



## Dog fouling

A review of the range of interventions used to tackle the issue of dog fouling and promote positive behaviour change.

Keep Wales Tidy 2016

## Summary

Although there have been many campaigns and media coverage on the issue, no consensus as to how best to tackle the problem of dog fouling has been identified and it remains a challenge for national and local government. There is very little published research on interventions to tackle dog fouling, making it difficult to draw robust conclusions on the issue. This paper attempts to bring together evidence of all common interventions to identify best practice.

The majority of dog owners are responsible but the actions of the few who do not clean up after their dog can have culminative consequences and can pose a serious health hazard. LEAMS data and other external surveys have shown that this is a persistent issue on our streets and Wales has seen a slight increase in recent years. The health risks posed by left dog faeces, although rare, can have a huge impact, namely through Toxocariasis.

As with other signs of poor local environment quality such as litter and fly-tipping, dog fouling can have far reaching social and economic impacts. The clean-up costs alone cost councils in England and Wales £22million per year.<sup>1</sup>

Current evidence from the UK and beyond suggest that a combination of approaches, particularly those that focus on awareness raising are not only demonstrating the greatest results but are also the most cost-effective. Similarly, social marketing techniques can have a big impact and can be cost-effective.

This paper explores the options for enforcement and effective campaigns as well as looking at some of the more uncommon interventions, and includes results of our own social marketing experiment carried out in three regions in Wales in October 2015. This is not a definitive guide and does it negate the need for accessing appropriate legal advice for specific situations or sought orders but it attempts to provide a framework of thinking around behaviours and appropriate interventions, whilst recognising the significant cost restrictions currently faced by local authorities.

The report concludes with a series of broad recommendations for action for local and national government to help inform policy which can translate into practical and effective action.

<sup>1</sup> BBC. (2008). *How serious a problem is dog fouling?* <http://news.bbc.co.uk/1/hi/magazine/7469369.stm> (6.4.16)

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## Introduction

There are approximately eight million dogs in the UK, with 24% of households owning at least one dog.<sup>2</sup> It has been estimated that dogs produce more than 1,000 tons of faeces every day in the UK<sup>3</sup> and much of this waste is deposited in public areas.<sup>4</sup>

Dog fouling affects 10% of streets surveyed in Wales, and frequently tops people's list of concerns regarding litter and refuse found on the streets. It is encouraging that 74% of Welsh people don't think there are any acceptable reasons not to pick up dog fouling, but a small number of dog owners acting irresponsibly can have a very significant and cumulative impact on local areas.

Local Authorities in Wales have adopted a combination of campaigns and enforcement to help tackle dog fouling. Posters and displays in public areas are the most frequently used method, while enforcement, media coverage, leaflet distribution, provision of free poop scoops, and dog waste bins are also used. A number of local authorities are also working with schools to educate children about dog fouling and the health risks associated with it.

Dog fouling is of great concern to the general public, and Keep Wales Tidy research shows that people in Wales consider dog fouling as the problem which has the greatest impact on the look and feel of an area<sup>5</sup>. It is not only the visual impact of seeing dog faeces but also the health problems associated with it, namely Toxocariasis, which can lead to blindness. Initial work with the Wales Centre for Behaviour Change in this area with Bangor University and discussions with a range of stakeholders found that many people do not realise that they can put dog fouling bags into a street bin and was found to be one of the barriers to responsible behaviour.

As with other signs of poor local environment quality such as litter and fly-tipping, dog fouling can have far reaching social and economic impacts. The clean-up costs alone cost councils in England and Wales £22million per year.<sup>6</sup>

This paper looks at some of ideas for tackling the problem of dog fouling and some studies where campaigns have been successful in achieving a reduction in the number of instances of dog fouling. However, a great deal of research is needed in this area as there is not a wealth of information about best practice and interventions vary across regions. According to a recent review which looked at a number of studies on the subject, 'the review did not find any good-quality studies which have looked at interventions to prevent dog fouling'.<sup>7</sup> Although these studies are useful as they highlight important gaps in knowledge, further research has been recommended in order to develop best practice guidance based on evidence and successful actions.

