

Marine Litter - outreach Lead: PAME Secretariat

The development of communication and outrerach material for PAME's work on marine litter in the Arctic is facilitated via the PAME Secretariat. This effort is an important aspect of PAME's Regional Action Plan on Marine Litter. Recently, two main components have been carried out, the Litter in a Bottle initiative and the <u>Marine Litter Library</u>.

Plastic in a bottle

PAME launched the first bottle equipped with a GPS transmitter into the Atlantic Ocean on 12 September 2019. Called "plastic in a bottle", the capsule simulated how marine litter and plastics travel far distances into and out of Arctic waters. The collected data will feed into PAME's Regional Action Plan on Marine Litter and serve as an outreach tool to create awareness around the growing concerns on marine litter in the Arctic.

The bottles were designed and built by Icelandic engineering firm Verkís. Every day, the GPS transmitter sends a signal allowing viewers to follow the journey of the bottle in real time through an online map on the PAME website. <complex-block>

The capsule travelled around 7.000 kilometers in 207 days before washing on shore in the Isle of Tiree, Scotland on 6 April 2020. The capsule was tracked on a live map for the whole journey.

This bottle was sent off the Reykjanes peninsula by Guðmundur Ingi Guðbrandsson, Iceland's Minister for the Environment and Natural Resources from the Icelandic Coast Guard vessel Thor in



conjunction with the PAME II-2019 Working Group meeting in Reykjavík on 12 September 2019.

It was retrieved by Hayley Douglas on April 6th 2020 (pictured).

The map showed how the capsule travelled from Iceland, up to Greenland where it circulated for a while, going further south towards Newfoundland, before heading east. It looked like it would reach the shore on South Uist in Scotland, but went on and washed up – notably without its yellow foam coat which was for protection – in Tiree.

PAME will be releasing more capsules, the next one will be in conjunction with a project by the Netherlands. That project is scheduled for 2020.

The marine litter library

<u>The library</u> is a collection of submissions on marine litter literature of relevance to the Arctic based on a dedicated submission form sent out to Arctic Council members and experts in Fall 2017. This was in support of the development of the Desktop Study on Marine Litter, including Microplastics in the Arctic (May 2019).

The library contains over 250 documents in seven categories:

- Crosscutting Studies
- Distribution of Marine Litter
- Marine Litter Sources
- Marine Litter Responses
- Impact of Marine litter
- Transport of Marine Litter