

# Weed Control in Calderdale

**An Integrated Approach with Common sense, Responsible and reasoned methodology**



**Calderdale**  
Council

# The issues

- Bees
- Use of Glyphosphate
- Pesticide lobbying campaigns
- Impact of Sustainable use Directive
- Best Working Practice
- What we do
- What more can we do

## Don't kill our bees!

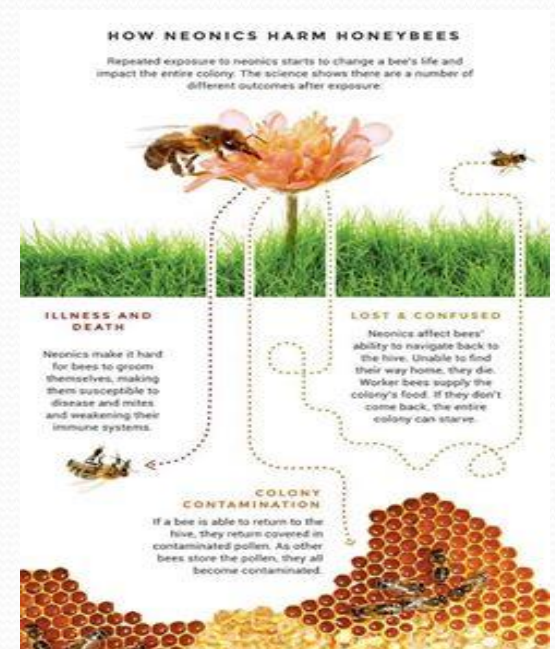
<https://petition.parliament.uk/petitions/104796>

- **Immediately halt the use of Neonicotinoids on crops**
- Neonicotinoids are pesticides in agricultural use that control pests such as aphids and grubs.
- The poison gets into the pollen and renders it deadly to bees and other pollinators.
- Neonicotinoids are banned in several countries due to links with bee deaths.
- Please ban the use of neonics on crops.



# Neonicotinoids

- Neonicotinoids, especially seed treatments of imidacloprid and clothianidin on arable crops, have become of increasing concern to beekeepers and bee researchers in recent years with many of them suspecting that they may be connected to current bee declines. These concerns have led to partial bans on the use of some neonicotinoids for specific crops in several European countries, including France, Germany, Italy and Slovenia. Bees are already facing sharp declines in their numbers and need help



# What controls are in place on the use of glyphosate in parks and public spaces?

<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/using-pesticides/General/glyphosate-FAQS>

- There are particular issues associated with the use of **any** pesticide in amenity areas, most notably the increased likelihood that members of the public will be exposed to pesticide applications.
- This is taken into account when pesticides are authorised for use.
- Conditions are imposed to ensure levels of exposure fall within acceptable limits.
- It is, however, important that users (or those who cause or permit others to use pesticides) not only comply with the authorised conditions of use but also use products in a responsible and sustainable fashion.
- <http://www.glyphosate.eu/basics>

## Why does the Government not ban glyphosate?

<http://www.pesticides.gov.uk/guidance/industries/pesticides/toxics/using-pesticides/General/glyphosate-FAQS>

- The Government feels that the regulatory process for authorising plant protection products (PPP) is a robust system. The authorisation process takes into account all scientific knowledge available.
- All products which contain glyphosate must be individually authorised in Member States.
- Applicants for authorisation must show that their products are effective, humane and pose no unacceptable risks to people or the environment.
- If their products were to pose such risks, they would not be authorised; or if such effects were discovered later, they would be withdrawn.
- Neither the EU's assessment of glyphosate as an active substance nor the UK's assessments of applications for authorisation of products which contain it have found the substance unacceptable for use.

## Sustainable Use Directive

<http://www.pesticides.gov.uk/guidance/industries/pesticides/News/Collected-Updates/Regulatory-Updates-2012/July/Sustainable-Use-PPP-Regulations-2012>

- **Why do you have to do this?**
- All countries in the European Union are implementing the **Sustainable Use Directive**.
- **The Directive applies in every EU country** and sets minimum standards for the safe use of professional plant protection products (pesticides).
- Due to existing legislation and the VI, many UK farmers and growers already meet most of the requirements of the Directive.
- However, some farmers and sprayer operators currently operating under 'grandfather rights' will need to get a Recognised Certificate if they wish to continue using professional pesticides.
- In addition, most spray application equipment will need to be tested and farmers need to demonstrate they are following an integrated approach to crop protection.