<sup>2</sup> PFMA. (2015). *Pet Population 2014-2015*. <http://www.pfma.org.uk/pet-population-2015> (4.6.16)

<sup>3</sup> Campbell, F. (2007) *People Who Litter: ENCAMS Research Report*, ENCAMS, Wigan, UK.

<sup>4</sup> Wells, D.L. (2007) 'Public understanding of toxocariasis', *Public Health*, Vol. 121, No. 3, pp.187–188.

<sup>5</sup> Keep Wales Tidy (2010) *Litter in Wales Understanding Littering and Litterers Executive Summary Report*

<sup>6</sup> BBC (2008) *Op cit*

<sup>7</sup> Atenstaedt, R.L., S. Jones. (2011). Interventions to prevent dog fouling: a systematic review of the evidence. *Public Health*. 125 (2), 90-92

## Scale of the problem

There has been a significant overall decrease in dog fouling over the past few decades and responsible behaviours of dog owners is largely the norm. However, the inaction of a minority can accumulate into an issue of significant impact which persists today. Dog fouling tops many people's list of concerns regarding litter and refuse found on the streets as it is not only the visual impact of seeing dog faeces but also the health problems associated with it.

Toxocariasis is a rare infection transmitted from animals to humans caused by roundworms commonly found in the intestine of dogs and cats. As there is no correlation between Toxocariasis and pet ownership, the primary areas of transmission are public environments such as playing fields and parks where children are most commonly at risk due to having greater contact with contaminated soils. Although rare, contraction of the disease can be very serious, such as the case of Collin Smith from South Wales who lost his leg after dog fouling which was left on a rugby pitch caused serious infection. Toxocariasis can be prevented by regularly worming dogs, particularly puppies and nursing bitches and by ensuring that dog faeces are disposed of responsibly. Freshly deposited faeces are not infectious so you cannot get Toxocariasis by cleaning up after your dog – Toxocara eggs do not become infectious for at least 2-3 weeks after the faeces have been deposited)<sup>8</sup>.



<sup>8</sup> Keep Wales Tidy (2008) 'Don't leave it for someone else...' Dog Fouling Leaflet <http://www.keepwalestidy.org/news/153-dog-owners-need-to-take-responsibility> (4.6.16)

Each year, Keep Wales Tidy undertakes surveys which give a snapshot of street cleanliness across the country. The latest results for 2014-15, published in the 'How clean are our streets' report, shows that dog fouling on our streets has yet to drop below 10%. While dog fouling decreased gradually for the first few years since the baseline survey of 2007/8, it has since increased, peaking at 13.8% in 2012-13.<sup>9</sup> It is however, encouraging that 74% of Welsh people don't think there are any acceptable reasons not to pick up dog fouling.

Results from a survey carried out by The Dogs Trust suggest that dog fouling may be a much more widespread problem. 66% of respondents to the survey said that they saw dog fouling every time they left the house and only 1% said that people in their community always pick up after their dogs.<sup>10</sup>

## Understanding the problem

Only a restricted number of academic studies have focussed on dog fouling and there has been even less published research relating to the more recent issue of discarded bagged dog waste.<sup>11</sup> A study in 2014 by Christopher Lowe, sought to identify the barriers to behaviour change in dog walkers and looked at both bagged and non-bagged waste. The study consisted of a questionnaire (933 respondents) and on-site surveys of 8 different dog walking locations of various typography under different ownership. Some of the locations had dog bins or combination litter bins whilst others had no provision.

98% of those surveyed were in strong agreement that they should always clean up after their dogs on pavements and in public parks and playing fields although views differed when asked whether they feel they should clean up after their dog in open countryside or farmland. Only a small minority said that they should never have to clean up after their dog in any location.<sup>12</sup>

The study, which included participants from all areas of the UK, looked at the factors influencing behaviour related to cleaning up dog waste, in order of the mean of importance attributed, these were:

1. The right thing to do
2. Reduces the spread of disease
3. *Toxocariasis* (parasite found in dog faeces)
4. Good for the environment
5. Availability of bins
6. Threat of being fined or prosecuted
7. Confrontation by members of the public
8. Confrontation by other dog owners
9. Dog waste related campaigns
10. Money spent by the local authority to clean up dog waste

<sup>9</sup> Keep Wales Tidy (2008) 'Don't leave it for someone else...' Dog Fouling Leaflet <http://www.keepwalestidy.org/news/153-dog-owners-need-to-take-responsibility> (4.6.16)

<sup>10</sup> Dog's Trust. (2015). *The results are in and we've got the scoop... on The Big Scoop!* <https://www.dogstrust.org.uk/whats-happening/blog/the-results-are-in-and-weve-got-the-scoop-on-the-big-scoop> Last accessed 4.6.16.

