

Policy paper on balloon litter

Executive Summary.

Keep Wales Tidy has examined the issues surrounding balloon litter and has concluded that, as one of Wales' foremost environmental stakeholders, the organisation should adopt a coherent policy around the issue. It should be stated that the term "balloon releases" refers to the **intentional** act of releasing a balloon into the general environment.

The paper contends that justification for balloon releases / promotions has been largely based on a single piece of research, published by D.K. Burchette in 1989. The "research" was written by a member of the main balloon promotional organisation. It was apparently supported by vested interests in the Malaysian rubber industry. However, its most memorable conclusion, that a balloon degrades "as fast as an oak tree leaf", has been accepted in an unquestioning way, in order to justify balloon releases.

Recently, the Marine Conservation Society has led the way in terms of an NGO critique of balloon releases. It bases its policy on the harm that balloon debris can cause to marine life. Other organisations, such as some local authorities, have also concluded that balloon releases are unacceptable on environmental grounds. At least one major private organisation (Barclays Bank) has followed suit.

It is the belief of Keep Wales Tidy that further work is needed to address the issue of balloon releases. We recommend that the following actions are taken:

1. **Upholding the law.** Keep Wales Tidy should argue that the intentional releasing a balloon is a form of littering.
2. **Enforcing the law.** Keep Wales Tidy should call upon local authorities in Wales to use their statutory powers to tackle balloon releases, including the issue of Fixed Penalty Notices.
3. **Working with other stakeholders.** Keep Wales Tidy should inform the voluntary sector in Wales of the problems caused by balloon litter, and discourage organisations from conducting balloon releases.

4. **UK Legislation.** At present, the intentional release of balloons is not mentioned explicitly in the 2005 Clean Neighbourhoods and Environment Act. This situation needs to be rectified in the next raft of local environmental legislation.
5. **Wales legislation.** There are several examples of regional / state jurisdictions across the world which have banned balloon releases. Keep Wales Tidy could consider the possibility of raising a petition to prohibit balloon releases in Wales. Such a petition would be presented to the Petitions Committee of the National Assembly for Wales.

What are balloon releases?

Balloon releases have become a traditional event for groups seeking to raise funds and / or publicity. A cursory search of the internet shows that balloon releases occur at all spatial scales, ranging from the local village fete to global media events. Figure 1 illustrates how balloon releases can become the focus of attention in an outdoor community event:

Figure 1: illustration of a typical balloon release



(Photograph reproduced with permission of the Marine Conservation Society)

The strengths of balloon races are aptly summed up by the promotional material of one balloon event company:

*“A **spectacular** way to promote your business, raise funds for charity, publicise a grand opening or to start a new season or sporting event. A balloon release creates **excitement and publicity** in your local area and the spectacle of hundreds of colourful balloons rising into the sky will attract attention, generate publicity and entertain spectators of all ages” (bold in original text)ⁱ*

The following case-studies demonstrate some of the various contexts of balloon releases. Balloon releases have been organised by individuals; local authorities; private companies and the charitable sector.

- On June 22, 2007, Gerry and Kate McCann organised a global balloon release to mark the 50th day since their daughter, Madeleine, went missing in Portugal. Yellow balloons were released in fifty countries, including Afghanistan, Argentina, Australia, the Republic of Ireland, the UK and the USA. The event captured the attention of the global media, including the BBC.ⁱⁱ
- An organisation called “BalloonRelease.com” describes itself as “a wonderful celebration of unity and fellowship”. It has organised an annual, worldwide balloon (and butterfly) release day on December 3rd annually since 2004, “in celebration of and to honour and remember the lives of our children”.ⁱⁱⁱ
- In the private sector, the “Me to You” company, notable for its “Tatty Teddy” brand of grey coloured teddy bears, organised a promotional balloon race from its company headquarters in Tangmere, Sussex, on Thursday 27 September, 2007^{iv}.

