

Response to the Green Party's motion on use of pesticides and herbicides

Report to Executive



DATE	17th February 2020
PORTFOLIO	Green Spaces and Amenities
REPORT AUTHORS	Simon Goff
TEL NO	01282 477223 Ext 7223
EMAIL	sgoff@burnley.gov.uk

PURPOSE

1. To consider a motion from the Green Party for the Council to cease all use of glyphosate herbicide and to recommend action that the Council will take in response.

RECOMMENDATION

2. It is recommended that the Executive:
 - a. Investigates phasing out the use of pesticides and herbicides on land that it owns or manages by undertaking trials of alternative techniques and reviewing progress made by other authorities.
 - b. Undertakes a trial to cease the use of glyphosate in children's play areas and in Thompson and Ightenhill parks from April 2020 to the end of September 2020 using alternative methods of mechanical and steam treatment to manage weeds.
 - c. Trial the use of the organic herbicide pelargonic acid for control of weeds around graves in Burnley Cemetery from April 2020 to the end of September 2020.
 - d. Continue the use of glyphosate to control highway weeds but instigate trials of integrated weed control to reduce the quantity of herbicide used, including a trial of spot treating weeds using a hand-held CDA in a representative area of the Borough.
 - e. Request Scrutiny Committee to review the outcome of trials and review the progress being made by other local authorities to reduce/eliminate glyphosate use and to complete this by the end of November 2020.
 - f. Notes the Green Party's desire to see glyphosate-based herbicides banned, but relies on regulatory agencies to determine the safety or otherwise of regulated pesticides.
 - g. Write to the Leader of Lancashire County Council and Minister of State at the

Department for Environment and Rural Affairs informing them of this Council's resolution.

REASONS FOR RECOMMENDATION

- 3.1 Glyphosate is certified and approved for the control of weeds in public places and is the safest and most cost-effective method available. However, there is growing popular and political pressure to eliminate the use of glyphosate, which may lead to the chemical being de-listed at some point in the future. It is therefore prudent for the Council to investigate ways in which glyphosate and other pesticides could be eliminated.
- 3.2 The Sustainable Use of Pesticides Directive (2009/128/EC) promotes the use of integrated pest management and the use of alternative non-chemical alternatives.

SUMMARY OF KEY POINTS

4 The Green Party Motion

The Green Party presented a motion to full council in July 2019 as follows:

1. Phase out the use of all pesticides and herbicides on all Council owned or maintained land
2. Cut out all use of glyphosate-based treatments in all Council operations within one year, except in parks and children's play areas where treatment will cease immediately
3. Trial pesticide-free and herbicide-free alternatives during this period. Particularly those adopted by the likes of Hammersmith and Fulham, Lewes and Trafford Councils who use biodegradable foam or hot steam treatments on weeds. To be decided by Executive.
4. Grant an exception to the above ban regarding the control of Japanese knotweed, or other invasive species, where necessary and whilst there is no effective mechanical or alternative pesticide-free or herbicide-free techniques available. However, in this case pesticides and herbicides (such as glyphosate) will only be stem-injected, rather than sprayed, in order to reduce its spread in the environment.
5. Grant an exception on sprays only in relation to giant hogweed where it is absolutely necessary and not safe to be dug out or safely removed by other means and whilst there is no effective mechanical or alternative pesticide-free or herbicide-free techniques available.

5 Background

5.1 The Council undertakes weed control on land that it owns in parks, greenspaces and cemeteries, etc. The Council also undertakes weed control on highways and pavements for Lancashire County Council under the Street Services Agreement. The income received from LCC does not fully cover the cost of highway weed spraying and the Council provides a modest subsidy of approximately £8,000 per year. The Agreement can be terminated at 3 months-notice, expiring on the following 31st day of March.

5.2 **Estimated costs of weed control in Burnley**

Parks and Green Spaces weed control costs	£
Labour	11,020
Equipment	960
Chemical (glyphosate)	1,630
	13,610
Highways weed control costs	
Labour (spraying 50% of time due to weather)	12,232
Machinery & equipment	13,500
Chemical (glyphosate)	6,160
	31,892
Income from LCC	23,892
Burnley Borough Council subsidy for highway weed control	8,000

5.3 The control of highway weeds is vital to protect hard surfaces from damage, to prevent accidents (trips and falls) that would occur if pavements became overgrown and to maintain an attractive townscape that encourages people to want to live, work and invest in the borough. The control of weeds in parks prevents footpaths from becoming overgrown and manages vegetation around paths, bins and play equipment, etc. The public is quick to complain, and in large numbers, when the weed control programme falls behind and streets begin to look neglected.

6. **Use of glyphosate in Burnley**

6.1 The main herbicide used to control weeds is glyphosate. This is the only herbicide licenced for use on the paved highway. It has extremely low toxicity and is effective on all types of plant and has a systemic action, which means that it kills the entire plant including roots. This systemic action means that fewer applications are needed to manage the weed population than for non-systemic methods such as steam treatment.