<sup>11</sup> Lowe, C.N., Williams, K.S., Jenkinson, S. and Toogood, M. (2014) 'Environmental and social impacts of domestic dog waste in the UK: investigating barriers to behavioural change in dog walkers', *Int. J. Environment and Waste Management*, Vol. 13, No. 4, pp.331-347.

<sup>12</sup> Lowe, C.N *Ibid*

As bagged waste can sometimes be as much of an issue as non-bagged waste, the study also investigated the factors that influenced people to pick up after their dog and then discard it. Bagged dog waste was considered to be visually and environmentally worse than non-bagged dog waste by 57% and 76% of dog walkers respectively.<sup>13</sup> In order of the mean of importance attributed to each factor, these were:

1. A lack of dog waste bins
2. Avoid taking dog waste home or into cars
3. Some owners do not usually clean up after their dog but may feel obliged to discard the bag later (e.g. in the presence of other people)
4. Uncertainty about placing dog waste into litter bins
5. Embarrassed to be seen carrying bags of dog waste

These results correlate with initial work with Bangor University where discussions with a range of stakeholders found that many people do not realise that they can put dog fouling bags into a street bin and was found to be one of the main barriers to responsible behaviour.

Whilst the methodology used in this study can only provide a snapshot and admits that questionnaire respondents are likely to be dog enthusiasts rather than a cross section of the dog walking public, the results provide an insight into factors that may influence behaviour change. The provision of bins features very highly as a factor but is not the primary motivation for people who do pick up and discard dog waste appropriately. The more powerful, and sustainable factor is that of 'doing the right thing' and the creation of a social norm which makes not picking up dog waste entirely unacceptable. Awareness of the health risks also featured highly in motivational factors which could signify that a greater focus on education around the issue could have a positive behavioural impact.



<sup>13</sup> Lowe, C.N *Ibid*

It has been suggested that demographic factors can significantly influence pro-environmental behaviours, as with similar studies on litter behaviours which try to address behavioural change, dog walkers can also be categorised depending on their attitude to the issue and level of motivation and sense of responsibility. The Lowe study depicted the following typologies for dog walkers:

- **Proud to pick up** – happy to be seen carrying dog waste, will pick up in all locations and take it home if no bins are available.
- **It is the right thing to do** – will pick up in public places but will seek to dispose of the waste as soon as it is practical.
- **I have done my job....** – if there is no bin available will leave the bagged waste to be dealt with by others.
- **Only if I have to** – will only pick up in the presence of other people – likely to discard when no one is looking.
- **Disengaged** – will not pick up in any situation even if they are aware of the environmental consequences of their actions

Lowe concludes that further study is required to ascertain if such typologies are a limited reflection of a more complicated reality, fixed, or whether people move between them. In order for local authorities to tackle the issue of dog waste it may be necessary to develop individual strategies for each of the suggested dog walker typologies and potentially tailor these strategies to individual locations.<sup>14</sup>

## Enforcement

Whilst increased enforcement of existing legislation for dog owners who fail to clean up after their dog is an important factor in successful interventions, the cost of enforcement can be difficult with increasingly reduced budgets. In 2015, although complaints about dog fouling rose, issuing of Fixed Penalty Notices (FPNs) went down.<sup>15</sup> Visible enforcement can be a powerful deterrent and can have a deal of public support although it is recognised that policing dog walkers and enforcing penalties is increasingly difficult. A reduction in enforcement should always be weighed up against cleaning costs, the costs of social impacts (for example, dealing with complaints from the public) and any associated health risks, particularly in dense urban areas or public parks where children play.