Numerous examples can be found of local balloon releases in Wales. They illustrate the range of sectors that have been involved with balloon releases.:

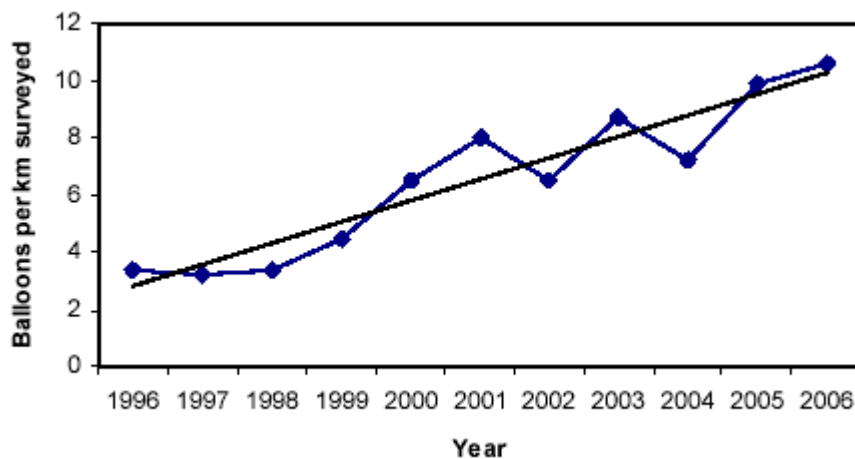
- On November 8th, 2007, the *Cynon Valley Leader* reported how 400 balloons were released by the friends of Penrhiwceiber Primary School in Rhondda Cynon Tâf^v.
- In the neighbouring Rhondda Valley, the “Valleys Kids” charity has released 200 balloons in Penygraig. The event was supported and publicised by a private sector company, Arriva Trains Wales^{vi}.

- On December 3rd 2007, staff and students at the Llanelli campus of Coleg Sir Gâr held a balloon race as a fund raising activity for the BBC Children in Need Charity^{vii}.
- In April 2007, four members from Conwy County Borough Council helped release “up to 1,000 brightly coloured balloons”, in aid of local health charities^{viii}.
- A balloon race had been planned by the Bala Lake Railway for August 9th 2008 as part of the railway’s annual calendar of events^{ix}.

The problem: litter and environmental impacts

The most detailed data on balloon litter, specific to the UK context, occurs in the annual *Beachwatch* surveys undertaken by the Marine Conservation Society (MCS). Several interesting facts are revealed in the *Beachwatch* 2006 survey.^x A total of 1,983 items of balloon litter were collected. Although balloons accounted for just 0.5% of total surveyed litter, it was nevertheless the case that 10.6 items of balloon litter were found for every KM of beach that was surveyed, compared to a density of 9.9 balloon items per KM in 2005. This ongoing increase in density since 1996 is represented in figure 4:

Figure 2: density (per KM) of balloon litter observed on *Beachwatch* surveys since 1996



(Reproduced with permission of the Marine Conservation Society)

The MCS also cite data from the US Ocean Conservancy's International Coastal Cleanup in 2004, indicating that over 63,000 balloons were collected on surveyed beaches worldwide. The MCS also make salient points about the degradation of balloons. Crucially, they highlight that 10% of balloons will not burst. Moreover, it is argued that not all balloons burst into fragments, as is continually highlighted by balloon industry literature. Some balloons return to ground in a partially inflated state, i.e. in much bigger pieces than fragments, leading to an adverse affect on (marine) wildlife (figure 3):

We know that balloons can kill as there are many cases around the world where the death of marine wildlife has been attributed to balloon ingestion (swallowing). In 1985 the Marine Mammal Stranding Centre of New Jersey recorded the death of a pygmy sperm whale that had starved after ingesting a mylar (foil) balloon. In 1987 they recorded the death of a leatherback turtle that had starved after ingesting a partially inflated latex (rubber) balloon. Other records of balloon ingestion include common dolphins in Californian waters, loggerhead turtles in Texan waters, and a green turtle that died in Florida after eating a partially inflated latex balloon. Closer to home, Risso's dolphins in French waters are known to ingest balloons, as are fulmars in the North Sea, and turtles...^{xi}

Figure 3: examples of balloon-related litter in a marine environment



(Images reproduced with permission of the Marine Conservation Society)

In April 2008, Keep Wales Tidy began monitoring incidences of balloon litter as part of the annual LEAMS surveys in every county in Wales^{xii}. At the time of writing, balloon litter had been observed in each of the counties that had been surveyed in the 2008/09 round of LEAMS surveys. In one county, balloon litter was observed on 17% of the surveyed streets.

