



Is there an alternative to glyphosate?



Gerard Proudman Streetscene Operations Manager Environmental Management

December 2021



Glyphosate alternatives for weed control

- Manual weed removal
- Hot foams
- Hot water / steam
- Heat gun / flame gun
- Pelargonic Acid
- Vinegar / Acetic acid



Manual Weed Removal











Hot Water / Steam





Heat Gun / Flame Gun

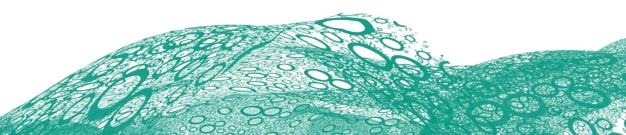




Pelargonic Acid



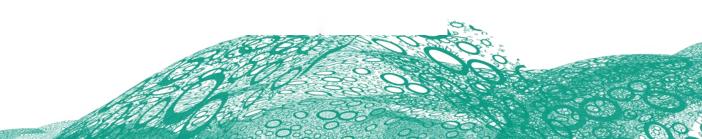




Acetic Acid (aka Vinegar)







Glyphosate – Cheers to the future



Questions





ALTERNATIVES TO GLYPHOSATE



COLIN REID GROUND SERVICES MANAGER SOUTH LANARKSHIRE COUNCIL

Fifth largest council in Scotland, covers 1800 square kilometres and has a population of approx 320,000

SOUTH

LANARKSHIRE

COUNCIL

- We currently treat all council owned land with herbicide on two occasions throughout the year
- Road channels kerb edges 5240 Kilometres
- Shrub bed spot treatment 1,400,000m2
- Care of Gardens 2600 properties
- Grass Edges 1,963,000 linear metres
- Non native Invasive 6500m2
- Hard stand 2,500.000m2
- Base of obstacle 21,000
- To treat these areas we use glyphosate products in both tank mix and CDA, using 9 quad bikes and a number of fully trained staff.

SOUTH LANARKSHIRE COUNCIL

REASON FOR OUR TRIALS

- This was a political decision, motion was raised in December 2020 to become a "Pesticide free" council.
- We tabled a 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 continue to use glyphosate products for 2021 but continually review our use.
- Agree to review alternative methods of control and trial such products.
- Sign up to the amenity forum
- Provide an interim report to the councils Climate Change and Sustainability Committee after 6 months and provide a full committee report after 1 year.

SOUTH LANARKSHIRE COUNCIL

ALTERNATIVES THAT WE TRIALLED

- Hot foam
- Hot Steam
- New Way spray
- Mankar ultra low volume lance
- Pedestrian Hot air machines.
- 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.

HOT FOAM





WEED CONTROL TIMESCALES







HOT STEAM







NEW WAY SPRAY

New-Way Weed Spray The active ingredient - acetic acid, has been formulated from the highest food grade product and developed to produce a formulation suitable for controlling a wide range of weeds, grasses, and hard surface mosses.

New-Way Weed Spray - MAPP No. 15319 New-Way Weed Spray is the first NATURAL non-selective herbicide for amenity and industrial weed control in the UK



SOUTH

LANAR KSHIRE

COUNCIL

Benefits of New-Way Weed Spray

Made from naturally occurring ingredients

Approved for use on hard surfaces

Will control mosses on hard surfaces

Fast acting - weeds die 1-2 days after treatment

Can be used all year round

How Does It Work?

New-Way Weed Spray is a non-selective herbicide with extremely fast activity and is active against most soft plant tissue it comes in contact with. It controls both grasses and broadleaved weeds. The product produces discolouration and browning of the foliage within a few hours of treatment and during warm sunny weather, most plants die within 1-2 days.

The product can be used year round. Perennial weeds generally require more than one application to control, but annual weeds are usually controlled with one treatment.

Application Information

Apply as a coarse spray so that leaves and stems are fully wetted before run-off. Ensure full Apply as a Date spiral so that backs and stand and run wetter before its safer to use around coverage, shrubs, and other valuable plants. Situations: natural surfaces not intended to bear vegetation. Permeable surfaces overlying soil. Hard surfaces. Maximum individual dose: 25ml product per m2. Maximum number of treatments: 6 per year. Other specific restrictions: A minimum interval of 7 days must be observed between applications Where can New-Way Weed Spray be used?

MANKAR ULTRA LOW VOLUME LANCE





SOUTH LANARKSHIRE COUNCIL

OTHER ALTERNATIVES

Other Alternatives that we have trialled or invested in this year include the following.

Hot Air we had a demo of a pedestrian machine, which basically blows out hot air which is fuelled by gas tank, can also be used as a burner. Again only kills the green part of the weed not the root so further treatments required. Will be arranging in spring 2022 unit which can be fitted to the front of small tractor for footpath use.

Pedestrian wire brush machines, these machines are particularly effective on monoblock areas for removing moss and weeds between the blocks, leave a good clean job however does take time to cover smaller areas.

