

# ALTERNATIVES TO GLYPHOSATE

2023



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SOUTH LANARKSHIRE COUNCIL

- Fifth largest council in Scotland, covers 1800 square kilometres and has a population of approx 320,000
- We previously treated all council owned land with herbicide on two occasions throughout the year
- Road channels kerb edges 5240 Kilometres
- Shrub bed spot treatment 1,400,000m<sup>2</sup>
- Care of Gardens 2600 properties
- Grass Edges 1,963,000 linear metres
- Non native Invasive 6500m<sup>2</sup>
- Hard stand 2,500.000m<sup>2</sup>
- Base of obstacle 21,000
- To treat these areas we used glyphosate products in both tank mix and CDA, using 9 quad bikes and a number of fully trained staff.

# REASON FOR OUR TRIALS

- This was a political decision, motion was raised in December 2020 to become a “Pesticide free” council.
- Based on increasing public concern about the use of pesticides, particularly those containing glyphosate, in weed control and the potential risks and dangers associated with using these products.
- We tabled a counter report in February 2021 in response to this motion, explaining in detail reasons for our use of herbicides, locations of use and impacts on infrastructure on not controlling weed growth. As well as detail on alternatives that had been trialled by colleagues in other Scottish authorities, and their success or otherwise.
- We proposed a number of points which were approved.
  - To consider and report on alternatives to pesticide weed control and the potential for reducing longer term cost
  - To pilot alternative methods of weed control and pesticide free zones in partnership with local groups where appropriate
- Sign up to the amenity forum, the Amenity Forum is the UK’s Voluntary Initiative fully recognised by Government, and its main objective is to promote best practice across the sector. It seeks to do this by advocating a fully integrated approach to weed, pest and disease management, tailoring solutions to meet specific situations and making
- Provide an interim report to the councils Climate Change and Sustainability Committee after 6 months and provide a full committee report after 1 year.

# WHY DO WE NEED TO CONTROL WEEDS

- Damage to infrastructure such as paths, roads, stairs.
- Serve as hosts for plant diseases or provide shelter for insect pests.
- Can be harmful to human and animal health, eg hay fever, poisonous leaves, berries, toxic when wilted.
- Interfere and block irrigation channels, impeding water flow and surface drainage systems.
- Can decrease land value especially invasive species.
- Can have an aesthetic impact.
- Can reduce visibility splays at road junctions

# ALTERNATIVES THAT WE TRIALLED IN 2021

- Hot foam
- Hot Steam
- New Way spray
- Mankar ultra low volume lance
- Pedestrian wire mechanical sweepers
- We also utilise wire brushes on our fleet of small and large mechanical sweepers for roads channel sweeping in line with duty 2 of the new Coplar regulations.

# ALTERNATIVES THAT WE TRIALLED IN 2022

Other Alternatives that we have trialled in 2022 include the following.

- Ride on hot air/thermal treatment.
- Pedestrian hot air/thermal treatment
- Tractor mounted out front and side arm brushes.
- We also tried different glyphosate products from our existing frameworks and measured and compared length of effectiveness against cost on all surfaces and applications
- We also tried different glyphosate products on the same surfaces to again determine if there was any difference in effectiveness.

# GETTING APPROVAL

- In order to get approval for the continued use of glyphosate we had to ensure that we maintained excellent communication and engagement with our elected members, including having them on site to witness the alternatives we were trialling.
- We had to provide accurate and detailed information on what we were doing on the ground what alternatives we had trialled, costs, effectiveness, benefits for and against to ensure that they had all of the information to allow them to make a learned decision on the way forward for South Lanarkshire Council
- We provided in total 5 reports from 2021-2023 including two full committee reports to our Climate Change and Sustainable Development Committee, which detailed all of the work that we had undertaken from 2020 till the end of 2022 our final committee report was presented in February 2023 to the CC&SD committee for approval.
- The key to getting approval was good communication, engagement as well as the provision of detailed and informative information.

