

## Meeting of the Climate Change and Environment Scrutiny Committee– 23<sup>rd</sup> January 2023

## **Report of the Interim Director of Public Realm**

# Progress update on the trial of the use of pesticides and maintaining the Borough's green spaces

#### Purpose of report

- 1. On 28th September 2022 a progress report was provided to Scrutiny on the trial of the use of pesticides and maintenance of the Borough's green spaces.
- 2. A request was made that the Head of Street and Green Care and Amenity Services provide a full report to Scrutiny in January 2023 setting out figures and cost implications of the weed control used for the trial, what areas were trialled, how easy it was for residents to give feedback and an overview of the effectiveness of the trials.

#### **Recommendations**

- 3. It is recommended:-
  - That the contents of the report are noted.
  - That the Cabinet Member for Highways and Public Realm considers using non-glyphosate Katoun Gold/Chikara for managing grass edges & obstacles and shrub beds as part of future annual weed control programmes, equivalent to a 37% reduction in the use of glyphosate.
  - That during 2023/24, Officers undertake a review of shrub beds to determine their current condition and appropriateness.
  - That the Cabinet Member for Highways and Public Realm considers commissioning a detailed review of where foamstream could be used effectively and including a review of sweeping schedules across the Borough.

 
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## **Background**

## Current Use

- 4. Each year, a weed control programme takes place on Council owned highways, parks and open spaces which sees treatment of 2,318,406 lin. M of edges, 43,179 obstacles and 210,976 sqm of shrub beds.
- 5. Similar to many other local authorities across the country, the Council uses glyphosate as part of its weed control programme. Used around the world to kill weeds and other unwanted vegetation, and as a non-selective chemical, glyphosate will kill most plants. Along with other ingredients, glyphosate-based herbicides prevent weeds from synthesizing proteins, which subsequently causes them to die.
- 6. On 22<sup>nd</sup> September 2021, the Housing and Public Realm Scrutiny Committee received a report on the Council's use of glyphosate. The report outlined alternative treatments and methods that could be considered to reduce and / or eradicate the use of glyphosate for managing weed control in the Borough. These alternatives are set out in Table 1.

Katoun Gold	A contact acting total herbicide containing pelargonic acid which is derived from sustainable plant origins (Sunflower & Oilseed Rape meal). Once applied the product causes dehydration in weeds within hours, degrades rapidly and has no residual herbicide activity.
Chikara	A residual herbicide and a water dispersible granule formulation. It is a soil acting systemic, pre-emergent and early post-emergent herbicide. Chikara combines both a contact and residual mode of action to control germinating weeds on natural surfaces not intended to bear vegetation, and permeable surfaces over-lying soil.
Foamstream	Made from natural plant oils and sugars. Foamstream is combined with hot water and applied to weeds using a lance. The foam insulates the hot water, ensuring the heat is not lost to the atmosphere. This ensures the heat covers the plant for long enough for it to kill or severely damage the plant.

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Strimming	Use of mechanical strimmers to cut long grass around perimeters, obstacles, under trip rails and against wall lines.
Weed Rippers	Mechanical pedestrian machines for physically removing weeds from hard surfaces.
Hoe and Hand Weed	Manual techniques to remove weeds, using simple gardening tools.
Flame Guns	Use of flames to destroy vegetative matter.

Table 1: Alternative treatments and methods to the use of glyphosate.

## 2022 Trials

7. During 2022, the Grounds Maintenance Team within Green Care carried out trials on alternatives to the use of glyphosate at four locations across the Borough, as agreed with the Cabinet Member and as set out in Table 2.

Gig Mill Estate, Norton	Grass Edges, Obstacles and Perimeters: controlled by strimmer's.				
	Shrub Beds: hoe and hand-weed, with an application				
	of mulch during the winter period.				
	Highways and Hard Surfaces: manual control				
	utilising weed-rippers and other manual methods.				
Hurst Green,	Grass Edges, Obstacles and Perimeters: application				
Halesowen	of pelargonic acid (Katoun Gold) plus Chikara,				
	followed by application of pelargonic acid (Katoun				
	Shrub Beds: application of pelargonic acid (Katoun				
	Gold) plus Chikara and follow up applications of				
	pelargonic acid (Katoun Gold).				
	Hard Surfaces / Highways: applications using the				
	Foamstream System and manual removal as				
	necessary.				
The Straits,	Grass Edges, Obstacles and Perimeters: application				
Lower Gornal	of pelargonic acid (Katoun Gold).				
	Shrub Beds: application of pelargonic acid (Katoun				
	Gold).				
	Hard Surfaces / Highways: application using the				
	Foamstream system. No manual removal /				
	interventions.				