6.2 To control weeds growing on pavements and kerb lines on highways, glyphosate is applied as a water-based spray using two quad bikes which are operated by trained and qualified staff. Normally there is a single application of herbicide in the spring and early summer and a follow up application later in the summer to pick up any areas of weed re-growth.

6.3 In parks, cemeteries and play areas, treatment of weeds on path edges and around obstacles is undertaken using a hand-held controlled droplet applicator (CDA) which

delivers a minute quantity of glyphosate to the leaf surface in an oil droplet that improves take-up by the plant. Only a single application each year is usually necessary and weeds around obstacles are also strimmed. Some path edges in ornamental parks are edged off manually, but reduced staff numbers mean this practice has become limited. Stone surfaced multi-user paths are treated using the quad bike sprayers.

6.4 Glyphosate is also used for the treatment of invasive weeds, including Japanese Knotweed. Treatments are by spray and direct stem injection.

6.5 Other use of pesticides and herbicides

The Green Spaces & Amenity unit also makes very limited use of other herbicides including Mecoprop to control weeds on golf course fairways and Flazasulfuron as a residual pre-emergent herbicide to control weeds in the cemetery. Pesticide use is limited to a fungicide used to manage Fusarium on golf greens.

7 **Issues regarding glyposate**

7.1 Glyphosate is the most widely used herbicide in the world. It is licenced for use in more than 130 countries and is primarily used in food crop production. It is also the leading weed killer on sale to the public through garden centres. The use of glyphosate is certified by the European Chemicals Agency and the current certification runs until 2022.

7.2 In 2015 the International Agency for Research on Cancer, concluded that there was some limited evidence for carcinogenicity of glyphosate and evaluated it as probably carcinogenic. However, in 2017 the Committee for Risk Assessment of the European Chemical Agency completed an extensive review of all of the available scientific evidence on glyphosate and concluded that there was no available evidence to link glyphosate to cancer in humans and extended the licence until 2022, with a further examination of all evidence to commence Dec 2019.

7.3 There have been three lawsuits in the USA in which plaintiffs have been awarded significant damages against the manufacturer of glyphosate. These are being appealed and other lawsuits are progressing.

7.4 In the UK, a number of local authorities have ceased use of glyphosate including the London Borough of Hammersmith & Fulham, Thameside, Rossendale and Lewes Council and have adopted alternative methods of control.

7.5 Elsewhere in Europe, Belgium, Luxembourg and France are working towards banning amenity use of glyphosate, with 10% of French municipalities currently glyphosate free <http://www.villes-et-villages-sans-pesticides.fr>. In other European countries, notably the Netherlands, Denmark, Sweden and Germany, individual municipalities are ceasing glyphosate use.

7.6 Future regulation/approval of herbicides is uncertain following the UK's departure from the EU. The current regulatory rules will apply until the Brexit negotiations are complete. However, it is prudent that the Council should investigate alternative treatments.

8 Alternatives to the use of Glyphosate

8.1 Steam/foam treatment

There are several manufactures supplying systems for treating weeds using a steam foam that is applied using a lance attached to a steam generator that sits on the back of a pickup truck or utility vehicle. The hot foam is applied to each individual weed and kills the leaves and shoots of the plant

8.2



Large capacity pick-up mounted Foamstream



Small capacity Foamstream mounted on a utility vehicle



Foamstream head, producing a high temperature steam foam that kills exposed vegetation

8.3 Treatment is extremely slow compared with herbicide application and because the steam foam kills only the leaves and stems of the weed but not the roots, perennial weeds such as dandelions, docks and thistles are able to quickly regrow. Typically, 3 or 4 treatments per year are required.

8.4 The London Borough of Hammersmith and Fulham, operates 5 Foamstream units over an urban area that is 30% smaller than Burnley at a cost of over £400,000 per year. Two units are used for highways and work double shifts and weekends at peak times. They treat weeds at intervals of 8 weeks and have additional teams of staff to deal with problem areas by mechanical removal (hoes, strimmers, etc.). The costs of adopting this system in Burnley are prohibitive, but a trial of a single unit in parks and play areas is recommended.

8.5 It should be noted that there are significant negative environmental consequences of steam treatment, caused by the CO₂ emissions of the diesel/gas powered steam generator units and the vehicles they are mounted. According to the manufacturers figures these are up to 20 tonnes/p.a. of CO₂ per unit. The diesel units also produce nitrogen oxides and particulate emissions (which are classified as a group 1 carcinogen). The (known) carcinogenic and other health effects of these diesel emissions may exceed any risk (as yet not established) arising from glyphosate use.

8.6 Rossendale Borough Council considered use of steam/foam systems but has opted to switch to alternative chemicals and manual weed control in parks and cemeteries whilst

highway weed spraying in the Borough is undertaken by external contractors using glyphosate.

