

# Weed Control Trial



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# Background



- The Cabinet agreed to ‘Recommendation 5 - Herbicides & Pesticides – Glyphosate’ to undertake a trial of two approved alternatives weed control treatments on pavement areas over a whole growing season
- FRM was provided to undertake the trial, which was delivered by our specialist weed control contractor
- An independent consultant was engaged to develop the monitoring model and to analyse the data collected during the trial period
- The key factors for measurement /assessment were:
  1. Cost
  2. Environmental
  3. Customer Satisfaction
  4. Quality



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# Trial Design



## Approach

- Large scale testing under 'real world' conditions
- Provides realistic data to underpin decision-making

## Treatments

1. Acetic acid (contact herbicide)
2. Foamstream (contact herbicide)
3. Glyphosate (systemic herbicide) - used to benchmark alternative treatments
4. No weed treatment (scientific control)

There are currently no other weed control treatments are approved for use on hard surfaces in the public realm



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# Trial Design



## Monitoring sites

- Each of the 3 treatments has been assigned to a specific ward across the city:
  1. Acetic acid - Riverside Ward
  2. Foamstream - St Mellons & Pontprennau Ward
  3. Glyphosate - Penylan Ward

No weed treatment (scientific control)
- 6 monitoring sites were established within each ward these included:
  1. Main thoroughfare routes
  2. Representative residential street routes
  3. Residential street routes in close proximity to an open space/parkland
- 2 assessments were made in each monitoring site
- Data collection 4 occasions
- 48 assessments made per treatment

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# Analysis & Reporting



## Analysis

- **COST**- Economic evaluation of all control treatments based on the labour requirement to undertake each treatment per km pavement
- **ENVIRONMENTAL** - Life Cycle Analysis (LCA) treatment modelling to provide full quantification of carbon dioxide (CO<sub>2</sub>) emissions and other environmental burdens (e.g. water use, primary energy)
- **CUSTOMER SATISFACTION** – complaint data was collected and compared to previous years
- **QUALITY** - Weed score given for each assessment for all treatments and the untreated control

## Reporting

- Summary of treatment sustainability
- Scale-dependant considerations around treatment deployment
- Comparison of results with previous UK trials and other relevant literature (particularly from the Netherlands)

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**Evidence Project Final Report**

**Department for Environment Food & Rural Affairs**

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**Weeds, treatment of unwanted vegetation**

Trial and comparison for glyphosate free weed treatment in Bristol parks and highway surfaces



Bristol City Council  
28/01/2017

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**Thanet Study (2015)**  
Defra & Kent County Council

**Cotham Trial (2017)**  
Bristol City Council



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# Early Findings



- **Cost** – per kilometre to treat the weeds
- **Environmental** – i.e. carbon footprint of the work undertaken
- **Customer satisfaction** - measured using complaints received
- **Quality** – measured by sampled assessments on 4 occasions

<b>Treatment \ Factors</b>	<b>Cost</b>	<b>Environmental</b>	<b>Customer</b>	<b>Quality</b>
New-way Weed Spray	High	High	Low	Poor
Foamstream	V High	V High	Good	Poor
Glyphosate herbicide	Low	Low	Good	Good



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# Questions ?



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