

# BALLOON DEBRIS: A RISING CONCERN IN THE MID-ATLANTIC

## Why Focus on Balloons?

Balloon marine debris is of immediate concern to the Atlantic Coast because of its potentially severe impact on marine life. More than 270 experts in marine debris, averaging 12 years of experience in their field, were asked by the Ocean Conservancy to rank the severity of impacts of marine debris on seabirds, sea turtles and marine mammals. Balloons were ranked in the number three spot due to the likelihood of entanglement or ingestion by marine life.

Balloons are unique among all the man-made litter and debris found in the ocean and on the land because helium-filled balloons (and their attachments including plastic valves, disks and ribbons) are a form of litter that people actually purchase with the intent to release them into the environment. Some people make the connection that when balloons go up they come back to Earth as potentially harmful litter. However, too many participate in balloon releases without making this connection.



During the taping of a new video on balloon debris, researchers Christina Trapani and Kathy O'Hara share some of the many balloons they have documented and collected on Virginia beaches.



Bags of balloons found in one day on a Virginia beach.



Christina Trapani



Christina Trapani

## Balloon Debris by the Numbers

In 2016-2017, volunteers participating in the International Coastal Cleanup (ICC) found and reported more than 14,700 littered balloons in Mid-Atlantic states - New York, New Jersey, Delaware, Maryland and Virginia. Of these, 7,383 balloons were found in New York. New Jersey volunteers reported 2,832 balloon litter items, and Virginia volunteers found 2,414 balloons.

ICC data in one mid-Atlantic state—Virginia—reveals that most of the balloon litter is found on its beaches, demonstrating that balloon litter accumulates in coastal environments. During a recent 5-year (2013-2017)

monitoring project on remote islands of Virginia, up to 272 balloons were recorded per mile of beach. The study, which documented a total of 11,441 balloons and balloon-related pieces of litter (e.g., plastic ribbons), also found that balloon litter was the top marine debris item on the beaches that were surveyed. Plastic beverage bottles were in second place.

## Impacts of Balloon Debris

Released balloons can drift hundreds of miles and out over our oceans. Latex balloons burst in the atmosphere (photo top right), so that when they fall into the water they resemble jelly fish, a favorite food of sea turtles like the Kemp's ridley shown above with plastic ribbon attached to a balloon protruding from its mouth. Birds are also easily entangled in the balloons and their ribbons. Most of the osprey chick's nest at right is filled with balloons and ribbons. Foil balloons that become entangled in power lines can cause wide-spread power outages.



Florida Fish and Wildlife



Christina Trapani



Ben Wurzel/Conserve Wildlife Foundation of NJ



Clean Virginia Waterways

## What is Marine Debris?

Our oceans are filled with items that do not belong there, making marine debris one of the most widespread pollution problems facing the world's ocean and waterways. According to NOAA's Marine Debris Program, marine debris is defined as any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes. Marine debris is a global problem, and it is an everyday problem.

# BALLOON DEBRIS: A RISING CONCERN IN THE MID-ATLANTIC

## Why Focus on Joyful Events?

All balloon releases become litter, yet many planning balloon releases to celebrate or memorialize life events do not think about it as littering. When people are grieving is not an appropriate time to approach them about their decisions on how to commemorate their loss. The Joyful Send-off campaign, informed by extensive research and piloted in Virginia, uses Community-Based Social Marketing to change balloon release behavior during celebratory events. The campaign "sells" memorable, joyful, picture-perfect and litter-free celebrations.



## Expanding the Campaign



Prior to expansion, the Mid-Atlantic Regional Council on the Ocean (MARCO), which includes Virginia, New York, New Jersey, Delaware, and Maryland, began working with the founder of Community-Based Social Marketing, Doug McKenzie-Mohr, to evaluate the Joyful Send-off campaign pilot strategy and outcomes to date. The partners are also working with a marketing firm to conduct additional research and testing to confirm that the Joyful Send-off campaign

strategy will be effective in reducing balloon releases and debris in the Mid-Atlantic region.

The Mid-Atlantic expansion is being funded by a grant from NOAA's Marine Debris Program to MARCO. The Mid-Atlantic partners plan to implement a campaign they hope will be scalable beyond the target communities and transferable to other regions of the United States.

Since balloons can travel great distances, measuring success presents challenges. Project partners will measure current balloon litter on beaches and monitor this litter during the implementation of the regional campaign (until 2021). All the states will use a Balloon Debris Monitoring Protocol developed by Virginia.

## Why Balloon Releases Occur

A lack of knowledge—many people do not understand that no balloon is "environmentally friendly if released," and that every released balloon becomes litter and can be harmful.

Some who are aware that balloons often become litter and that balloons have a harmful impact justify or rationalize their actions.

People assume "biodegradable" means "harmless."

Balloon release events are primarily planned by associations, families and schools, with women planning about 85% of releases.

Balloons are released mainly at parks, school grounds, churches and wedding venues.

Some rural residents think their distance from the ocean makes balloon releases acceptable.

Spring has the highest number of balloon releases, followed by the fall.

The majority of balloon releases are at "sad" events (e.g., funerals, memorials), are organized to raise awareness, or are at "happy events" (e.g., weddings, graduations).

The sight of balloons rising into the sky stirs strong emotions.

## Campaign partners also heard:

Although balloon releases illicit strong emotional responses, if balloon releases are not done as part of a ceremony, participants find a release less meaningful—indicating that the ceremony may be the more important part of the balloon release for those participating.

Electrical outages caused by foil balloons coming in contact with power lines is a concern to many.

## FOR MORE INFORMATION

Kaitly Goldsmith, Mid-A Campaign Project Coordinator:  
kgoldsmith@midatlanticocean.org

Laura McKay, Marine Debris Work Group Leader  
laura.mckay@deq.virginia.gov

## State Project Contacts:

NY: Sherryll Jones, sherryll.jones@dec.ny.gov

NJ: Kevin Hassell, kevin.hassell@dep.nj.gov

DE: Nicole Rodi, nicole.rodi@state.de.us

MD: Kim Hernandez, kimberly.hernandez@maryland.gov

Donna Marrow, donna.marrow@maryland.gov

VA: Virginia Witmer, virginia.witmer@deq.virginia.gov

Katie Register, registerkm@longwood.edu

[www.JoyfulSendoff.org](http://www.JoyfulSendoff.org)



This campaign is supported by a grant from the NOAA Marine Debris Program to MARCO, with matching support from the Mid-Atlantic states. Funding for the Virginia research and pilot was supported by a previous grant from the NOAA Marine Debris Program, and several grants from the NOAA Office of Coastal Management to the Virginia CZM Program at the Virginia Department of Environmental Quality, with support from partners, including Clean Virginia Waterways, OpinionWorks, Virginia Aquarium and volunteers.

September 2018