Increased enforcement has, in many cases, shown to have a positive impact and an effective deterrent although it is unlikely that this intervention alone will lead to behaviour change or be financially sustainable for local authorities in the long term. Enforcement in Wales is patchy, with some local authorities having strict enforcement measures and others operating none at all. Unless enforcement coverage is consistent and widespread, it may lead to shifting the problem to another area, particularly in more rural areas where dog walkers have more choice of walking space. In the study on barriers to behavioural change in dog walkers, Lowe identified that even though awareness of FPN's was high (98%) it was 'not a dominant factor in influencing behaviour' and that there were significant problems in regulation and enforcing legislation.<sup>16</sup>

<sup>14</sup> Lowe, C.N *Ibid*

<sup>15</sup> BBC. (2015). *Dog poo fines 'down by almost 20% in England and Wales*. <http://www.bbc.co.uk/news/uk-33064119> (4.6.16)

<sup>16</sup> Lowe, C.N *Op Cit*

This demonstrates a need for awareness and training of legislation to be offered to local authorities as part of the legislative process. Furthermore, this regulatory approach may be developing a negative view of dog owners amongst the non-dog owning public which is unfair on the majority of responsible dog owners.

However, new legislation also allows for Public Space Protection Orders (formerly Dog Control Orders) and Community Protection Notices to be issued for certain areas where dogs must be kept on leads or the designation of dog-free zones. The Anti-social Behaviour, Crime and Policing Act 2014, sets out new guidelines for Public Space Protection Orders and have simplified the process of designation. According to some small observational studies, areas where dogs are leashed are more likely to be free of waste as there is a direct association with the dog and the owner. Studies from Northern Ireland and, more recently the US, seem to support this case which recorded that dog owners cleaned up after their dogs more often when the dogs were on a leash.<sup>17</sup> However, research by Social Issues Research Centre (2008) suggested that the opportunity to walk dogs off the lead was considered the single most important factor in determining dog walking location and this factor must be considered before any designation changes are implemented. It is also important to note that the right for dogs to be allowed to exercise off the lead where it is safe for them to do so, so they can 'exhibit normal dog behaviour' is a right enshrined in the Animal Welfare Act 2006. Many authorities who have attempted to implement strict dog control orders have been criticised for having a draconian approach and have been challenged by animal welfare organisations.

Enforcement through dog wardens is largely cited as the most effective way of dealing with the issue as they act as a deterrent and enforcer of Fixed Penalty Notices but can also be a voice for engagement and education with the public as well. Many local authorities do have dog wardens and public perception is increasingly more positive as their role has evolved to be more community focused. One of the primary advantages to having local wardens is that they can be tailored to suit the needs of specific communities and can promote partnership working and community engagement. This role in recent years has been superseded somewhat by the introduction of PCSOs although in practice, these officers have little to do with littering or dog fouling offences.

### **Fixed Penalty Notices**

An FPN is an enforcement tool which offers someone who has committed an offence the opportunity to avoid prosecution by the court, by paying a sum of money (a fixed penalty). The default amount is £75, but a local authority can set the amount within a specified range. If prosecuted for the offence, a person is liable to a maximum level 3 fine of £1,000.<sup>18</sup>

FPNs are generally an effective method of addressing environmental crime and are generally welcomed by the public. However, there can be issues in the way that these are enforced, particularly when they are done through private contractors and with little or no engagement or education, which can create discord in communities, particularly in more deprived areas where awareness levels tend to be lower. Issuing financial punishment for irresponsible actions can be viewed as compounding socio-economic problems unless thought is given to effective engagement, communication and realistic payment plan opportunities.

<sup>17</sup> Christie, A. (2011). *Scoop to Win – A Survey of Dog Waste in the Nisqually Reach and Henderson Inlet Shellfish Protection Districts*. <http://www.pacshell.org/pdf/scooptowinfinalreport.pdf> (4.6.16)

<sup>18</sup> Lawyer. (2016). *Dog Fouling*. <http://www.mylawyer.co.uk/dog-fouling-a-A76076D76944/> (4.6.16)



Some countries in Europe, such as Sweden, the Netherlands and Germany have an annual dog tax, which requires all dog owners to pay a small amount of statutory tax and have all animals registered on a national database. Some of these schemes are based on breed of dog whilst others are dependent on the number of dogs in the household. Whilst Sweden reports dog fouling as a minor problem, Germany still finds it a top issue and the tax has been blamed in part for this as dog owners see the clean-up costs as part of the tax payment. Whilst a dog tax or a levy on dog food could potentially raise finances which could go toward supporting more dog wardens or clean-up costs, there is currently not sufficient evidence that this would lead to behaviour change in the long term.

### **DNA enforcement**

There are a growing number of Dog DNA companies who promise to ‘Match the Mess’ in order to identify and penalise the irresponsible dog owners from a DNA match to the faeces. This requires a dog DNA database to be created, although DNA sample collection is normally voluntary. A number of regions across Europe and the US have adopted this sort of scheme and more recently, local authorities in England.

Barking and Dagenham Council have become the first council in the UK to implement the DNA scheme. Under the plans, the dogs’ DNA would be collected by a cheek swab which is sent to a laboratory. The dog’s profile is then added to a central register, compiled by PooPrints UK. If an owner fails to pick up their dog’s mess, a DNA test will be taken from the offending faeces which can be traced back to a registered dog with 99.9 per cent accuracy.<sup>19</sup>

Although the scheme is costly to implement and does not mean that on the ground enforcement is no longer necessary, some schemes have produced results. In Xatvia, Spain, the DNA scheme reduced dog fouling instances by 80% in the first three months, although it is not clear from the available information at this time whether this is due to scheme itself or the campaigns and publicity and profile that surrounded it.<sup>20</sup>

Given the expense of this scheme, insufficient evidence and voluntary nature, it is not considered an efficient solution to the problem on a larger scale other than at the ‘gated community’ level, which was originally what the schemes were developed for.

### **Efficient cleansing and facilities**

Bodies with a duty to keep land or highways clear of litter and refuse under s. 89 of the Environment Protection Act 1990, are required under the Litter (Animal Droppings) Order 1991, to keep certain areas of land clear of dog faeces such as public footpaths, recreation areas and picnic sites. However, the responsibility for cleaning up dog fouling is ultimately the owner or handler of the dog.

Members of the general public have also contributed to cleansing of public spaces. Some passionate public volunteer dog walkers pick up dog fouling whenever they see it and can be a positive deterrent force for irresponsible behaviour.

<sup>19</sup> Turner, C. (2015). *Dog poo to be DNA tested in council plan to track down lazy owners*. <http://www.telegraph.co.uk/news/newstoppers/howaboutthat/11567422/Dog-poo-to-be-DNA-tested-in-council-plan-to-track-down-lazy-owners.html> (4.6.16)

<sup>20</sup> StreetKleen. (2015). *Spanish town Xàtiva reduces dog fouling incidents by 80% using DNA analysis - success!* <http://www.streetkleen.co.uk/latest-news/spanish-town-xativa-reduces-dog-fouling-incidents-by-80-using-dna-analysis-success> (4.6.16)

According to a survey ahead of the launch of 'The Big Scoop' campaign, one in three people would pick up dog fouling that wasn't theirs and 6 out of 10 would point out an oversight to an owner.<sup>21</sup>

The provision of bins and signage in public areas is a crucial 'prompt' for responsible behaviour, the availability of these facilities is one of the top cited reasons why people do not pick up after their dogs. Although we recognise it is not possible to have dog fouling bins at every location, removing this excuse, wherever feasible is an important step in changing behaviour.

## Raising Awareness

While the availability of bins was considered to be an important factor influencing behaviour, the key driver was that dog walkers considered clearing up after their dogs to be simply following the internalised and externally sanctioned rules of being a responsible dog owner. It was considered 'the right thing to do' and this was partly a result of an awareness of the health risks associated with dog foul. It is also suggested that this attitude is more strongly held by dog walkers than other members of the public.<sup>22</sup>

Keep Wales Tidy, along with many other organisations and local authorities have taken to streets, parks and other outdoor spaces with brightly coloured chalk spray to highlight the issue of dog fouling. According to Slough Council, spraying action reduced instances of dog fouling by over 72%.<sup>23</sup>

Other forms of messaging have included more humorous means such as the flags used in Boston Councils' campaign in Lancashire where flags on cocktail sticks were put in foulds which carried messages such as "flagged up... irresponsible dog owner woz 'ere". The council reported a 'marked decrease' in instances of dog fouling as a result of the action.<sup>24</sup>

Drawing attention to the problem highlights how widespread the issue is. Lance Workman, visiting professor of psychology at the University of South Wales says that this helps as it can make owners realise "how much it upsets other people".<sup>25</sup> These campaigns have been remarkably effective although momentum is needed to maintain results and there will also be a minority of people who cannot be 'shamed' into action.

One of the largest national awareness campaigns in recent years has been 'The Big Scoop', led by the Dogs Trust and in association with Keep Wales Tidy in Wales and Keep Britain Tidy in England.

The message of the campaign is simple 'Bag it and Bin it' in any public bin. A lack of dog waste bins is the number one factor cited by those who do not dispose of bagged waste and the availability of bins is a contributory factor (no. 5 in the Lowe study) in influencing responsible behaviour. Not all dog walkers are aware that they can dispose of dog waste in any public litter bin and this has been the main message of many dog fouling campaigns.

<sup>21</sup> Walker, D. (2013). 8 radical solutions to the problem of dog mess. <http://www.bbc.co.uk/news/magazine-22853270> (4.6.16)

<sup>22</sup> Lowe, C.N *Op Cit*

<sup>23</sup> BBC (Berkshire). (2012). *Spray-painting reduces dog fouling by almost three-quarters*. <http://www.bbc.co.uk/news/uk-england-berkshire-19064119> (4.6.16)

<sup>24</sup> BBC (Lincolnshire). (2013). *Boston Council 'flags up' dog dirt to shame pet owners*. <http://www.bbc.co.uk/news/uk-england-lincolnshire-22691529> (4.6.16)

<sup>25</sup> Walker, D (2013) *Op Cit*

Unlike some other forms of littering\*, there are few examples of incentives being offered to motivate behaviour. A notable exception is New Taipei City in Taiwan where residents were offered a lottery ticket for every bag of poo they handed in. Officials collected 14,500 bags from 4,000 people, with the scheme said to have halved the amount of excrement in the city.<sup>26</sup>

Broadly speaking, awareness campaigns at a local level demonstrate an approximate 50% reduction in dog fouling instances, simply by highlighting the issue and bringing it to the forefront of public attention.

Generally, the more innovative the intervention, the better the results. It should be noted however that many campaigns and interventions have been relatively short term and evidence of reduction as a result of a long standing, or even permanent awareness intervention has not been found.

### **BARC: a new message for dog owners?**

The BARC (Bag And Remove in Cymru) Project was established in 2013 aims to:

- Assess the UK prevalence of common soil parasites, focusing on *Toxocara* spp. in particular
- Determine whether parasite contamination levels can be reduced by anti-dog fouling campaigns
- Increase public awareness of the negative effects of dog fouling on the environment and to mankind.

This successful undergraduate research programme is based at Cardiff University within the CRIPES (Cardiff Research into Infection and Parasites in Ecological Systems) research group.

BARC's awareness raising efforts has found that there has been a positive response to the message that not clearing up after your dog can actually harm your dog by increasing their risk of infection. This indicates a new approach to anti-dog fouling messaging and was considered to be a powerful piece of information when it was discussed with BARC at this year's LEAMS stakeholder event in March.

BARC collect and analyse soil samples in order to determine the distribution of parasites, including *Toxocara* species. The website provides a map of the UK where soil samples have been collected and analysed and indicates where sites have been found to be *Toxocara* positive. For more information and to take part of the project please visit the [BARC website](#).



<sup>26</sup> Walker, D (2013) *Op Cit*

## Social Marketing

Social Marketing, sometimes referred to as ‘Nudging’<sup>27</sup> is defined as: "the application of commercial marketing techniques to social problems." In other words, it uses the same advertising and marketing techniques that used to sell commercial goods with the aim of encouraging behaviour change for the benefit of the community or society as a whole.

In order for social marketing to be effective, it is necessary to identify the negative behaviour and the barriers to the desired change and provide the infrastructure for the change to be implemented. For example, ‘Don’t mess with Texas’ is a well-known social marketing scheme but in addition to the popular slogan, the state provided bins in problem areas and targeted specific groups of people who they had identified as more likely to litter. Although people commonly find littering to be a malpractice in social norms, if the proper receptacles are not available, behaviour may be inconsistent with their concern for not littering.<sup>28</sup>

Social Marketing is increasingly being used by governments to tackle persistent problem issues. Although not without controversy, the UK Government was the first government to create an independent ‘Nudge Unit’ through their Behavioural Insights Team and are applying these techniques to a wide range of social, political and economic issues including charitable giving, organ donation and business engagement.

Many effective social marketing efforts have been simple and cost-effective. In 2011, students in Copenhagen carried out an experiment where green footprints on the street directed people to bins, to see if it led to a reduction in litter. The experiment showed a 46% decrease in the litter dropped.<sup>29</sup> A researcher from a Copenhagen based Nudge Research Unit explains that the footprints were ‘a recognition of the fact that the citizens of Copenhagen actually do care about the state of the city streets, they just need a little nudge to effectively carry those concerns out in their busy every day lives’<sup>30</sup> This experiment has been replicated in parts of Wales where it had a similar impact. The trial concluded that these low-cost, simple interventions should be implemented permanently.

Behaviour change is a complex science and not all social marketing experiments have been successful, which underlines the importance of pilot projects before full implementation. Effective campaigns build on already established social norms, such as the generally established perception that litter is ‘wrong’, the ‘embarrassment’ factor of being caught littering or ‘brand shaming’ to engage manufacturers with their responsibility for waste reduction.

See the [Community Toolbox website](#) for more information.

<sup>27</sup> ‘Nudge theory’ is a concept from the field of behavioural economics which uses positive reinforcement or indirect suggestion in order to achieve a desired behaviour.

<sup>28</sup> McKenzie-Mohr, D. (2000), *New Ways to Promote Pro-environmental Behaviour: Promoting Sustainable Behaviour: An Introduction to Community-Based Social Marketing*. *Journal of Social Issues*, 56: 543–554

<sup>29</sup> INudgeYou. (2012). *Green Nudge: Nudging Litter into the bin*. <http://inudgeyou.com/green-nudge-nudging-litter-into-the-bin/> (14.7.15)

<sup>30</sup> INudgeYou (2012). *Ibid*

### Keep Wales Tidy – Dog fouling social marketing experiment

After undertaking this literature review and researching international campaigns and interventions to tackle dog fouling, it was clear that there was a gap in the data available for policy makers and local authorities as to what works. As a result, Keep Wales tidy developed a small-scale social marketing experiment which captured two elements of successful campaigns previously used to tackle littering. Chalk based spray messaging based on the ‘footprints to bins’ experiment and signage in prominent areas. Not only was this a simple intervention but it was also extremely cost-effective and easily replicable.

The experiment was carried out in three areas of Wales. One of the areas used the signage, one used the chalk based spray and the third used a combination of both. If we collate the data from all three sites, overall the interventions resulted in a 53.4% decrease in dog fouling incidence. A longer time scale and larger scale intervention of this nature would help us to prove the robustness of these results.

For a full copy of the report, please email [leq@keepwalestidy.org](mailto:leq@keepwalestidy.org).

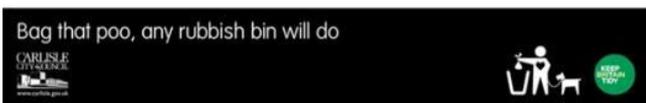


## Keep Britain Tidy – We’re watching you campaign

Keep Britain Tidy piloted the ‘We’re Watching you’ campaign in early 2014 and have since rolled it out to over 40 local authorities across England.



9 out of 10 dog owners clean up after their dog.  
Are you the one who doesn't?



The simple poster campaign was based on the theory that people behave better when they think they are being watched.

Although the technique has been tested in social experiments before, this was the first time it had been used for the issue of dog fouling.

Keep Britain Tidy and 17 local land manager partners developed and delivered the experiment.

The A3-size posters used a luminescent film that ‘charged up’ during the day and glowed in darkened areas to increase their visibility at night.<sup>31</sup>

The experiment demonstrated an average of 46% reduction in dog fouling.

The full results of the experiment, including the various messaging techniques and the possibility of displacement can be [downloaded here](#).

## Conclusion

It is encouraging that 74% of Welsh people don’t think there are any acceptable reasons not to pick up dog fouling. Although we have seen a significant improvement over the decades, dog fouling remains a persistent issue on our streets and remains a high public concern. Dog faeces can carry Toxocariasis which can pose significant risk to health and can be prevented by regular worming and responsible disposal of dog waste.