Figure 4: balloon litter discovered on a LEAMS survey, Swansea.



(Photo: Keep Wales Tidy)

Several organisations have acknowledged the problem of balloon litter and the impact on wildlife, and have adopted policies against balloon littering. The Marine Conservation Society (MCS) has led the campaign against balloon releases for a number of years. Their “Don’t let go!” campaign is by far the most coherent campaign on this issue^{xiii}. In short, MCS opposition to balloon releases is predicated on the harm to marine wildlife:

*“Balloon litter floating at sea is deadly for many marine wildlife species. **Marine turtles** and some seabirds are particularly at risk, as they feed on prey that floats at the surface. They may mistake floating balloons for their jellyfish prey and swallow them, or become entangled and drown. Once swallowed, a balloon may block the digestive tract and eventually lead to death by starvation. Some whales, dolphins and fish are known to have died as a result of eating balloons” (bold in original text).^{xiv}*

Several local authorities appear to be developing policies aimed at discouraging or prohibiting balloon races^{xv}. In March 2008, Keep Wales Tidy approached the 22 local authorities in Wales to ask what, if any policies were in place in respect of balloon releases. Of the local authorities who responded, the most comprehensive response was received from an officer in the Vale of Glamorgan authority:

“...We do not encourage balloon releases/races and will not use them as part of our own...work. We also work with other outside organisations to discourage them and/or others using such methods or carrying out the distribution of balloons at events as promotional literature etc.”^{xvi}

- The Wildlife Trusts' opposition to balloon releases is largely based on the evidence of the MCS^{xvii}. Another organisation, “The UK Rivers Network”, adopts a similar approach, quoting the MCS material verbatim^{xviii}.
- In March 2007, Prestonpans School Infant and Nursery School in Scotland cancelled a balloon race on environmental grounds^{xix}.
- The National Farmers Union have previously campaigned against balloon releases, stating: “When the balloons land in grass fields they might be eaten by grazing livestock or contaminate hay, again with the risk of being swallowed by livestock when they eat the hay. Balloons are just another form of litter, making the countryside look untidy.”^{xx}
- Keep Scotland Beautiful *have released a policy paper opposing balloon releases*^{xxi}
- In the private sector, Barclays Bank have a detailed statement against promotional balloon releases^{xxii}.

In their policy statements, Keep Scotland Beautiful and Barclays Bank raise the question of whether balloon releases are illegal, implying that there is some legal ambiguity over the status of balloon releases.

In our view, the only logical answer to this question is that provided under Part 3 of the Clean Neighbourhoods and Environment Act 2005^{xxiii}:

“(1) A person is guilty of an offence if he throws down, drops or otherwise deposits any litter...and leaves it.

(2) This...applies to any place in the area of a principal litter authority which is open to the air...”

Given this legal context, Keep Wales Tidy could call for a complete ban on balloon releases in Wales. There are examples where sub-state levels of government have introduced legislation to prohibit balloon releases. For

example, New South Wales in Australia, and Connecticut, Florida, Tennessee and Virginia in the United States of America. One possible avenue for Keep Wales Tidy to promote such a policy might be the Petitions Committee of the National Assembly of Wales, which is obliged to consider all public petitions on policy areas within the competence of the National Assembly.

The view of the balloon industry

The National Association of Balloon Artists and Suppliers (NABAS) is an umbrella organisation speaking on behalf of the industry in the UK^{xxiv}. It may be open to conjecture whether the NABAS code of conduct on balloon releases was published for pragmatic or ethical reasons, or a combination of both^{xxv}. Nevertheless, the code of conduct does acknowledge the potential environmental risks of balloon releases. It contains eight points:

1. "Only natural rubber balloons will be used for releases" (thereby distinguishing between latex and foil-lined ("Mylar") balloons).
2. "All components used in balloon releases must be biodegradable" (including a recommendation against plastic valves inside balloons)
3. "Only helium gas should be used to inflate the balloons" (thereby aiding the explosion of the balloon into smaller fragments which decompose more easily)
4. "No ribbons or strings must be attached to the balloons"
5. "Balloons must always be launched singly" (as opposed to tied bunches)
6. Full approval must be obtained from the relevant authorities (particularly in relation to releases of over 5000 balloons, which require the clearance of air traffic control)
7. "Maximum balloon size" (including a recommendation against releasing balloons larger than 12").
8. "All balloons sold near balloon releases must be weighted" (so that the cannot escape accidentally).

