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



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



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

Analysis & Reporting



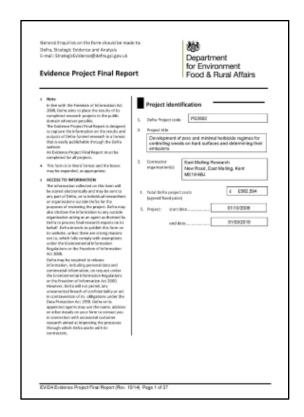


Analysis

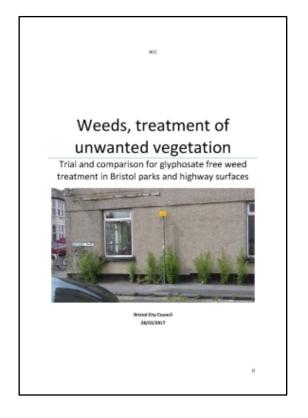
- COST- Economic evaluation of all control treatments based on the labour requirement to undertake each treatment per km pavement
- ENVIRONMENTAL Life Cycle Analysis (LCA) treatment modelling to provide full quantification of carbon dioxide (CO2) emissions and other environmental burdens (e.g. water use, primary energy)
- CUTOMER 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)



Thanet Study (2015)



Cotham Trial (2017)Bristol City Council



CAPITAL

PRIFDDINAS

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

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







Questions?