Fitting of wire brushes to mechanical sweepers, something we have done for many years to remove silt and debris from road channels in turn removing the seed bed. Should be getting completed in line with new Coplar guidance under duty two.

SOUTH LANARKSHIRE COUNCIL

CONCLUSION

- So in conclusion there are a number of alternatives to glyphosate however they all come with their own factors or environmental factors that must be considered when making a decision on what control measures are being used, this would also include additional treatments due to weed control being less effective.
- Additional or increased costs for alternative products,
- Increased resources and costs for additional labour and vehicles including fuel.
- Environmental factors, additional water usage or increased CO2
- Public disruption, application in busy areas, hoses, foam, hot steam.
- Additional training for staff.



Setting up a Tree Nursery for Woodland and Bio-Diversity

Paul Naylor

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A little context...

- Medium sized district
- South Hampshire
- Population 135,000
- Southampton Airport, Hampshire Cricket
- 500 employees
- Very ambitious Council
- Major housebuilding programme
- Political stability from 1994
- Culture is co-production with staff/councillor joint working





Tree Nursery

- Why?
 - Plant 160,000 new trees in 10 years!
- Potential Solution
 - Grow them ourselves
 - Quality
 - Staff development 2 apprentices
 - Environmental Impact
- Finance
 - Business Case
 - £950k over 10 years
 - We had the land
- Progress
 - Decision July 2019
 - Nursery land cleared August 2019
 - Infrastructure pathways, water, welfare facilities and Polytunnels in December 2019
 - Staff recruited and on site November 2019



Tree Nursery

- Stock Production
 - Started potting up February 2020
 - We have bought some stock in to grow on
 - Continued through pandemic
- Nursery Stock
 - All planting stock sourced and provided through the Nursery.
 - Trees and shrubs now being grown to contract for our own developments
 - Potential to work with developers to contract grow for larger schemes
 - 19,500 trees and shrubs now growing on site today
 - Need to expand the site in next 18 months to accommodate doubling of stock on site, circa 50,000 on site at one time



Woodland Creation

Creating Woodlands

- We have recently purchased 80 hectares of farm land to help mitigate against Nitrates.
- This provides for approx. 25 years housing development even if we do nothing to the land
- Land has greater potential for nitrate & phosphate mitigation
- If we create woodlands there are increased benefits with regard to Nitrates and Phosphates
- Woodland Trust, confirmed we can access grants for planting and maintenance of new woodlands

• Three Year plan

- Evaluate each area of land to determine nitrate and phosphate value March 22
- Start to create woodlands January 2023 approx. 23 hectares this will take approx. 5 years
- important to engage and work with the ecology team
- Choice of trees/plants is key to ensuring we create spaces which are diverse for future ecology of the area



Tree Nursery Planting 160,000 trees

- We will achieve the initial target of 160,000 trees in ten years
- All trees will be grown locally within the Borough
- We have created jobs, our apprentices will hopefully be our workforce in the future
- Woodlands will be created mainly through grant funding
- The Tree Nursery will generate a surplus from year 5 onwards



Questions / Discussion

Paul Naylor Executive Head, Neighbourhood Services

Paul.naylor@eastleigh.govuk



Be part of the conversation! Follow APSE on Twitter and LinkedIn





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www.apse.org.uk



APSE Performance networks seminar 2021

Workshop E Parks and open spaces



www.apse.org.uk



Welcome

Today's facilitators and presenters are:

- Ian Jones APSE Associate
- Wayne Priestley APSE Principal Advisor





Setting up a tree nursery to create woodlands and bio-diversity

Paul Naylor, Executive Head of Neighbourhood Services, Eastleigh Council

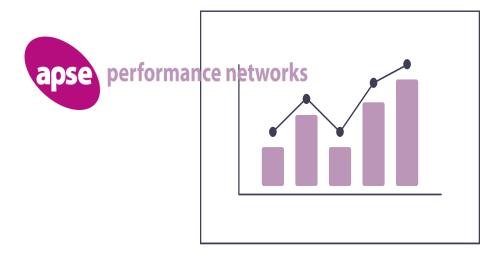
www.apse.org.uk



Update on Land Audit Management Services (LAMS)