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Hawbush Estate,	Grass Edges, Obstacles and Perimeters: controlled			
Brierley Hill	by strimmer's			
	Shrub Beds: applications using the Foamstream			
	system. No manual removal / interventions.			
	Hard Surfaces / Highways: applications using the			
	Foamstream system. No manual removal /			
	interventions.			

## Table 2: Trial Areas

## **Findings**

## Were the trials successful?

- 8. Appendix 1 provides a selection of before and after photographs from each of the trial areas. As shown in Appendix 1, each trial was ultimately successful in that the technique that was applied worked and either killed or removed the weeds that were present.
- 9. Table 3 provides a summary review of each element used across the trial areas.

Katoun Gold	There were no difficulties in applying Katoun Gold- it is applied in the same way as the Council's current glyphosate treatment, which can lead to a negative perception from the public. Katoun Gold shows effects within a couple of hours.
Chikara	There were no difficulties in applying Chikara- it is applied in the same way as the Council's current glyphosate treatment, which can lead to a negative perception from the public. Chikara shows effects within a couple of hours.
Foamstream	Foamstream was shown to be effective in treatment of weeds, with results quickly evident on site. Using the machine is not practical on main roads or in areas with high numbers of parked cars. Considerable time ends up being lost with needing to refill the machine with water. Two operatives are required to drive and operate the machine, with the treatment taking longer to apply than a conventional spray. The machine is diesel/petrol powered and requires vehicle mounting.

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Strimming	The use of strimmers provided an instant response and helped to provide a tidier look and feel, with their use not being weather dependant. Whilst the operation is more labour intensive, it is considered that it may be possible to use strimmers to maintain grass edges, obstacles and perimeters instead of using glyphosate.
Weed Rippers	Weed rippers were used on the Gig Mill estate, Norton. Weed rippers are considered effective where weeds are already established, but effective use requires two operatives.
Hoe and Hand Weed	Whilst effective, this operation is more labour intensive particularly where, for example, shrub beds are empty and would benefit from restocking.

Table 3: Summary of each element used.

Public Feedback

 359 weed related enquiries were received by Public Realm between 1<sup>st</sup> April and 31<sup>st</sup> October 2022. Of these, 14 related to roads within areas where weed control trials were being undertaken, as set out in Table 4.

Gig Mill Estate, Norton	6
Hurst Green, Halesowen	4
The Straits, Lower Gornal	1
Hawbush Estate, Brierley Hill	3

Table 4: Enquiries relating to weeds per trial area

11. 16 formal complaints relating to weeds were received by Public Realm between 1<sup>st</sup> April and 31<sup>st</sup> November 2022. Of the complaints, 7 related to the practice of weed spraying, 5 of which were from Stourbridge, whilst the remaining 9 related to the presence of weeds or lack of maintenance across different parts of the Borough.

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## **Recommendations**

- 12. As stated previously, each trial was ultimately successful in that the technique that was applied worked and either killed or removed the weeds that were present.
- 13. Whilst the Council safely uses glyphosate as part of its weed control programme, Officers are aware that there is a view that the authority should look to move away from its use.
- 14. Should the Council wish to reduce its use of glyphosate then it is the recommendation of Officers that the Cabinet Member for Highways and Public Realm considers the use of non-glyphosate Katoun Gold/Chikara for managing grass edges & obstacles and shrub beds. Officers consider that this option could potentially result in a 37% reduction of the use of glyphosate and could offer the most cost effective of those options trialled for weed control associated with grass edges, obstacles and shrub beds.
- 15. In the case of shrub beds, Officers would also recommend that a review be undertaken to determine their condition and appropriateness. In some cases, it may be possible to restock or replace a shrub bed with a more appropriate solution to reduce the likelihood and impact of weed growth.
- 16. It is not possible to use non-glyphosate Katoun Gold/Chikara for the management of hard surfaces and highways. Whilst the trials that have been undertaken have shown that the use of foamstream could help the Council with its weed control programme, Officers have found that it would not be possible to use it as a simple direct and wholesale replacement for the use of glyphosate at all locations.
- 17. Should the Council wish to reduce its use of glyphosate for the management of hard surfaces and highways then the Cabinet Member for Highways and Public Realm could consider commissioning a more detailed review of where foamstream could be used effectively. This piece of work could also include a review of sweeping schedules across the Borough, which could help reduce the likelihood of weeds appearing as well as removing weeds that have been treated and are dead but still visible.