In order to tackle a problem, it is important to understand the barriers to behaviour change and the reasons why the problem is persisting, despite general knowledge of the impact. The study by Lowe demonstrated insight into behaviour incentives of those who picked up after their dog, and those who didn’t. Availability of bins (and the knowledge that dog waste can be disposed of in any public bin) is one of the top barriers to responsible disposal whilst many responsible owners were motivated by awareness of the health risks and the understanding that it was the ‘right thing to do’. This affirmation of a positive social norm has also been demonstrated in the success of certain social marketing campaigns, particularly the ‘We’re watching you’ poster campaign in England.

<sup>31</sup> Keep Britain Tidy (2014), ‘Keeping an eye on it; A social experiment to tackle dog fouling’ Available: [http://network.keepbritaintidy.org/Documents/Files/KBT%20Network/11.%20Keeping%20an%20eye%20on%20it\\_Final%20report.pdf](http://network.keepbritaintidy.org/Documents/Files/KBT%20Network/11.%20Keeping%20an%20eye%20on%20it_Final%20report.pdf) (4.6.16)

Enforcement has a crucial role to play in deterring responsible behaviour although this should not be an isolated method of prevention. One of the most successful interventions is the role of dog wardens with a primary focus on community engagement and communication although it is recognised that this is not possible in all areas. Many simple awareness raising campaigns have had a significant impact on dog fouling, all of which have served to highlight the issue and demonstrated decreases as a direct result.

There is not robust evidence to suggest that DNA schemes work to decrease dog fouling given that there are significant awareness campaigns at the point of introduction. Given their expense and voluntary nature, it does not appear to be the most effective option at hand unless the targeted area is a 'gated community' or similar level where cooperation could be made compulsory by the estate.

Local Authorities in Wales and further afield have adopted a combination of awareness and education campaigns and enforcement to help tackle dog fouling. Public messaging and signs in commonly used areas are the most frequently used method, while enforcement, media coverage, leaflet distribution, provision of free poop scoops, and dog waste bins are also used. A number of local authorities are also working with schools to educate children about dog fouling and the health risks associated with it.

This paper has covered a range of interventions, from enforcement to awareness campaigns to social marketing experiments. The low cost interventions appear to be the most effective at changing behaviour although these would need to be consistent to maintain results. That said, enforcement, especially when combined with engagement and communication aspect which comes with a community dog warden role for example, also has a significant part to play. It is thought that a holistic approach, tailored to target specific areas, is the best approach to tackling the issue of dog fouling on our streets and parks, together with a consistent national message of 'Bag it and Bin it' or 'Bag it, Bin or take it home'. Broadly speaking, any awareness campaigns serve to reduce the instances of dog fouling although whether reduction continues on a long term basis is still to be seen.

Social marketing 'prompts' can be used to great effect and are often simple in nature and cost effective. However, it should be noted that current techniques specifically for this issue need to be robustly evaluated over a longer time frame and at a larger scale before any definitive conclusions are drawn. The issue of displacement is especially relevant for dog fouling, especially in more rural areas where there is a greater choice of areas for dogs to roam freely, and should be considered in future research.

## Recommendations

Keep Wales Tidy recommends the following for further actions to tackle the issue of dog fouling, addressing the gaps in research and main messages learnt through the course of our research.

**Further research:** More published research is necessary as current evidence of interventions, campaigns and legislation is not robust enough to recommend best practice across the board. More specifically, this should focus on long term interventions and the issue of displacement. This also extends to social marketing experiments where there is a need for more robust evaluation and monitoring before it can be recommended as a long term solution.

**More available information:** Whilst campaigns tailored to a local area can be particularly effective. There is a need for more information to be available to local authorities and other stakeholders at a more national level so that interventions can be as informed as possible. Projects such as BARC are extremely helpful in providing information and raising awareness at a national scale.

**Partnerships:** Collaboration and partnership working, both at regional and national scales are required in order to address the problem of dog fouling at scale and to reach as many people as possible. We know that people don't pick up their dog mess for different reasons and therefore it is vital that messaging and information is done in partnership with as many agencies as possible. Vets, doctor's surgeries and town and community councils are just some of the more obvious partners for future campaigns.

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