Ian Jones APSE Associate

www.apse.org.uk



Key messages

Leading performance management tool for local government in the UK

Well-recognised at a national level

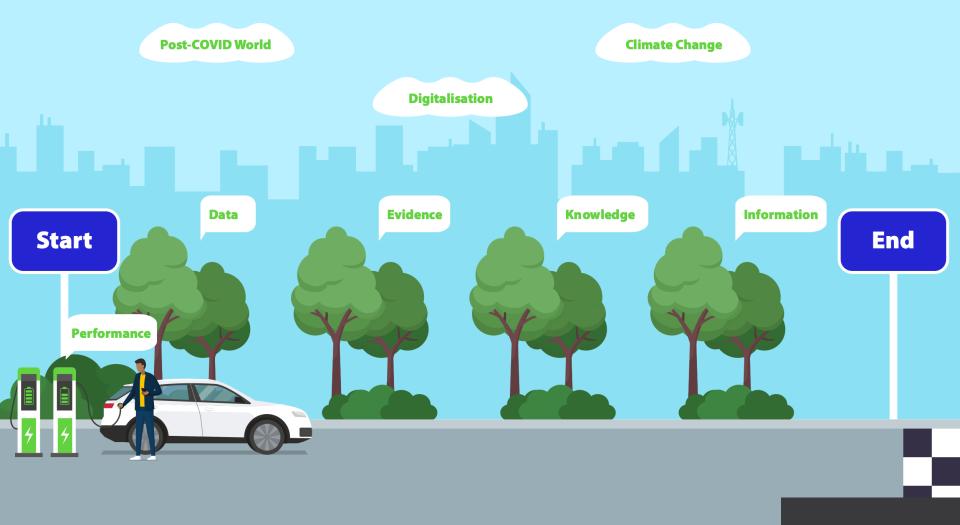
Progressive and responsive







apse





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apse performance networks

Impact of Covid

LAMS PI analysis - % change from the previous year

PI LO2 - Percentage of sites classed as acceptable (grounds maintenance)

1.12% Improved

PI LO3 - Percentage of sites classed as acceptable (litter) 0.01% Improved

PI L04 - Percentage of sites classed as grade A (fly tipping)

3.08% Improved

PI L05 - Percentage of sites classed as acceptable (dog fouling) -0.63% Deteriorated

PI L06 - Percentage of sites where bins were overflowing -1.75% Improved

PI L07 - Percentage of sites containing bins classed as acceptable (bin structure) 0.47% Improved

PI L08 - Percentage of sites containing bins classed as acceptable (bin cleanliness)0.17%Improved





PI L09 - Percentage of sites classed as unacceptable (hard surface weeds)

2.69% Deteriorated

PI L10 - Percentage of sites classed as acceptable (grass cutting)

2.22% Improved

PI L11 - Percentage of sites classed as acceptable (shrub bed maintenance)

3.05% Improved

PI L12 - Percentage of sites classed as acceptable (flower bed maintenance)

0.38% Improved

PI L13 - Percentage of sites classed as grade A (fly posting)

0.05% Improved



apse performance networks

Other PI analysis

Local authority and community playgrounds per 1,000 children - % change from previous year

-1.22%	decrease
PI 51a 1.79%	PPE and other covid related expenditure as a percentage of total expenditure
PI 52a 0.55%	Percentage change in cost per household (overall) increase
PI 52b 2.92%	Percentage change in cost per household (maintenance) increase
PI 53a	Percentage change in cost per 1,000 head of population (overall)

0.39% increase

MULTEVO



PI 53b	Percentage ch	Percentage change in cost per 1,000 head of population (maintenance)						
2.81%	increase							
PI 54a	Percentage change in cost per hectare (overall)							
-1.12%	decrease							
PI 54b	Percentage change in cost per hectare (maintenance)							
0.47%	increase							
Average FT	E lost as a result of	:						
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Climate change - some findings...

<u>Parks:</u>

49% have a biodiversity/parks habitat action plan

9% have said this includes setting and achieving targets for parks





Available data

Environmental issues / practices

Percentage of composting material used which is non peat-based

Percentage of composting material used which is reduced peat

Percentage of total length of footpaths / rights of way which are "easy to use" (formerly BVPI 178 Score)

Do you have a Tree / Woodland strategy

Do you have a formal, documented woodland management plan

Climate Emergency

Has your authority made a formal Climate Emergency declaration

If yes, has a Climate Emergency plan been prepared that includes targets for the parks/grounds maintenance service

If yes, what percentage of those targets have been met by the parks/grounds maintenance service





EMAS Environmental Policy

Do you have a formal, documented environmental policy

Have you carried out a documented initial environmental review

Do you comply with a formal, documented environmental management system (e.g. ISO 14001)

Have you published an environmental statement

Are you registered with EMAS (Eco-Management and Audit Scheme)

Biodiversity Action Plan (BAP)/Parks Habitat Action Plan (PHAP)

Does your authority have a Biodiversity Action Plan (BAP) and/or a Parks Habitat Action Plan (PHAP)

If yes, does it include targets for the parks/grounds maintenance service

If yes, what percentage of those targets have been met by the parks/grounds maintenance service





Recycling	
Total tonnage of 'green' waste generated during the year by parks and horticultural services operation	
Tonnage of 'green' waste recycled during the year by parks and horticultural services operation	

Discussion point: Implications of chemical controls on parks – suggested new data collection in relation to glyphosate





Tea and Coffee Break







Is there an alternative to glyphosate? The experiences of two local authorities

- Gerard Proudman, Street scene
 Operations Manager, Rochdale Council
- Colin Reid, Grounds Advisor, South Lanarkshire Council



Meadow Creation, environment and management plans

Carl Beacock,

Greenspace Manager (Neighbourhoods) North Lincolnshire Council



Open discussion forum





Action plan





Thank you

Good luck in tonight's awards! Keep performing!



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