

# Grassland weed control

A best practice guide to controlling weeds and protecting the environment



# Grassland weed control

Even though weed control is a small element of grassland farming it is important that the job is done safely, effectively and with care for the environment.

Effective weed control - whether by cultural or chemical means – is an important part of grassland management. Controlling weeds can improve forage yields, quality and longevity. However, a professional approach is vital

– both to optimise the benefits of weed control, and also to protect sprayer operators, the environment and the public.

**This leaflet aims to help grassland farmers and managers understand:**

- Weeds that threaten stock and productivity
- How to improve pasture
- Options for weed control
- The tools available
- Best practice in protecting the environment

This leaflet can only provide general guidance. If you need more information or advice, consult a BASIS qualified agronomist or your pesticide supplier for information specific to your farm or fields. And always check the pesticide label.



# Why control weeds in grassland?



## For Two Reasons:

1: They are costing you money

Grazed grass is the cheapest form of feed for most livestock.

Weeds can soon reduce productivity. Numerous trials show that a 10% weed infestation equates to a 10% yield loss.

A 10 acre field with 10% weeds is therefore only yielding 9 acres of grass.

2: Weeds may be harming your stock.

Some examples include buttercups, ragwort, nightshade, thistles and rushes.

If you apply manures or fertilisers you are actually helping them to grow.

Whatever, you want from your grassland, controlling weeds responsibly will help you achieve your objectives and protect the environment.

## What is a pesticide?

In this leaflet the terms herbicide or weedkiller are used, but strictly speaking the legal term for a pesticide is now "plant protection product". This term covers weedkillers/herbicides, fungicides, insecticides/pesticides, plant growth regulators and soil sterilants amongst others.

## Keeping weedkillers out of water



Whilst weedkillers are safe when used correctly they are potentially toxic to aquatic organisms. Every effort must be made to prevent them polluting water courses.

Additionally water companies are required by law to remove them before supplying water to the public; this is paid for by consumers.

Pesticides can reach water from farm yards, field drains, run-off, drift and over spray ditches. That is why it is important to consider the use of pesticides on grassland.

The main causes of pollution are when filling, run off from the field by rain, spray drift and over spray of water courses.



To avoid pollution leave at least 6m buffer strips between watercourses and sprayed areas and only spray when soil and weather conditions are suitable. All spraying equipment must be kept in good order and have the equivalent of an MOT certificate called an NSTS test. All operators must obtain the appropriate qualifications and hold a certificate of competence.

### **Best practice involves:**

- Identify the problem weeds and the plants you want to retain.
- Consider alternative control methods such as topping BEFORE weeds go to seed. Strimming around telephone poles will reduce weed seeds.
- Using only approved weedkillers recommended by a qualified agronomist ideally in writing.
- Keeping pesticides in a locked, bunded store
- Using trained operators with appropriate current certificates of competence.
- Regularly checking and testing spray equipment.
- Filling in areas away from drains and water courses.
- Clearing up any spills immediately, do not wash spills down the drain.
- Spraying when soil and weather conditions are suitable, i.e. no risk of drift and soils not too wet
- Leaving at least 6m buffer strips between watercourses and sprayed areas;
- Cleaning and washing down sprayers at the end of the day in the field.
- Wear appropriate protective clothing and dispose of used containers correctly.
- **If in doubt contact your local BASIS qualified agronomist or call the helpline number of the product manufacturer.**

## Integrated Weed Control

For best results an integrated and long term approach to weed control is usually the best option: look after the grass, avoid making gaps for weeds in the sward, act early to control weeds when numbers are few and hand pulling/mowing and spot treatment can be effective, using mowing to reduce weed vigour, choose the right weedkiller for the weed spectrum and make sure it is applied correctly; expect to re-treat the following year.

# Tools for the job



## Most herbicides have restrictions on how they may be applied.

Eg: Weedwipers may only be used with approved formulations of glyphosate.

Some may NOT be used through hand-held equipment or on tractor driven machines.

Check the label before you purchase or use.

**For large areas**, where weeds are limiting productivity, then weedkillers applied by a competent, certificated operator with a well maintained sprayer may be the most effective option. If you only spray occasionally consider if it makes better economic sense to use

a contractor rather than investing in training and machinery.

Remember, minute quantities of pesticides reaching drains and water courses on your farm can cause impacts on the environment miles down stream.

**For small areas**, Options include knapsack or ATV-mounted sprayers, weed wipers and weed wands.

However, smallscale does not mean small risk. The same basic principles apply – the user should be a trained, certificated and a NRoSO member; the equipment checked and due diligence paid to filling, application and washing out the sprayer.

# Control options



## Product purchase and use

Before you decide what to do, identify the weeds you need to control. It may be that you want to control docks but avoid damage to both grass and clovers or you want to treat newly sown leys.

Only products that are currently approved for use on grassland should be used to control grassland weeds. It is recommended that you check the latest approval status of products with your BASIS qualified agronomist, especially products you have purchased over a year ago.

Professional products are only available from certain outlets and should only be purchased for use by qualified and

certificated people.

Certificates of competence can be obtained from many providers see references at the end.