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## <u>Finance</u>

- 18. Approximately £330,000 is spent per year on weed control across the Borough. Of this total, approximately £160,000 is spent treating 2,318,406 lin.M of grass edges and 43,179 obstacles, £70,000 is spent treating shrub beds and the final £100,000 spent treating hard surfaces.
- 19. A recommendation of this report is that the Cabinet Member for Highways and Public Realm considers the use of non-glyphosate Katoun Gold/Chikara for managing grass edges & obstacles and shrub beds. Whilst this could result in a 37% reduction in the use of glyphosate, Officers expect this could result in an additional cost of at least £37,000 per annum, as set out in Table 5.

Location	Current Cost	Future Cost	Additional
	(Glyphosate)	(Katoun	Cost
		Gold)	
Grass Edges (2,318,406 lin.	£160,000	£177,000	£17,000
M) & Obstacles (43,179)			
Shrub Beds	£70,000	£90,000	£20,000
(210,976 sqm)			
			£37,000

Table 5: Financial impact of replacing glyphosate

20. The cost of using techniques for managing grass edges & obstacles and shrub beds and considered by Officers as alternatives are given in Tables 6 and 7 below.

Location	Current Cost	Future Cost	Additional
	(Glyphosate)	(Strimming)	Cost
Grass Edges (2,318,406 lin.	£160,000	£362,000	£202,000
M) & Obstacles (43,179)			
			£202,000

Table 6: Financial impact of alternatives for grass edges and obstacles

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Current Cost	Future Cost (Hoe and	Additional Cost
(elyphoedie)	Hand Weed)	0001
£70,000	£326,000	£256,000
		£256.000
	Current Cost (Glyphosate) £70,000	Current Cost (Glyphosate)Future Cost (Hoe and Hand Weed)£70,000£326,000

Table 7: Financial impact of alternatives for shrub beds

21. As to hard surfaces, it is the view of Officers that the use of foamstream would not be a simple direct and wholesale replacement for the use of glyphosate at all locations. Whilst subject to a detailed review of where it could be used effectively, Table 8 provides indicative costs for the use of foamstream across the Borough, assuming varying weed coverage.

Location	Current Cost	Future Cost	Additional
	(Glyphosate)	(Foamstream)	Cost
Hard Surfaces (20% weeds)	£100,000	£180,000	£80,000
Hard Surfaces (40% weeds)	£100,000	£360,000	£260,000
			£80,000-
			£260,000

## Table 8: Financial impact of alternatives for hard surfaces

## Law

- 22. Under Section 111 of the Local Government Act 1972, the Council is empowered to do anything which is calculated to facilitate, or is conducive to, or incidental to the discharge of its functions.
- 23. Pursuant to Section 1 of the Localism Act 2011 a local authority has a general power of competence to do anything that individuals generally may do.



## Risk Management

24. No risks have been identified in the Council's Risk Management Framework.

## Equality Impact

25. None.

## Human Resources/Organisational Development

26. None.

## **Commercial/Procurement**

27. None.

## Environment/Climate Change

28. The use of non-glyphosate Katoun Gold/Chikara for managing grass edges & obstacles and shrub beds could result in a 37% reduction in the use of glyphosate.

## **Council Priorities and Projects**

29. It is considered that this report has a positive benefit on helping Dudley be a safe and healthy borough, in making it an affordable and attractive place to live with a green network of high-quality parks, waterways and nature reserves that are valued by local people and visitors.

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## pp Interim Director of Public Realm

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## **Appendices**

Appendix 1: Selection of before and after photographs

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