## You need to take three steps

- **1 Demonstrate IPM practices are being followed from 2014**
- This can be done by completing an IPM plan.
- Links to a range of plans can be found at [www.voluntaryinitiative.org.uk](http://www.voluntaryinitiative.org.uk).
- Completing a plan will help you make the most of IPM and shows you are considering different ways of controlling weeds, pests and diseases.
- The plan may also be useful evidence for farm assurance schemes and cross compliance inspections.



## 2 Ensure operators hold a Recognised Certificate from 26 Nov 2015

- Existing certificates e.g. PA1+PA2 meet the requirements of the Directive.
- A new Grandfather certificate will be available from City & Guilds from 26th Nov 2013 ([www.nptc.org.uk](http://www.nptc.org.uk)).
- Professional pesticide products must not be purchased or used after 26th Nov 2015 unless the operator who is applying that product is certificated.



### 3 Have application equipment tested by NSTS before 26 Nov 2016

- Find an approved National Sprayer Testing Scheme examiner at [www.nsts.org.uk](http://www.nsts.org.uk).
- Subsequent testing will be required every five years from 26th Nov 2016; and every 3 years from 26th November 2020.
- Granule applicators and boom sprayers less than 3m wide need to be tested every 6 years, while handheld equipment should be regularly checked against a checklist and a record kept.



## Are there any other options?

- **You have two other options**

1. Use a contractor or neighbouring farmer who holds an appropriate Recognised Certificate and has a tested sprayer. (It is your responsibility to check this).

Your BASIS Registered Crop Protection adviser may be able to help with your IPM plan.

2. Some amateur pesticides, available from garden centres, country and DIY stores, may be used without a recognised operator certificate. Check the label first; appropriate training and a CoSHH assessment is still required when these pesticides are used at work.

# Amenity Users

- The amenity use of pesticides covers a wide-range of areas, including facilities such as: public spaces; sports grounds and facilities; industrial sites; and transport infrastructure.
- There are particular issues associated with the use of pesticides in amenity areas, most notably the increased likelihood that members of the public will be exposed to pesticide applications.
- This is taken into account when products are authorised for use. Conditions are imposed to ensure levels of exposure fall within acceptable limits.
- It is, however, important that users (or those who cause or permit others to use pesticides) not only comply with the authorised conditions of use but also use products in a responsible and sustainable fashion.
- Ensuring that practices promote this in the amenity sector is identified as a priority in the [UK National Action Plan for the Sustainable Use of Pesticides](#) [external website].



# 10 Golden Rules

<http://www.iosh.co.uk/Membership/Our-membership-network/Our-Groups/Rural-Industries-group/Group-news/Amenity-Pesticides-10-Golden-Rules.aspx>

<b>Get trained</b>	All Calderdale staff who spray are trained	41 Calderdale staff NPTC 1a and 6a 14 2a and Quad - Lantra
<b>Carefully plan pest, weed and disease control strategies using a suitable advisor where necessary.</b>		
<b>Buy pesticides from reputable distributors.</b>	<b>Use only authorised products and comply with conditions specified on the product label.</b>	Calderdale uses Roundup Pro 450 See data sheets

# 10 Golden Rules

<b>Minimise use</b>	<b>Using the minimum amount of product necessary to control pests, weeds and diseases makes economic sense.</b>	<b>It is also a legal requirement in: areas frequented by the public; conservation areas;</b> herbicides approved for use on hard surfaces contain directions for use on the product label stating where the product can be applied. Application on hard surfaces must be targeted

# 10 Golden Rules

<b>Store pesticides correctly</b>	Calderdale stores at Lock Hill and Bedford Street Conform to Requirements	2 Nominated store Keepers
<b>Maintain application equipment.</b>	<b>It is a legal requirement that certain types of application equipment are tested on a regular basis.</b>	<b>All equipment must be regularly calibrated to help ensure that there is no under or over-dosing of pesticides and set correctly so that applications are confined to the target area</b>

# Protect workers and the public.

Protect workers and the public.

It is a legal requirement to ensure that all reasonable precautions are taken to protect human health when advising on, storing, handling or using pesticides. For example, employees must wear suitable protective equipment and may need their health monitoring.

Also the product should not be allowed to drift onto neighbouring properties.



# 10 Golden Rules

**Check the guidance.**

**Government and industry bodies provide advice (in paper form and on the internet) to help ensure pesticides are used safely and sustainably and a key source is the Amenity Forum.**

**However there is also a range of advice available in person and warding bodies can provide information on availability of suitably qualified and trained staff.**

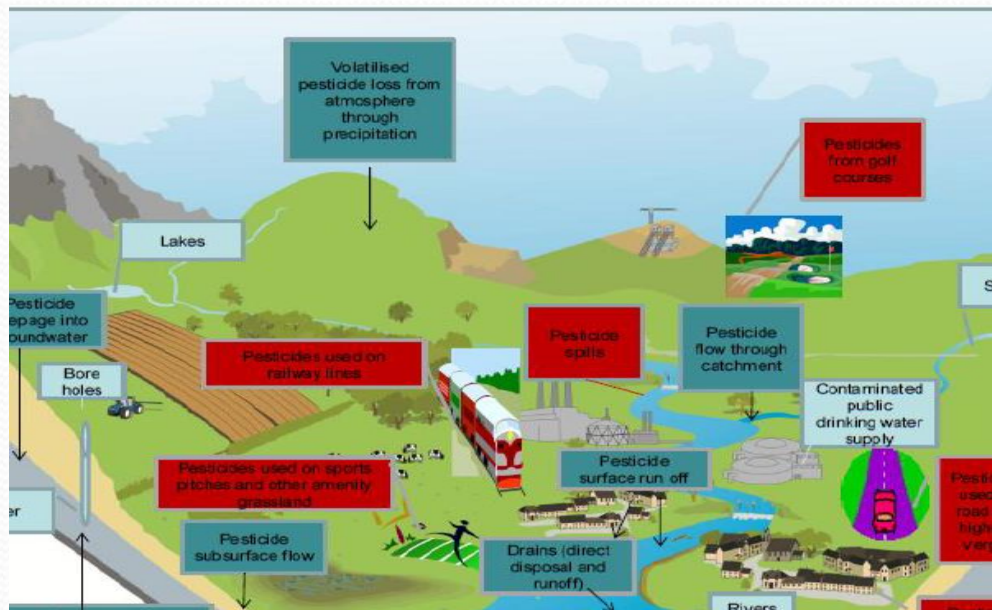
## Protect water.

<http://apps.environment-agency.gov.uk/wiyby/default.aspx>

- Is it raining or forecast to rain within the next two days at a level which might result in the pesticide draining into watercourses?
- You need also to take account of surface type.
- Are you applying to a hard or permeable (soil/grass) surface?
- Are you taking account of the topography?
- All such factors are crucial in assessing risks when advising on, storing, handling and/or applying the pesticide.
- It is a legal requirement to ensure that all reasonable precautions are taken to protect the environment when storing, handling or using pesticides. Particular care should be taken to avoid pollution of water
- Users should determine whether they are in areas such as surface water safeguard zones or drinking water protected areas.
- You should also take account of weather conditions. Is the wind blowing at a level that may increase the risk of spray drift (a guide is more than 4mph)?

# Quick Scoring Review

## –The impact of Pesticides used for Amenity purposes



[www.defra.gov.uk](http://www.defra.gov.uk)

### Quick Scoping Review The impact of pesticides used for amenity purposes on controlled waters

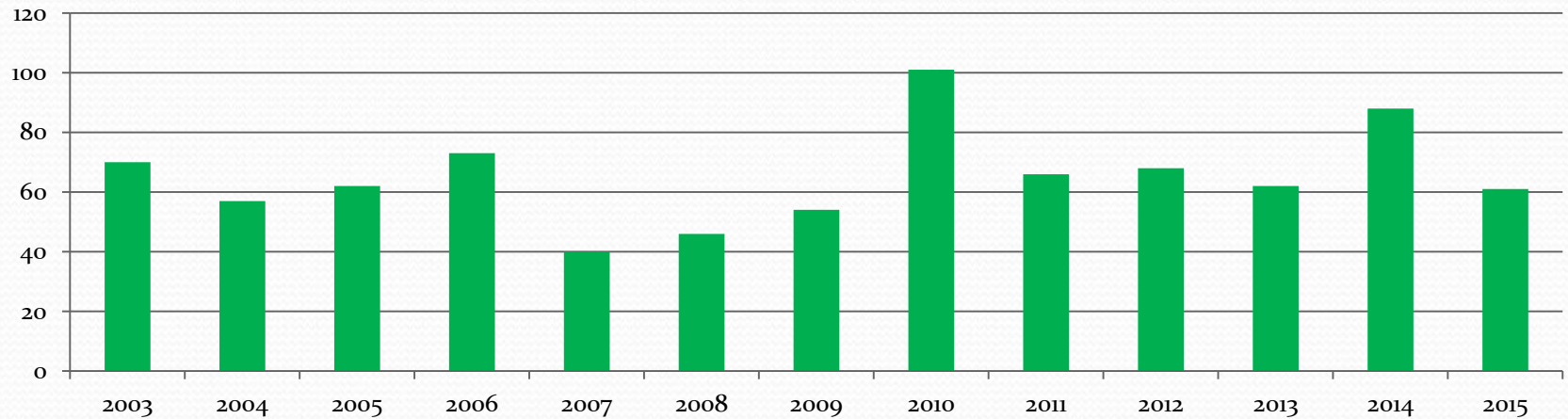
Final report WT1546

Produced: August 2014

# Weed Spraying Requests

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
70	57	62	73	40	46	54	101	66	68	62	88	61

## SPRAYING REQUESTS



## Alternatives - Other weed-control options

<p>Mechanical/ Manual Including brushing/ripping, mowing, strimming and weed pulling. Other In development or to be developed in the future, including electrical</p>	<p>Operatives must be trained in the use of equipment but do not require a pesticide specified certificate.</p>	<p>Employers also need to be aware of health and safety implications such as vibrations as well as other issues such as vehicles obstructing larger vehicles and flammable objects such as wooden fences.</p>

## ALTERNATIVE METHODS OF WEED CONTROL

<http://www.hortweek.com/market-report-amenity-weed-control/products-kit/article/1338298>

**Defra project PS2802  
Developing minimal  
herbicide regimes for  
hard surfaces noted  
difficulties with  
alternatives tested:**

**Comparing herbicide  
treatment to the  
alternatives**

Infra red burners -  
igniting debris and dry  
foliage.

<https://www.youtube.com/watch?v=MIPND6HDx6g>

**Risk of using naked  
flames under pressured  
burners in Public areas  
High CO<sub>2</sub> emissions  
and energy  
consumption is lower**

Foam

Safe working area  
Hot temperature  
Pipes on Pavements  
Labour Intensive



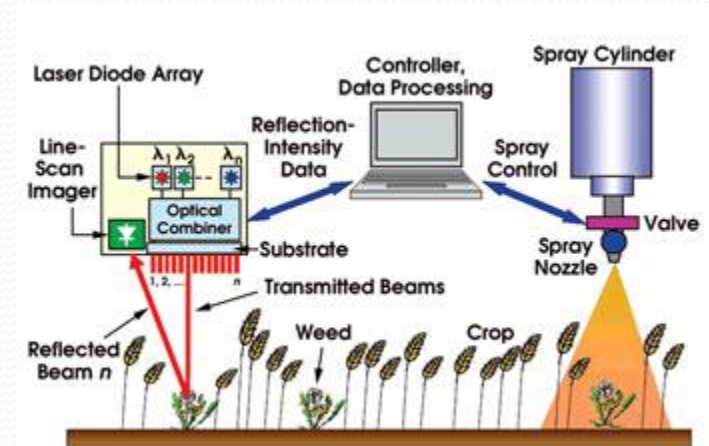
# ALTERNATIVE METHODS OF WEED CONTROL

<b>Brushing-</b>	<b>heavy equipment causing damage to infrastructure &amp; parked cars</b> Access problems with parked cars
<b>Strimming</b>	Risk flying debris, stones damaging windows,
<b>Steam</b>	Safe working area Hot temperature Pipes on Pavements Labour Intensive



# Weed it Spray System

- Target spray picks up by laser on plant protoplasm and chlorophyll pigment
- Weeds are targeted accurately and controlled
- A reduction of 80% in herbicide use
- No off-target spray damage to grass verges, open-plan gardens and the like
- The **Weed-IT** system attracted no adverse comments from local residents and members of the public. (In previous years up to 40 complaints per year had been received)
- Improved operator productivity
- Enables local authorities to meet objectives of their environmental policies
- <http://www.weedit.com.au/products.php>





