

A Good Practice Guide for the Management of Ragwort (*Senecio jacobea*) on Kent County Council Land

Need for a Good Practice Guide

An issue that has been steadily increasing over the last few years is the problem of controlling the spread of ragwort, which is poisonous to livestock. Ragwort is a native plant widespread in Kent and its complete eradication is neither possible nor desirable. However Kent County Council is looking to minimise the risks posed by ragwort on its own land and on that of its neighbours. This involves the adoption of practical measures that are appropriate to the type and use of the land involved. *This Good Practice Guide shows how KCC will prevent, identify and control ragwort problems on its own land.*

Introduction

Ragwort is a native plant of disturbed waysides and over-grazed land. It is a biennial plant forming a rosette in the first year and flowering in the second. It is prolific and normally propagates by seed. Climate often has an important role to play in ragwort reproduction each year. Expansion of over-grazed pasture and new earthworks associated with development and road schemes provide additional niches. The latter however often only provides temporary opportunities for the plant. Areas that are regularly disturbed, over-grazed or harshly mown will continue to provide ideal conditions for establishment and rapid increase of ragwort.



Ragwort is poisonous to horses, cattle and sheep causing progressive liver damage. Animals kept on over-grazed ragwort infested pasture are most at risk. Reported poisoning cases are relatively few. Adult animals learn to leave the plant alone but the plant does become more palatable to stock (and more poisonous) if cut plants are left to dry on site - this must be not be allowed to happen on pasture land.

Eradication of a common native plant is not a practical option. All that can be done is to control ragwort where it is a serious problem to the health of grazing animals or in extreme cases to rare or threatened species and habitats on nature reserves etc.



Avoiding the development of ragwort abundance

The key to avoiding a ragwort problem developing on any land is sound long-term (sustainable) management.

- Do not over-graze. Use stocking rates that achieve a grass sward that is not too short over the majority of the land in question.
- Do not employ intensive mowing regimes that will result in opportunities for ragwort to become established and thrive.
- Avoid allowing other activities that may disturb the soil or break up the grass sward (e.g. heavy use by vehicles).
- Disturbed sites that exist should be given time to recover and develop closed grassland swards and/or scrub/woodlands.
- Large areas of disturbed land can be prevented from establishing ragwort if a suitable grass/wildflower seed is shown. All seed mixes sown on KCC land should not contain ragwort (some assurance or certification from the supplier maybe necessary). Disturbed sites with unsuitable soils (e.g. too heavy/wet) are unlikely to develop a ragwort 'problem'.
- Where there is a choice or opportunity consider the creation of scrub, woodland or even wetland habitats instead of grassland. Take advice on what habitats are appropriate for the location of the site.

It has been suggested that early season sheep grazing can help to knock back ragwort plants. This should only be seen as a short-term measure as it is likely to cause vegetative spread and persistence of ragwort even if it prevents plants from flowering and seeding. Early grazing on semi-improved or unimproved grassland can also impact heavily on spring and early summer wildflowers.

Deciding whether control is necessary

Control is to be considered only if one of the conditions below applies:

1. the ragwort 'problem' is specific to KCC land only and there is a specific threat that has been clearly identified (see list that follows).
2. ragwort concentrations occurring on land adjacent to KCC land are also being simultaneously controlled.

Control may be necessary if *ragwort occurs at a large enough density for one or more of the following to be true:*

- The diversity and value of wildflower rich 'unimproved' or semi-improved grassland is threatened.
- Grazing animals are at risk from poisoning from prolonged ingestion of the plant.
- The density of ragwort is so high that there is a very *real* risk of spread to adjacent *unaffected* wildflower rich 'unimproved' grassland or pasture that is being grazed by animals.

Treating ragwort infestations

The notes below will help to determine the appropriate approach for treatment in each situation. Consider the options in the order listed.

Option 1: Pulling

How and when to pull?

- Pull plants by hand whilst still in bud (use of gloves or a specialised tool, a "Lazy Dog", is recommended). Only suitable for very small areas or as a 'mop up' operation after cutting. Mechanical pulling by specialised but expensive equipment (e.g. the 'Eco-puller') is only recommended for *small* infestations of ragwort over wide areas. May be worth considering if there is also a large associated thistle 'problem'.

Considerations in making a decision to use pulling as a control measure:

- An effective measure for smaller infestations if complete rootstocks can be removed.
- Pulling (especially by hand) can leave fragments of rootstock behind in the soil that will readily produce new plantlets.
- It is recommended that pulling is undertaken at bud stage (early to mid summer, usually before late July)
- Digging out may be more likely to remove whole root but there is the danger of providing bare ground for seedling establishment.
- Time consuming and labour intensive (hand pulling) or expensive (mechanical pulling).
- Requires constant vigilance after treatment and may need to pull again in same or future years.

Option 2: Cutting

How and when to cut?

- By hand using scythes (for very localised problems or a few scattered plants) or mechanically using a reciprocating mower (for a number of small patches or larger areas up to 0.5 ha).

Considerations in making a decision to use cutting as a control measure:

- Likely to be the most appropriate method for KCC to use in most instances.
- It is recommended that cutting is done at the bud stage (early to mid summer, usually before late July);
- Cut material should be removed if grazing animals are present on the land, as dried material becomes palatable to them.
- Cutting can often cause plants to re-grow vigorously and produce tillers (vegetative side shoots) so if a problem worsens then in the following summer pulling maybe a more effective control measure (see above).
- For particularly difficult problems a cut in year 1 followed by spot treatment with a herbicide of any remaining plants in year 2 can be very effective (see below).

Option 3: Using Herbicides

How and when to use herbicides?

- Can be applied by using a 'weed wiper', brush or stick for spot treatments and small patches. Use a knapsack sprayer for larger areas. Product label advice must also be strictly adhered to.

Considerations in making a decision to use herbicides as a control measure:

- If options 1 or 2 are impractical then the use of herbicides may be appropriate.
- It is not normally advisable for KCC to use herbicides to control ragwort. This is because we do not wish to adversely affect the growth of wildflowers and the animals they support. Herbicides should not be used next to or on areas of nature conservation importance without consultation with KCC's Environmental Resources and Policy Group. Herbicide use should be restricted to land that has a low diversity of plant species, all of which are commonplace in the county. This approach is supported by wildlife conservation organisations.
- There are many tight health and safety regulations governing the use of herbicides that need to be adhered to. People using herbicides must have appropriate training and certification. Using herbicides in places used by the general public can sometimes be problematical. Health and safety guidance should be followed in these cases.
- Use on or near areas of nature conservation importance should only be considered in exceptional circumstances. Herbicides that are biodegradable and are recommended for use by English Nature and/or the Environment Agency should only be selected. Use of Barrier-H, for example is recommended for use in these situations by English Nature.
- An effective measure for spot treating large numbers of scattered plants or extensive patches on land of low nature conservation value.
- Herbicides may also be the only option for persistent and large ragwort populations in inaccessible locations (e.g. steep slopes).

- Extensive ragwort patches cut in year 1 (see above) followed by spot treatment with a herbicide of any remaining plants in year 2 can be very effective (see below).
- A single application may not be enough and repeated treatment of some plants/patches maybe necessary.
- Ideally herbicide should be applied in mild weather with rain not expected for at least a few days

Option 4

Various biological control methods have been tried world-wide but their effectiveness and suitability for use by KCC is yet to be fully established. Therefore biological control is not recommended.

11.09.02