Position Statement Balloon and Chinese Lanterns



Executive summary

Keep Northern Ireland Beautiful has considered the evidence provided in support of both arguments and supports the position adopted by the TIDY group throughout Britain that large-scale balloon and Chinese lantern releases have a detrimental effect upon the environment.



A release for the purposes of

this statement refers to the **intentional** act of releasing any balloon or balloons, Chinese lantern or Chinese lanterns into the general environment.

It is the view of Keep Northern Ireland Beautiful that justification for large-scale balloon releases has been largely based on a single piece of research, published by D.K. Burchette in 1989, that may not be wholly impartial, having had it's relevance to real-world situations questioned. Recently, the Marine Conservation Society among others has led the way in terms of an NGO critique of balloon releases. It bases the policy on the harm that balloon debris can cause to marine life. Other organisations such as the RSPCA, some local authorities in Great Britain, the United States, Australia, and Europe have also concluded that balloon releases are unacceptable on environmental grounds.

Notwithstanding the possible consequences of terrestrial or marine animals ingesting balloon fragments, once the balloon returns to earth it will become litter, either on land where it contributes to the pollution of the local environment, or to the store of marine litter that potentially washes up on our beaches. The 2009 MCS Beachwatch Survey found that there was an average of 8.1 balloons per kilometre of the UK coastline.

The argument for balloon releases

Balloon releases are an effective and emotive method of providing publicity for a range of causes, and are widely used in promotion of events. Arguments supporting such releases come from a paper published by D.K. Burchette in 1989¹. This reported that natural latex balloons (the type supported by the Balloon Association NABAS for such releases) would break down within a 6 month timeframe under conditions present in the natural environment. This is the basis for the often repeated statement that balloons "break down as fast as an oak leaf"

The National Association of Balloon Artists and Suppliers (NABAS) is an umbrella organisation speaking on behalf of the industry in the UK. Its 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)
- "Maximum balloon size" (including a recommendation against releasing balloons larger than 12").
- 8. "All balloons sold near balloon releases must be weighted" (so that they cannot escape accidentally).

Keep Northern Ireland Beautiful 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, and evidence from litter recorded in surveys carried out by the TIDY Network partners and the Marine Conservation Society (MCS) indicate that in many cases these guidelines are not followed.

Arguments Against

A detailed investigation of balloon litter across the UK occurs in the annual *Beachwatch* surveys undertaken by the MCS. Several interesting facts are revealed in the *Beachwatch* 2009² survey. A total of 1,504 items of balloon litter were collected from 183 km of beaches across the UK. Although balloons accounted for just 0.4% of total surveyed litter, that equates to 8.1 items of balloon litter found for every km of beach that was surveyed. This represents a fall from the high of 10.1 pieces per km in 2007, but is still more than double the number found during the first survey in 1996.

The MCS also 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, potentially leading to an adverse effect on wildlife:

"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..."

A study carried out by A.L. Andrady in 2000³ found that "Promotional releases of balloons that descend into the sea pose a serious ingestion and/or entanglement hazard to marine animals." This study found that plastic and latex falling into the sea breaks down much slower than it does under warmer, air-exposed conditions, often maintaining some element of elasticity after ten months controlled exposure. These are the conditions used by D.K. Burchette, 1989 to simulate normal conditions for

weathering of balloons. Andrady carried out further work in this area, leading to the conclusion:

"In general, the various materials tested tended to weather at a slower rate when exposed in sea water compared to that in air"

In addition, the impartiality of the study by D.K. Burchette has been questioned. Burchette was writing as "Technical Advisor" to the Environmental Committee of NABAS – the representative body of the balloon industry. A second point is that 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).

Chinese Lanterns

Chinese lanterns, sometimes known as "sky lanterns", have been supported as a more acceptable alternative to balloon releases but these present environmental issues as well as possible health risks to farm animals. The most common form of lantern consists of a wire-framed paper balloon heated by a combustible material held in a pan below the balloon. There have been a number of reports of farm animals ingesting the wire frame and suffering severe distress, and unconfirmed reports of fires started by lanterns which have spilt their fuel.

The National Farmers' Union has highlighted a number of cases where livestock have been directly or indirectly injured by Chinese lanterns (British Farmer and Grower, July 2010).

The Maritime and Coastguard Agency has raised concerns that the lanterns may be mistaken for distress flares if used in coastal areas, and the Civil Aviation Authority has grouped lanterns with fireworks and included them in its safety guidance notes because of the risk of airborne lanterns hitting planes or distracting pilots (CAP 736 Guide for the Operation of Lasers, Searchlights and Fireworks in United Kingdom Airspace (Including Helium-Filled Toy Balloon Display Guidelines)

The issue has also been raised in the House of Lords, during a debate tabled by Baroness Fookes on 4th February 2010. They did not call for a ban on their use, but highlighted that both Germany and Australia have banned their use, and that guidelines in the UK state that they should not be used within five miles of the coast⁴.

Recommendations

Keep Northern Ireland Beautiful recognises that the arguments for and against balloon and lantern releases rests upon a small body of evidence. We caution that this provides a significant margin for uncertainty, and support the call from other organisations that more research be conducted into the issue.

It is Keep Northern Ireland Beautiful's position that the release of balloons and lanterns is detrimental to the environment, and that it should be regarded as littering and treated as such by local authorities.

Current legislation does not specifically state examples, but the definition of litter is where "any refuse, filth, garbage or any other nauseous, offensive or unsightly waste, or any waste which is likely to become nauseous, offensive or unsightly. Keep Northern Ireland Beautiful is not aware of this being tested in court in Northern Ireland. However, a Fixed Penalty Notice was served in 2008 by Newcastle Council for intentionally releasing a balloon and allowing it to become litter. In this instance a 16-year old male released the balloon during a charity event and was given a £50 Fixed Penalty Notice. Keep Northern Ireland Beautiful is mindful of the possible negative media such a position may attract, but enforcement actions should not be withheld simply because of circumstance or because the act of littering 'looks nice'.

We make the following recommendations:

- 1. That private, public and voluntary sector organisations in Northern Ireland refrain from the use of balloon or lantern releases as a promotional/publicity tool as a matter of policy.
- 2. That Local Authorities be lobbied to ban large-scale balloon and lantern releases within their jurisdiction.

3. That local authorities use their statutory powers, including fixed penalty notices or other punitive measures to prevent the intentional littering associated with such releases.

References

- 1. D.K. Burchette, 1989. Report to the Environmental Committee, NABAS. ""A study of the effects of balloon releases on the environment"
- 2. Beachwatch 2009. Marine Conservation Society Beachwatch Big Weekend 2009 Report. http://www.mcsuk.org. Accessed 13/10/2011
- 3. Andrady, A.L. 2000. Plastics and their impacts in the marine environment. *Proc. International Marine Debris Conference on Derelict Fishing Gear and the Ocean Environment*. August 6–11, 2000 Hawai'i Convention Center Honolulu, Hawaii.
- 4. Hansard Publication of debate in UK House of Lords, Feb 2010 : Column 297 <u>http://www.publications.parliament.uk/pa/ld200910/ldhansrd/text/100204-0002.htm</u>. Accessed 01/02/2011