Keep Wales Tidy acknowledges that the NABAS code of conduct contains some important steps towards mitigating the environmental impact of balloon releases. However, the code is entirely voluntary. There is nothing in law to enforce the provisions of the code of conduct. The credibility of the code is entirely dependent on the absolute co-operation of balloon release organisers. Figure 2 is an example of balloon litter that was discovered blowing around the grounds of Aberystwyth castle by a member of Keep Wales Tidy staff on Saturday March 22nd, 2008. Closer inspection of the balloon revealed that the balloon was a promotional item from the Matalan store in the nearby town centre of Aberystwyth (Figure 3)

Figure 2: Balloon litter at Aberystwyth castle



(Photograph: Keep Wales Tidy)

It should be stated that the Matalan Balloon was intended as an “indoor” promotion and not for outdoor use^{xxvi}. Nevertheless, the example is useful for several reasons. Not least of which is that organisers of “indoor” balloon events need to be vigilant in order to prevent the escape of balloons to the outdoor environment. More specifically, the Matalan balloon demonstrates the weakness of the NABAS code of conduct. In this example, the balloon was attached to a plastic stick thereby in contravention of points 2 (and possibly 4) of the NABAS code. The example demonstrates that the NABAS

code of conduct has not filtered through to all balloon event organisers: Matalan refused the opportunity to state whether or not they were aware of the NABAS code of conduct.

Figure 3: source of Aberystwyth balloon litter.



(Photograph: Keep Wales Tidy)

There are many balloon manufacturers and balloon event promoters across the UK, several of which are listed here^{xxvii}. Balloon promoters do seem to be aware of the environmental questions surrounding balloon releases. Balloon industry websites do tend to make either implicit or explicit reference existence of the NABAS code of conduct, which suggests that at least a degree of environmental responsibility has permeated throughout the industry, and is to be welcomed. However, balloon promoters appear to accept uncritically that the NABAS code of conduct justifies the principle of balloon releases. There appears to be very little discussion in the balloon industry of alternative balloon activities, such as indoor balloon-popping. Crucially, there is no acknowledgement that the intentional act of releasing a balloon could be classified as littering.

A critique of D.K. Bourchette (1989)

A common theme of the “balloon lobby” is that latex balloons present little impact to the environment. A common quotation in the “balloon lobby” literature is that a latex balloon will degrade “as quick as an oak leaf” (or, approximately six months), as if this were an unquestionable fact. The “oak leaf” comparison stems from a research paper on balloon releases written in

1989 by D.K. Bourchette^{xxviii}, who studies the degradation of oak leaves and balloons over a period of six weeks.

“Based on the results through the first six weeks of aging the following conclusion[s] can be made:..

...Latex rubber balloons degrade about as fast as oak tree leaves under a wide range of exposure conditions in the environment including sunlight, weathering, soil and water exposures.”

The “oak leaf” comparison has been accepted uncritically by the balloon industry. Perhaps the most blatant example occurs in the promotional literature of BOC industrial. They make the following, completely unreferenced assertion that all of their balloons:

“...degrade typically at the same rate as an oak- tree leaf and therefore do not impact on the environment.”^{xxix}

A recent position and policy statement by Keep Scotland Beautiful has challenged the relevance of the “oak leaf” comparison:

“A study on balloon persistence in the environment indicated that latex balloons degrade “faster than an oak leaf...However, an oak leaf in a cold water environment may take six months to break down.”^{xxx}

Clearly, we welcome Keep Scotland Beautiful's recent intervention on this matter. We would also state that there is a case for challenging the credibility of D.K. Bourchette's (1989) paper in more general terms. We would contend that two vested interests serve to undermine the credibility of Burchette's 1989 paper from the outset. The first point to make is that Burchette was writing as “Technical Advisor” of the “Environmental Committee” of NABAS – the representative body of the balloon industry^{xxxi}. A second point stems from a footnote of the on-line version of Burchette's paper. The research, which argued strongly in favour of latex (over Mylar) balloons, was “originally published by the Latex Rubber Institute of Malaysia” (Malaysia being the world's largest exporter of rubber).