## Managing expectations is also important.

- Adopting an integrated approach will probably lead to increased treatments, the guidance suggests.
- "The use of herbicides is primarily to target persistent and inaccessible weeds.
- Only spray when we need and what we need to at optimum time using the best methods possible
- [https://www.youtube.com/embed/EGloYl7SKoM?feature=player\\_embedded" frameborder="0" allowfullscreen></iframe>](https://www.youtube.com/embed/EGloYl7SKoM?feature=player_embedded)

# Chemical Control

Advantages	Disadvantages
Quick	Pesticide losses to the environment
Efficient	Potential for herbicide resistance
Cost effective	Public perception of spraying chemicals
A fixed number of treatments per growing season	Fewer greenhouse gas emissions



# Integrated Control

Advantages	Disadvantages
Reduced risks associated with pesticide use	Increased greenhouse gas emissions
Less pesticide PPE required	Monitoring required
Good PR	Increased costs (x2)2
	Increased no. of treatments (2-6)
	Increase sweeping Regimes
	Increased Costs

# Non Chemical Control

Advantages	Disadvantages
Avoid the risks which may arise	Increased monitoring
Greater greenhouse gas emissions from pesticide use	No pesticide PPE required
	Greater costs (x8) <sup>2</sup>
	Persistent perennial weeds
	Increased number of treatments (3-6)

# Other Options

- Good planning - Using fewer resources in the areas where they are less needed can help to save money and time
- Communication between stakeholders facilitates the co-ordination of weed control.
- For example, the guide notes: "Programming weed-control operations before street cleansing will ensure that dead foliage is removed to prevent detritus build-up."

# The Weediness Scale

Height in MM	Weed height in Diameter or length	Joint coverage	Score	Level	Description
Less than 10 mm	Less than 50mm	Less than 10%	Less than 3	1	No Noticeable weeds
10-50 mm	50-100 mm	0-20%	4-6	2	Occasional small weeds
50-100 mm	100-150 mm	20-30	7-9	3	Patch weed growth in flower
100-150 mm	150-200 mm	30-40	10-12	4	Numerous weeds Many in flower View annoys and irritating to public
150-200 mm	200-300 mm	40-50	13-15	5	Numerous large weeds Risk of slipping an tripping
200 mmm	033 mm	50%	16-18	6	Numerous large weeds Many tall and in flower ready to set seed Causing obstruction degradation of surface

## The Thanet Project

<http://www.emr.ac.uk/projects/development-zero-minimal-herbicide-regimes-controlling-weeds-hard-surfaces-determining-emissions/>

- The aim of this project is to develop a weed control programme for pavements and roads (amenity use) which minimises risk to the environment (in particular, water quality) compared to using herbicides alone, while still controlling weeds to an acceptable standard. The impacts (inc. costs and benefits) of three programmes are being measured and new reactive specifications developed for municipal weed control. Methods available for controlling weeds fall into three categories:
- Chemical methods: herbicide (mainly glyphosate)
- Integrated methods: combining chemical and non-herbicidal methods to minimise herbicide use and risks
- Non-herbicidal methods: thermal (flaming, infra-red, hot water, steam, hot foam) and mechanical (wire brushing, sweeping, hand removal)

# Internet References and Research

- <https://petition.parliament.uk/petitions/104796>
- <http://apps.environment-agency.gov.uk/wiyby/default.aspx>
- <http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/using-pesticides/General/glyphosate-FAQS>
- <http://sustainablepulse.com/2014/04/04/dutch-parliament-bans-glyphosate-herbicides-non-commercial-use/#.VWcppiXVhBd>
- <http://www.pesticides.gov.uk/guidance/industries/pesticides/News/Collected-Updates/Regulatory-Updates-2012/July/Sustainable-Use-PPP-Regulations-2012>
- <http://www.pesticides.gov.uk/guidance/industries/pesticides/News/Collected-Updates/Regulatory-Updates-2012/July/Sustainable-Use-PPP-Regulations-2012>
- <http://plantnetwork.org/wordpress/wp-content/uploads/10276/weed-control-and-changes-to-the-pesticides-control-regime.pdf>
- <http://www.emr.ac.uk/projects/development-zero-minimal-herbicide-regimes-controlling-weeds-hard-surfaces-determining-emissions/>
- <http://www.iosh.co.uk/Membership/Our-membership-network/Our-Groups/Rural-Industries-group/Group-news/Amenity-Pesticides-10-Golden-Rules.aspx>