8.7 Mechanical weed control

In Sweden, Denmark and the Netherlands, some authorities rely on mechanical removal of weeds using rotary wire brushes to rip weeds from hard surfaces combined with manual removal using hoes. Like steam treatments, it is much slower than chemical control and consequently more expensive

8.8 Repeated use of aggressive wire brushes causes damage to tarmac surfaces and can't be used on surfaces that are already in poor condition (as is the case in many parks) or on stone surfaced paths. However, mechanical control could be used in combination with steam treatment.

8.9 The Council already employs Urbaser to remove soil build up on hard surfaces, which provide a substrate for weed growth. There are opportunities to link enhanced mechanical sweeping and hoeing with spot treatment of perennial weeds in order to reduce herbicide use.

8.10 Use of alternative chemicals

Acetic acid (vinegar) has been trialled in Bristol as a herbicide to replace glyphosate. Residents apparently objected to the powerful smell and there were concerns about the corrosive effect that repeated applications could have on street furniture, and on the equipment used to apply the acid, etc

8.11 Pelargonic Acid is a plant derived herbicide that has been licenced for use since 1995. Costs of the chemical are significantly higher than of glyphosate and because it is not systemic, repeated applications are required. However, it is recommended that the Council should trial its use in Burnley cemetery in conjunction with strimming.

8.12 Electrical treatment

Systems that pass a powerful electric current through plants to kill them are being developed for agricultural use. The method is effective against perennial weeds but commercial amenity systems are not currently.

8.13 No control of weeds

This is an option in some areas and the Council has been developing a programme of meadow management for some time and has planted many areas of open space as woodland. Overall 46% of open spaces are now managed as natural/semi-natural green space, with minimal herbicide use to keep paths from becoming overgrown.

8.14 However, in other areas where there is public access, weeds do need to be controlled because otherwise pavements, paths, kerb and fence lines would rapidly become overgrown with weeds and later seedling trees, creating an unsightly appearance, giving rise to overwhelming numbers of complaints and eventually causing damage to paved surfaces leading to accidents and claims.

9 **The Way Forward**

It is recommended that the following actions should be undertaken:

9.1 Work towards phasing out the use of pesticides and herbicides

Many herbicides have already been withdrawn from use and it is more likely that more will follow. It is therefore sensible that the Council should work towards eliminating chemical use by testing and adopting alternative maintenance techniques (where suitable) in the coming years. Educating the public to accept a less well manicured, but more bio-diverse townscape will also be part of this process.

9.2 Trial eliminating use of glyphosate in playgrounds and selected parks

It is recommended that the Council should hire a small Foamstream unit (or similar) to be mounted on an utility vehicle to undertake a trial on the control of weeds in children's play areas and in Thompson Park and Ightenhill Park. The experience gained from operating a single unit will help inform decisions about expanding the use of this system. The cost of hiring and operating a unit will be funded from a growth item in the GS&A revenue budget from April 2020 to the end of September.

9.3 Reduce the use of glyphosate for highways weed control

It is possible to reduce the amount of glyphosate that is used in highway weed control. This can be achieved in the following ways:

- Convert the two existing quad bikes from water based to controlled droplet applicators, which reduces the quantity of glyphosate used by up to 70% and eliminates spray drift.
- Undertake further training of staff in how to minimise application rates.
- Undertake a trial of spot treating highway weeds using a hand-held CDA applicators in a representative area of the borough.
- Combine the hand-held trial with increased use of mechanical sweeping by Urbaser, to reduce the build-up of soil and organic matter that encourages weeds.
- Chemical use will be monitored, together with assessment of the efficacy of treatment.

9.4 Undertake trials of the use of Pelargonic Acid

Glyphosate is used to control weeds in cemeteries. It is proposed that the plant-derived chemical, pelargononic acid should be trialled on selected plots in Burnley Cemetery from April until end of September.

9.4 Monitoring and evaluation

Data on the use and effectiveness of different techniques will be collected to inform a proposed review by Scrutiny Committee, together with gathering information on the experience of other authorities that are making a transition from glyphosate to non-chemical methods of weed control. It is proposed that trials will be undertaken from April to the end of September and a review by scrutiny committee completed by the end of November 2020.

FINANCIAL IMPLICATIONS AND BUDGET PROVISION

10. The costs associated with converting two quad bikes to CDA applicators will be met from the Green Spaces & Amenities revenue budget.

The additional costs £15,257 for the hire of the Foamstream equipment and supply of Foamstream chemicals for the trial period will be funded by a growth item to the GS&A revenue budget.

POLICY IMPLICATIONS

11. None

DETAILS OF CONSULTATION

12. Cllr Fewings, Green Party Leader, Burnley
Simon Bucknell, Operations Manager, LCC Highways

BACKGROUND PAPERS

13. None.

FURTHER INFORMATION

PLEASE CONTACT:

Simon Goff

ALSO: