

Subproject: First survey on marine litter in West Greenland

Actual field dates: 30. May – 15. October 2016

Field site: Nuuk, Sisimiut, Qaqortoq, Disko, Young Sound, VRS, Taasilaq

Number of man-days in the field: 43

Summary:

Beach litter surveys have been performed on reference coast lines in seven areas in West and east Greenland. In each area has surveys been performed on 2-3 reference beaches on 100 m lengths except at Villum research station, where only one beach has been surveyed. The west Greenlandic sites have been visited twice during both summer and fall. Preliminary analyses of the results from the first surveys shows that significantly more litter items are on beaches in West Greenland (median: 322, range: 82 – 934 items per 100 m) compared with East Greenland (median: 3, range: 0 – 272 items per 100 m) and plastic items is the dominant material category of marine litter.

Collection of environmental samples for microplastic analyses have been performed only at West Greenlandic sites. In addition fulmars have been collected in West Greenland for studies on stomach content for ingested plastic pieces.

Photos:

Figure 1: Credit: Jakob Strand

Caption: Study areas for marine litter in Greenland 2016

Photo 2: Credit: David Boertmann

Caption: Marine litter found at remote 100 m coastline in Henryland in East Greenland 2016 that was dominated by pieces of robes and nets from fishing activities at sea.

Photo 3: Credit: Jakob Strand

Caption: Beach litter survey at an island in outer part of Nuuk fjord – together with students joining the course Arctic Marine Ecosystems at Greenland Institute of Natural Resources 2016.



Figure 1



Photo 2

Participants:

AU: Jakob Strand, Lis Bach, David Boertmann, Jørgen Skaftø, Anna Maria Plejdrup, Bjarne Jensen, Egon Randa Frandsen, David Boertmann

UoM:

GINR: Thomas Juul-Pedersen

Other: Local contact network at Disko, Sisimiut and Qaqortoq

Acknowledgements:

Ministry of Environment and Food, Danish Environmental Protection Agency supporting the DANCEA project First Systematic Surveys in Greenland (SUMAG)
Arctic Center (ARC) at Aarhus for co-funding logistic support.



Photo 3