Network query responses

Query Title: GM0758 - Innovative ways of treating / controlling weeds

on the Highway - 100920

Description:

This APSE member council is considering innovative ways to treat weeds on the highway. They would be interested to hear from any other APSE Member councils that have successfully introduced new methods of weed control / treatment. They would be particularly interested to hear from any member council who has utilised brushes on sweepers as a means of weed control / management.

Responses

nesponse							
Date:							
Authority:	Orkney Islands Council						
Name:							
Telephone:	Email:						
Response:	This topic is one that has created much consternation within my team. This year we reluctantly resur treatment using Nomix, though I have said we need to find a new way for next year.						
	I would therefore be very interested to hear what other authorities have tried (both successfully and unsuccessfully) to hopefully get a steer on a value for money option for us to prepare to take forward in 2021.						
Date:							
Authority:	Cheltenham Borough Council						
Name:							
Telephone:	Email:						
Response:	We are looking at this also – have trialled foam, electric, strimming etc – no one solution seems to do it at the moment and manual clearance takes a lot longer than weed spraying.						
Date:							
Authority:	Midlothian Council						
Name:							
Telephone:	Email:						
Response:	At Midlothian we have trialled sweeping small areas to control weeds and debris. This has involved fitting wire brush heads to the street sweepers from Johnstons and utilising wire brush heads on our pedestrian grass cutting machinery. Also utilising hand blowers to blow back debris onto grass areas. We have some indicative costs that would benefit from a comparison with others.						
	We will be undertaking further trials this Autumn.						
	Areas of block paving are an issue as mechanical collecting cannot be utilised without lifting sand and paving! .						

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Date:							
Authority:	Wirral Metropolitan Borough Council						
Name:							
Telephone:	Email:						
Response:	I am responding to your request for information about alternative methods to using Glyphosate in local Authorities.						
	For the last 12 months Wirral Borough council have been really proactive in their approach to finding alternatives to Glyphosate and have trialled many methods, please see list below for the method and brief description.						
	Alltec fully electric machine, this method uses heat to kill the cells in the vegetation, instantly see weed wilt but they soon spring back up and this method has little effect on the removal of weeds						
	Maxwind Pedestrian steam with nylon brush, steam is used to again kill the cells in the vegetation, lit effect on killing weeds						
	Johnston CN101 1m2 Sub-compact sweeper(carbon fibre brushes), had little effect on picking up larger weeds and only shreds the leave of the main stem. Using a nylon brush ensures that the infrastructure of the path are not damaged.						
	Foam-Requires considerable setup & running costs and heavy goods vehicle to transport. Slow, very little control of areas treated during application. Restricted to certain sites.						
	Manually Removing weeds, This method is very time consuming and labour intensive, scraping weeds will not completely kill the weed as the root will still be in the ground and the weed will simply grow back.						
	Green Gobbler 30% Vinegar- following on from positive results from our contractors trials, we have now begun a programme of testing this on our highways. .						
Date:							
Authority:	Wyre Forest District Council						
Name:							
Telephone:	Email:						
Response:	We here at Wyre Forest have not actually tried anything innovative but would really like to join the conversation.						
	We are also looking at have to make general verge maintenance more environmental friendly and are considering cut reduction, cut and collect and the introduction of bio digesters.						
Date:							
Authority:	Calderdale Metropolitan Borough Council						
Name:							
Telephone:	Email:						
Response:							
•	We currently have C201 Mini Sweepers, which change brushes in certain areas/routes from the full poly front brush to the wire poly brush. We haven't gone for the full wire brushes as this impacts on the integrity of certain surfaces						

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It works on some of the smaller weeds but its not effective on those above 10cm.