# OUTCOMES AFTER 2 YEARS

- Overall the trials can be considered a success as usage of Glyphosate had reduced considerably during the trial period. It was however evident that there were no clear alternatives at this point that would allow the complete removal of glyphosate from the council's weed control approach. Some methods proved expensive or resource intensive whilst others had negative environmental impacts or were simply ineffective in controlling weed growth.
- The table below sets out the volume of glyphosate used by Ground Services over the last 4 years with a 30% reduction in usage since passing of the council motion in 2020. This was a significant achievement and testament to the work undertaken to reduce usage, trial alternatives methods and work towards improving and protecting our environment.

Year	Usage (Litres)
2019	4462
2020	N/A Covid
2021	4187
2022	3123



# NATIONAL ACTION PLAN ON USE OF PPP

- The Revised Pesticide National Action Plan is a five-year plan aiming to minimise the risks and impacts of pesticides to human health and the environment, while ensuring pests and pesticide resistance are managed effectively. It also aims to support all users of pesticides to increase uptake of Integrated Pest Management (IPM) and to develop sustainable crop protection, amenity management, and garden pest control.
- It calls for a reduction of herbicide use and that alternative methods of weed control need to be utilised to ensure that we as land managers take an integrated approach to tackle our weed problems and reduce chemical application and volumes used.
- Compliance with the National Action Plan on the use of PPP will be central to our weed control methods going forward to ensure that we continually review our use of herbicides and introduce where possible as many alternatives means of control as possible.

# MOVING FORWARD

- The trial process demonstrated a clear direction of travel for decreasing usage of glyphosate, as a council and service we aim to continue reviewing our use of glyphosate whilst utilising a number of alternative methods and expand usage beyond the pilot areas to maximise impact.
- Review dilution and application methods on our quad bikes.
- To make more use of compact tractor mounted spraying, bigger tanks, trail dilution rates, reduce staff fatigue.
- Invest in additional mankur rechargeable hand held lances.
- Continue to expand our use of hot foam.
- Invest in compact tractor mounted full path width brushes with collectors
- Invest in additional pedestrian operated wire brushes (Smaller areas)
- Rainwater harvesting to reduce use of fresh water.

# COMPACT TRACTOR MOUNTED TANKS

SOUTH  
LANARKSHIRE  
COUNCIL



# MANKUR ULTRA LOW VOLUME LANCE



# HOT FOAM



# MECHANICAL FULL WIDTH BRUSHING



# LINKS TO IMPROVING BIODIVERSITY

South Lanarkshire Councils Biodiversity Duty Implementation Plan (BDIP) 2018-2023 reflects the priorities and outcomes set out within the South Lanarkshire Biodiversity Strategy and articulates how the council will achieve its duty to conserve biodiversity.

The BDIP takes cognisance of the South Lanarkshire Sustainable Development Strategy which also emphasises the importance of achieving the council's biodiversity duty, in line with guidance from the Scottish Government.

The work we have undertaken since 2021 in relation to our review of glyphosate use, with significant reductions in volumes used as well as the use of alternative methods of controls was never referenced in the original motion however it links in well to the council's BDIP and Sustainable Development Strategy.

This level of reduction in chemical use will have a positive impact on the Environment, particularly with regards to ground water and potential leaching into water systems, and will directly contribute to reduce the potential risks of contaminating eco-systems and help to increase biodiversity.

# CONCLUSION

- In conclusion and as I have stated previously based on the work we have undertaken there is no alternative to glyphosate that is as effective in terms of control and cost, and at this time glyphosate will remain as clear method of control particularly on the majority of our hard surfaces.
- We do intend to continue to review the locations where we use herbicides and obviously expand the use of those alternatives to further reduce our volumes applied.
- It is however important that we all make those changes and ensure we look at a range of alternative methods of control. The review that we undertook will be no different across all areas and if all users can reduce then there are clear benefits to the Environment.