## Product choice

Choosing the right product for your needs depends on correctly identifying the weeds limiting you grass yields. It is also important to distinguish between products that can be used on newly-sown leys – prone to a range of annual seedlings – and established grassland where perennial weeds, such as thistles and docks, can easily become a headache. It is alsoworth thinking through how you will manage clover as many weedkillers are not clover-safe.



Some products work through contact action – they will only control susceptible weeds that have emerged when sprayed. Others enter the plant and provide ‘systemic’ control – this is particularly important for deep-rooted weeds as the herbicide is translocated from the leaves to the roots. This is often the best way to achieve long-term weed control.

**Clover** can be an important component of grassland, particularly in grazing pasture. However, many commonly used grassland herbicides will control or damage the clover as well as weeds. Again, check the label and any leaflets to see whether the product is safe to use on swards containing clover.

### Rosette stage

The optimum timing for controlling biennial weeds, such as docks, thistles and ragwort, is when they are at the rosette stage. This means application is most likely to be effective during the early autumn of their first year or late spring / early summer in their second year (before flowering).



# Other considerations



**Spot treatment and weed wipers** provides a convenient way of reducing the amount of weedkiller used and targeting a specific area. Always check the product label to ensure the application method is approved. Weed wipers - are particularly useful for controlling weeds such as thistles, rushes and nettles when they have grown well above sward height.

**Application timing**  
Weedkillers work best on actively growing weeds, which are at a susceptible growth stage. A rule of thumb for annual weeds in newly sown leys is that the smaller the weed, the more effective the control. For perennial weeds, which often have deep roots, it is best to spray at the rosette stage, when weeds have active, healthy new growth.

**Grazing intervals** – the time that stock must be kept out of grazing pasture after spraying is set out on product labels, especially to avoid animals eating dying or poisonous weeds. Some labels warn not to allow any

animals (including domestic pets) into pasture until the spray has dried on the leaf.

**Personal protective equipment (PPE)** – the type of personal protective equipment, e.g. gloves, faceshields, coveralls, etc, is also specified on every product label. Often the PPE needed when handling and measuring concentrated product differs from what is required when applying the dilute spray.

**Minute residues** of some weedkillers can adhere to plant material and be found in manure resulting from grazing or feeding conserved forage. Again, product labels will warn where there is such a risk. Always follow the instructions regarding manure management

**All pesticides** should be stored in a secure bunded or leak proof area away from livestock or pets. The store should be, properly labelled with a plan in place for fire or spillage. It need not be complex and where only small amounts of pesticide are kept an old chest freezer with a lock fitted is adequate.

# Water protection and grassland weedkillers - check it out

1. Are you getting advice on when and how to use the right product from a BASIS qualified adviser.
2. Do you use only approved weedkillers and pesticides?
3. Are weedkillers/pesticides in a clearly marked, bunded lockable store, away from livestock and pets?
4. Is the operator applying the product trained, certificated and competent to do the job?
5. Is the sprayer tested through NSTS regularly?
6. Is the sprayer checked for drips and leaks before filling with pesticide ? And have nozzle flow rates been checked with a jug test?
7. When filling the sprayer do you make sure there is no chance of leaks, spills or splashes reaching water by using a drip tray, portable bund or a bunded concrete area?
8. Are pesticide containers triple or pressure rinsed and drained before storing them under cover?
9. When spraying, is a 6m unsprayed strip left next to ditches and water courses to ensure there is no risk of drift or overspray reaching water?
10. After spraying, is the sprayer washed down in the field and parked up under cover?

Spray operators and contractors should be able to answer yes to all of these questions.

If you are using a contractor, the operator must hold a certificate of competence and should be a NRoSO member and the sprayer should be NSTS-tested every year.

# Further information

In the first instance, talk to your pesticide supplier or consult a BASIS qualified agronomist

Websites offering more information:

The Voluntary Initiative  
[www.voluntaryinitiative.org.uk](http://www.voluntaryinitiative.org.uk)

Environment Agency  
[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

Catchment Sensitive Farming  
[www.naturalengland.org.uk/csf](http://www.naturalengland.org.uk/csf)

Health and Safety Executive  
[www.hse.gov.uk](http://www.hse.gov.uk)

Scottish Environment Protection Agency  
[www.sepa.org.uk](http://www.sepa.org.uk)

Northern Ireland Environment Agency – DAERA  
[www.daera-ni.gov.uk/](http://www.daera-ni.gov.uk/)

Natural Resources Wales  
[naturalresources.wales/](http://naturalresources.wales/)

National Association of Agricultural Contractors  
[www.naac.co.uk](http://www.naac.co.uk)

CropLife UK  
[www.croplife.uk/](http://www.croplife.uk/)

Chemicals Regulation Directorate  
[www.pesticides.gov.uk](http://www.pesticides.gov.uk)

National Sprayer Testing Scheme (NSTS)  
[www.nsts.org.uk](http://www.nsts.org.uk)

National Register of Sprayer Operators (NRoSO)  
[www.nroso.org.uk](http://www.nroso.org.uk) Acknowledgements

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