Date:							
	Nouszetta Haday Lyma Payough Council						
Authority:	Newcastle-Under-Lyme Borough Council						
Name:							
Telephone:	Email:						
Response:	Newcastle-u-Lyme's highways are owned by Staffordshire County Highways and they contract out the weed control.						
	For many years NBC used an outside contractor to treat with glyphosate using knapsacks.						
	Streetscene Operations then took over the contract (in house) and we fitted the "Nomix" system to our mechanical sweepers. The operation consisted of the machine sweeping the highway then the glyphosate mixture being apply via a droplet spray from the rear of the suction bucket. Any pavements or obstacles (grass verges/lamp columns/road sign/street furniture etc.) that were not accessible by the sweepers would then be treated by knapsack. The sweeping programme was adjusted to allow 2 applications throughout the season. We found this to be very efficient and the most cost effective way of controlling highway weeds.						
	NBC are no longer the preferred contractor to control weeds for Staffs County Highways.						
	Before Streetscene Operations was set up (2007) our Street Cleansing department trailed weed ripping brushes that would replace the normal channel brush on the mechanical sweeper. This does a reasonable cleanse, but not as good as a normal brush. The downsides of using these brushes are that due to the increased weight they caused damage to the brush arms/linkages, thus down time in repair. Also the cost per brush was up to 3 times the price of a normal channel brush. Also this was only a cosmetic solution compared to a glyphosate treatment.						
	We have not since trailed any other alternative .						
Date: Authority: Name: Telephone:	Fermanagh and Omagh District Council Email:						
Response:	Endi.						
nesponse.	We purchased two BCS 630 power units with 1metre brush attachment on the front. They are pedestrian operated and will be able to clean footpaths throughout the district. The brush attachment will be able remove weeds, moss and debris.						
	Also, we are undertaking a trial of FoamStream to assess it's effectiveness as an alternative to glyphosphate weed killers.						
Date:							
Authority:	Blackpool Council						
Name:							
Telephone:	Email:						
Response:	Blackpool has suffered this year more than other years as the normal treatment via quad and glysophate has been extremely restricted to parked vehicles during lockdown and the window of opportunity of the fine early spring weather, together with resource pressure.						
	We do have 2 compact sweepers with PKS weed sprayers (operators will require PA1 + PA2AR training modules) fitted using Vanquish biactive, which has helped control in the high footfall areas.						

The issue has a big impact on cleanliness perception and if there is a magic solution please share.

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Date:					
Authority:	London Borough of Redbridge				
Name:					
Telephone:	Email:				
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Response:	At the London Borough of Redbridge we still use a glyphosate based weed killer as treatment on the weeds. We only treat areas as needed, so some areas only receive 2 treatments per year, whilst others have up to 5 treatments per year.				
	In 2017 we trialled a vinegar based treatment, called New Way Spray. Unfortunately, this treatment did not fully kill off the weeds and we ended up having to abandon the trial at the beginning of the second treatment and revert back to the glyphosate weed killer.				
	Due to the number of parked cars within the borough, using brushes to remove the weeds would not be feasible in many areas due to access problems.				
Date:					
Authority:	Royal Borough of Greenwich				
Name:					
Telephone:	Email:				
Response:	The Royal Borough of Greenwich Street Cleansing service uses glyphosate for the treatment and control of weeds.				
	We have commissioned a contractor to treat weeds on the public highway. We are confident that the chemical is legal to use and carefully follow regulations and instructions regarding its use. We have not tried any new ways of treating the weeds on public highway but we will be interested to find out if any other local authorities have as we are due to renew our weed spraying contract.				
Date:					
Authority:	Northumberland County Council				
Name:					
Telephone:	Email:				
Response:	We are also looking into alternatives to herbicide but unfortunately our forays into the use of sweeper				

We are also looking into alternatives to herbicide but unfortunately our forays into the use of sweeper brushes a few years ago were not very successful. As a council with a lot of rural roads, the weed removing brushes on a road sweeper were trialled at Northumberland County Council as a potentially cost effective method of removing weeds with less staff, less chemical and only a slight amendment to existing resources.

