



KIMO RESOLUTION 1/15

Presented by KIMO International Secretariat

Mass Balloon Releases

Millions of helium-filled latex balloons are intentionally released into the atmosphere each year. Whilst balloon releases play an important role in business and promotional events the debris from balloons poses a serious ingestion and entanglement hazard to marine animals and birds. Fragments from balloons also contribute to the accumulation of litter in the marine environment, one of the fastest growing threats for the world's oceans health. The issue has been highlighted by the United Nations Environment Program and was included in the 11 Descriptors set by Europe's Marine Strategy Framework Directive (MSFD) (2008/56/EC)¹. The MSFD requires each Descriptor in all European marine waters not to deviate from the undisturbed state and reach Good Environmental Status (GES) by 2020.

The increasing contribution to marine litter of balloon debris is seen right across Europe. In Sweden a study of data from the OSPAR pilot project on Marine Beach Litter Monitoring shows a significant increase in marine litter consisting of latex balloons². Statistics from the OSPAR Beach Litter Monitoring data in the Netherlands (2002-2012) show a highly significant increase in the amount of balloon debris. The amount of balloon debris found on Dutch beaches was between 3% and 5%, putting it in the top 10 most frequently counted items³. A study in the UK of the Marine Conservation Society (MCS) Beachwatch litter surveys has shown the number of balloons and balloon pieces found on beaches has tripled in the last 15 years. In the 2013 Marine Conservation Society Beachwatch surveys the average density was 12.2 items/km, with a total of 1,176 pieces of balloon litter recorded. This is the highest average balloon litter density level recorded since the surveys began in 1993⁴.

Studies show that when latex balloons are released they rise to an altitude of five miles where the vast majority (around 95%) will rupture. Although partially

shredded, most of these remain intact. The remaining 5% may float many miles before descending intact, wholly or partially deflated⁵. In 2007 balloons were released in the Netherlands to celebrate Queensday. Many of these (more than 10 balloons per kilometre coastline) were recovered from Normandy, over 800km away. The largest ever balloon release was 1.4 million in the USA. Of those, it has been reported that as many as 140 000 could have descended intact, to the land or sea.

Latex balloons are often cited as biodegradable. However, in spite of its natural origin, latex does not degrade sufficiently quickly to avoid ingestion by marine wildlife and potential damage to their digestive system⁶. Balloons submerged in saltwater have been shown to remain intact for more than a year⁵. Ingestion of balloon debris poses both a physical and a chemical hazard to marine animals and causes significant harm. Marine animals, notably turtles, dolphins and whales mistake balloons floating in water for prey and swallow them which can block digestive tracts, causing the animal to slowly starve. Similarly, fragments of balloon debris will gather in the gut so that material ingested over many months binds together to gradually create a dangerous blockage which may release harmful chemical toxins⁷. Attachments such as strings and ribbons take even longer to decompose and can cause entanglement. The Marine Conservation Society's Beachwatch survey in 2005 found that balloons and their ribbons and strings accounted for 4% of entanglements of marine creatures recorded over a single weekend⁸.

It is difficult to assess the true rate of entanglement and ingestion caused to marine animals by balloon litter. We do know, however, that more than 265 species of birds, fish, mammals and marine turtles, including endangered and threatened species, have ingested or become entangled in marine debris⁹. This represents an unknown proportion of all entanglements and ingestion that occur and presents a conservative estimate of the actual scale of the problem.

It is important to note there are many sustainable alternatives to balloon releases that provide the economic and social benefits without harming the environment and these have been widely documented.

KIMO

Recognising the need to protect marine wildlife from the increasing burden of marine litter caused by balloon debris:

Urges the European Commission and Member States to recognise balloon releases as a form of littering and implement legislation to reduce the number of balloons released into the environment by introducing national bans on all outdoor releases of balloons.

KIMO members:

Agree to submit this resolution to all National Governments, the European Commission and other relevant organisations.

¹ Galgani F, Hanke G, Werner S, De Vrees L (2013) Marine litter within the European Marine Strategy Framework Directive. ICES J. Mar. Sci 70: 1055–1064. doi: 10.1093/icesjms/fst122

² Svärd, B. 2013. Analys av data från OSPAR:s referensstränder åren 2001-2011. Ren Kust Bohuslän http://www.renkust.se/wp-content/uploads/2013/12/Rapport-referensstrander_56sid.pdf

³ Dagevos, J.J. *et al.* 2013. OSPAR Beach Litter Monitoring in the Netherlands. First Annual Report 2002-2012. Update 2012. Report BLM.afv-2310. 2012. North Sea Foundation, Utrecht

⁴ Marine Conservation Society. 2014. The intentional outdoor release of balloons and Chinese/sky lanterns. Pollution Policy and Position Statement http://www.mcsuk.org/downloads/pollution/beachwatch/MCS_balloons_and_chinese_lanterns_policy.pdf (accessed 15 July 2015)

⁵ Foley, A.M. 1990. A preliminary investigation on some specific aspects of latex balloon degradation. Published on <http://balloonsblow.org/wp-content/uploads/2011/04/1990-Balloon-Study1.pdf> (accessed 15 July 2015)

⁶ Van Franeker, J.A. 2015. Five small facts about balloon litter. <http://www.wageningenur.nl/en/Expertise-Services/Research-Institutes/imares/Dossiers/5-Small-facts-about-balloon-debris.htm> (accessed 15 July 2015)

⁷ Andrady, A.L. 2000. Plastics and their impacts in the marine environment. Proceedings of the International marine Debris *Conference on Derelict Fishing Gear and the Ocean Environment*

⁸ Keep Scotland Beautiful. Balloon and flying lantern statement. <http://www.keepsotlandbeautiful.org/balloonsandlanterns> (accessed 15 July 2015)

⁹ Laist, D.W. 1997. Impacts of Marine Debris: Entanglement of marine life in marine debris including a comprehensive list of species with entanglement and ingestion records. In Coe, J. And Rogers, D.B. (eds) *Marine Debris: Sources, Impacts and Solutions*. Springer Series on Environmental Management