At the very least, there is a *prima facie* case for arguing that Burchette's research is *in hoc* to vested interests, and that further research on balloon dispersal and degradation is required. We would contend that there is a case for a fresh, independent study into the physical properties of balloons. Furthermore, as Keep Scotland Beautiful suggest, it might be worth examining the degradation cycle of an “oak leaf” under different climatic stimuli. The

“oak leaf” has become an entrenched and unquestioned part of balloon industry parlance, and surely requires further investigation. Presumably, a fresh independent study would be able to monitor the degradation of balloons and oak leaves over a substantially longer period, than the six week trials conducted in Burchette's study.

Recommendations

This policy paper has demonstrated that there are a number of facets to the debate on balloon releases. It has been observed that 1,983 instances of balloon litter were observed in the 2006 MCS *Beachwatch* survey. Qualitative data has demonstrated the impact of balloon litter on the welfare of (marine) wildlife). Furthermore, early indications from Keep Wales Tidy's balloon monitoring suggest that instances of balloon littering are occurring across Wales.

The balloon industry has relied for too long on the findings of a single piece of research (Burchette, 1989). The paper was essentially conducted by a member of the balloon industry on their behalf. However, the industry has been allowed to cite selectively from the paper, to the extent that the metaphor of the “oak tree leaf” comparison has become established as an undisputable fact. On the other hand, it is probably not healthy for opponents of balloon releases to rely exclusively on the data of a single NGO (MCS) which covers only coastal areas. For this reason, this policy paper calls for a fresh, independent study of balloon degradation under different environmental stimuli. Moreover, this paper calls for Keep Wales Tidy database on balloon litter to be established, so that staff can report all instances of balloon litter during the course of their work. Other interested organisations might also contribute to this initiative.

1. Keep Wales Tidy believes that the act of intentionally releasing a balloon into the open environment is a contravention of the Clean Neighbourhoods and Environment Act 2005.
2. Keep Wales Tidy urges local authorities in Wales to use their statutory powers, granted by the Clean Neighbourhoods and Environment Act 2005, in the context of balloon releases, including the issue of Fixed Penalty Notices for releasing balloons. Keep Wales Tidy also calls on

local authorities in Wales to ban balloon releases from events / land over which they have jurisdiction.

3. Keep Wales Tidy notes that balloon releases are a popular method of raising awareness and fund-raising for voluntary organisations. As a short-term measure, and working in partnership with the WCVA, Keep Wales Tidy should remind the voluntary sector in Wales about the illegality of balloon releases, and of the environmental problems caused by balloon litter. Keep Wales Tidy should discourage organisations from conducting balloon releases.
4. At present, the intentional release of balloons is not mentioned explicitly in the 2005 Clean Neighbourhoods and Environment Act. This situation needs to be rectified in the next raft of appropriate environmental legislation.
5. Keep Wales Tidy notes that individual states in Australia and the United States of America have already prohibited balloon releases in their territories. Depending on the outcomes of recommendations 1-4 (above), Keep Wales Tidy will consider the possibility of raising a petition to prohibit balloon releases in Wales. Such a petition would be presented to the Petitions Committee of the National Assembly for Wales.

ⁱ “Balloon race”, www.balloonlady.co.uk (accessed 05/03/08).

ⁱⁱ “Balloons released for Madeleine”, <http://news.bbc.co.uk/1/hi/uk/6230664.stm> (accessed 05/03/08).

ⁱⁱⁱ “Upcoming Events / Balloon Releases”, www.balloonrelease.com (accessed 05/03/08).

^{iv} “Balloon Race Winner”, www.metoyou.co.uk (accessed 05/03/08).

^v “Pupils’ grand balloon race”, <http://icwales.icnetwork.co.uk/news.south-wales-news/cynon-valley/2007/11/08/pupils-grand-balloon-race-91466-20069109/> (accessed 05/03/08).

^{vi} “Up, up and away at Valleys Kids”, www.arrivatrainswales.co.uk/Valleys_Kids.aspx (accessed 05/03/08).

^{vii} “Coleg Sir Gar raised nearly £3000 for Children in Need this year”, www.fforwm.ac.uk/index/news/4231.html (accessed 05/03/08).