Unfortunately the outcome was that the brushes, whilst effective at removing roadside weeds, were also rather effective at removing the tarmac at the edge of the road and resulted in unexpected erosion of the Highway edge, large tip-off fees with the extra weight and extra repairs to the Highway. Any cost saving in herbicide and any environmental benefits of not using it were offset or eclipsed by the extra tarmac repairs required and the haulage / tipping off costs due to removing of Highway surface.

Back to the drawing board, unfortunately.

We would be very interested in any solutions others have come up with!

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Authority: NORSE Commercial Services

Name:

Telephone:

Email:

Response:

There are options to use a Polly / wire or wire / Polly mix of brushes to help remove weeds and a total wire brush as well, these all depend on the sweeper manufacturer approving the sweeper and brush motor to operate with the additional brush weight on their equipment.

We generally find the wire Polly mix is the best option to keep the brush shape and to remove light / dead weeds and to optimise the standard of sweeping in general, the poly wire mix bends to much as the plastic bristle does on the outside and the total wire option is too heavy for most sweeper brush motors.

I hope this helps.

Date:

Authority: Exeter City Council

Name:

Telephone:

Email:

Response:

We have reduced the amount of highways sprays from 3 sprays per year to 2 sprays per year, which has only been possible off the back of introducing an integrated weed approach, i.e. use of alternative methods like the weed ripping machine (Nimos – Mosquito II) and deep clean teams (Utilising Gluton Hoover machines) city wide for the removal of detritus over a 12 month rolling schedule, removing growth material and emergent weeds. Both alternative methods have proven very effective.

We have trialled the Foamstream method of weed control and found the cost and time to be much more expensive and time consuming than that of our current methods. Additionally, the diesel consumption, fumes and hot steam were a concern for us from an operational as well as a carbon footprint point of view.

We have looked at applicability, efficacy, cost and environmental impact of chemical alternatives, pelargonic acid and acetic vinegar. These solutions have a limited environmental impact and efficacy is poor as they are contact herbicide only, killing soft leaves and not root systems, meaning re-emergence is high. At a minimum additional cost of 4x that of existing regimes, they are not currently a cost effective or financially viable option.

We have introduced a trial 'opt out' scheme for residents for the highways spray and are looking to roll this out city wide next year. A majority of residents within a road must agree to keep weed growth to a minimum, to an 'A' grade standard and provide photographic evidence in order to be removed from the spray list.

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Swansea City & County **Authority:**

Name:

Telephone: Email:

Response:

As a Glyphosate alternative, it is always worth considering the other non-herbicide control options that exist, but they can pose some considerable issues for any insect that finds itself in the path of the application equipment. The vast majority of alternative systems are based upon the application of heat to the weed, this can be a direct flame, hot water or foam. Very obviously any insect when exposed to such extreme heat will not survive. By comparison the slow decomposition of a weed (using Glyphosate) allows for even the slowest moving insects to relocate to another environment. Other alternative control options include, rotating wire brushes, which of course are equally damaging to any life that exists within weed growth and also impacts the longevity of the tarmacadam.

Swansea Council are currently using a company that utilises the "Weed It" technology to apply herbicides only to the weeds as a spot treatment and the actual amounts of active ingredient are miniscule in comparison to the 1,100 kilometres of footways treated throughout the area.

Swansea have previously trialled a number of "new" treatments as small area trials with little success, nevertheless we would be very interested in any new methods that could reduce the amount of weed killer used.

Date:

South Lanarkshire Council **Authority:**

Name:

Telephone: Email:

Response:

Nothing new being tried in South Lanarkshire although we have reviewed where we are using glyphosate and reduced.

Less use around obstacles and grass edges for instance.

We have a reasonable fleet of mechanical sweepers and where possible target paths rather than gutters/ drainage channels.

Continue to work with other local authorities re best practise via APSE's Litter Managers Network

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