. The seed head itself has a similar appearance to the commonly recognised dandelion. Once seeds are produced and dispersed on the wind the plant dies back, creating a gap suitable for immediate colonisation by seedlings.

The provisions of the Weeds Act only apply to common ragwort (*Senecio jacobaea*). Other species of ragwort, e.g. marsh ragwort (*Senecio aquaticus*), hoary ragwort (*Senecio erucifolius*) and Oxford ragwort (*Senecio squalidus*) are less common but may still need to be controlled as they may be equally toxic to horses or other livestock. Some species of ragwort are relatively rare, such as fen ragwort (*Senecio paludosus*), which is a protected species and has been reintroduced into several sites in England. Welsh ragwort (*Senecio cambrensis*) (also sometimes known as Welsh groundsel) is restricted entirely to North Wales.

Not to be confused with ragwort there are a number of lookalikes, including tansy and St John's wort.

## HOW CAN I CONTROL RAGWORT ON MY LAND?

---

Control of ragwort is the only way to avoid ragwort spreading and subsequent 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 removing your animals from any affected grazing to allow for proper removal of the plants. 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. The following techniques can be used singly or in combination to reduce, control or eliminate ragwort.

**Detection at an early stage of infestation will be easier, quicker and more economical to treat when compared with eradication of a well-established infestation.**

### 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 from a fragment of root as small as 1cm. 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'. Always cover arms and legs, wear gloves and a facemask to avoid the inhalation of ragwort pollen, or other airborne particles (research on absorption/inhalation is inconclusive but it remains a theoretical possibility).

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.

## CUTTING

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

## 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:**

- **Exclude livestock from the treated area until specified.**
- **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 access it as they may eat it. 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)  
[www.defra.gov.uk](http://www.defra.gov.uk)

**Wales:** Rural Inspectorate in Wales, for details of nearest office visit [www.wales.gov.uk](http://www.wales.gov.uk)

**Scotland:** Rural Payments and Inspections Directorate [www.seeradonline.gov.uk](http://www.seeradonline.gov.uk)

**Northern Ireland:** Department of Agriculture and Rural Development (DARD) Tel: +44 (0)28 9052 0100 [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: National switchboard 08459 55 65 75 [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  
[www.networkrail.co.uk](http://www.networkrail.co.uk)

**A control policy should involve collaboration with neighbours/neighbouring agencies to ensure the best possible outcome.**

## 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 Tel: 0330 333 4171 (local rate no) [www.livingthelifeofriley.co.uk](http://www.livingthelifeofriley.co.uk) (also available from most agricultural suppliers, tack & saddlery stores and equestrian mail order catalogues)

Lazy Dog Tool Company Tel: 01751 417351 [www.lazydogtoolco.co.uk](http://www.lazydogtoolco.co.uk)

Barrier Animal Healthcare Tel: 01953 456363 [www.barrier-biotech.com](http://www.barrier-biotech.com)

Garden Organic Tel: 024 7630 3517 [www.gardenorganic.org.uk](http://www.gardenorganic.org.uk)

## ECOLOGICAL IMPORTANCE

---

One final thought... although ragwort must always be considered a potential poison, in areas where there are no livestock, or neighbouring farms it may be acceptable to leave ragwort untreated due to its ecological importance. (See government guidance on how to identify areas of medium to high risk.) Ragwort is an attractive plant to many insects and for some rare species ragwort is an exclusive food source and as such has an important role in maintaining the country's biodiversity.

## THE DONKEY SANCTUARY

Slade House Farm, Sidmouth, Devon EX10 0NU

**T** [44] (0)1395 578222 **F** [44] (0)1395 579266 **E** [enquiries@thedonkeysanctuary.org.uk](mailto:enquiries@thedonkeysanctuary.org.uk)

[www.thedonkeysanctuary.org.uk](http://www.thedonkeysanctuary.org.uk)

The Donkey Sanctuary was founded by Dr Elisabeth Svendsen MBE in 1969.

The Donkey Sanctuary (registered charity number 264818) and its sole corporate trustee, The Donkey Sanctuary Trustee Limited (Company number 07328588) both have their registered office at Slade House Farm, Sidmouth, EX10 0NU.

Incorporating: The Elisabeth Svendsen Trust for Children and Donkeys (EST); The International Donkey Protection Trust (IDPT).

**WORKING WORLDWIDE**

## ACKNOWLEDGEMENTS

---

Author: Welfare, Vet and Research Depts  
© The Donkey Sanctuary.  
Published ca. 2000. Revised October 2014