^{viii} “Sky’s the limit for charity balloon race”, www.conwy.gov.uk/doc.asp?cat=5184&doc=19916 (accessed 05/03/08).

^{ix} “Balloon Race and Car Boot”, www.bala-lake-railway.co.uk/balloon.html (accessed 05/03/08).

^x Marine Conservation Society (2006) *Beachwatch 2006: The Annual MCS UK Beach Litter Survey Report* (Ross-on-Wye: Marine Conservation Society).

^{xi} *ibid.*

^{xii} LEAMS is the acronym for “Local Environment Audit Management System”. See Welsh Assembly Government “Code of Practise on Litter and Refuse and Associated Guidance 2007” .

^{xiii} The Marine Conservation Society has several web pages dedicated to its “Don’t Let Go!” campaign. The Society’s main homepage is www.mcsuk.org (accessed 05/03/08). MCS campaign material is comprehensive, and includes a campaign pack; balloon fact pack; leaflet; poster; factsheet; postcard and feedback postcard. The

MCS website includes an on-line “Cancelled Balloon Release Form”, which organisations may declare a change of arrangements in preference to a balloon release. MCS policy has influenced other organisations.

^{xiv} *ibid.*

^{xv} Birmingham City Council: “Balloon releasing in Birmingham” (Summary of research, November 2006); Oxford City Council: “Report of Head of Legal and Democratic Services to Environment Scrutiny Committee: Mass balloon Releases Briefing Note”, 12 November, 2007; Tonbridge and Malling Borough Council Local Environmental Management Advisory Board meeting, 21 January 2008.

^{xvi} Correspondence from Vale of Glamorgan County Council to Keep Wales Tidy, 25/03/08.

^{xvii} “Don’t Let Go! – the dangers of balloon releases” (November 9, 2006), www.wildlifetrusts.org (accessed 05/03/08).

^{xviii} “Balloon Releases: pollution factsheet” www.ukrivers.net/balloon_fact.html

^{xix} “Eco-school cancels balloon race”, http://news.bbc.co.uk/1/hi/scotland/edinburgh_and_east/6445241.htm (accessed 05/03/08).

^{xx} [http://64.233.183.104/search?q=cache:7Zl-](http://64.233.183.104/search?q=cache:7Zl-LiMpLHsJ:www5.tbmc.gov.uk/akstonbridge/images/att5767.doc+nfu+balloons&hl=en&ct=clnk&cd=5&gl=uk)

[LiMpLHsJ:www5.tbmc.gov.uk/akstonbridge/images/att5767.doc+nfu+balloons&hl=en&ct=clnk&cd=5&gl=uk](http://64.233.183.104/search?q=cache:7Zl-LiMpLHsJ:www5.tbmc.gov.uk/akstonbridge/images/att5767.doc+nfu+balloons&hl=en&ct=clnk&cd=5&gl=uk) (accessed 14/05/08).

^{xxi} “Keep Scotland Beautiful Policy and Position Statement” www.keepsotlandbeautiful.org (accessed 05/03/08).

^{xxii} “Balloon Races / Releases – fact sheet and policy statement”

http://www.personal.barclays.co.uk/BRC1/jsp/brcucontrol?task=file&site=pfs&fileName=/PFS/A/Content/Files/Balloon_Releases.pdf.pdf (accessed 05/03/08).

^{xxiii} Clean Neighbourhoods and Environment Act, 2005.

http://www.opsi.gov.uk/acts/acts2005/ukpga_20050016_en_4#pt3-pb1

^{xxiv} www.nabas.co.uk

^{xxv} “Guidelines and Code of Conduct for Balloon Releases”, www.nabas.co.uk/balloon.html (accessed 05/03/08).

^{xxvi} Correspondence from Matalan to Keep Wales Tidy, 16/05/08

^{xxvii} For example: www.balloon.co.uk; <http://tri-balloons.co.uk/environment.htm> www.balloonlady.co.uk;

^{xxviii} D.K. Burchette (1989) *A Study of the Effect of Balloon Releases on the Environment*.

^{xxix} www.bocindustrial.co.uk (accessed 05/03/08).

^{xxx} “Keep Scotland Beautiful Policy and Position Statement”, *ibid.*

^{xxxi} D.K. Burchette, *ibid.*