

3.2 Pollution

3.2.2 Anthropogenic matter

Text by T. Prokhorova

Figures by P. Krivosheya

Floating anthropogenic matter was observed only on the Russian research vessel «Vilnyus» during the survey. Anthropogenic matter, taken by pelagic and bottom trawls, were registered at all stations by both Russian and Norwegian vessels.

As in the previous years, visual observations showed that the surface is most polluted in areas of intensive fishery and navigation.

Plastic litter were dominated among natant garbage, as usual. (Figure 3.2.2.1). Floating garbage was distributed mostly along the main ocean currents. Floating garbage was mostly distributed along the main ocean currents. So, it might be entered the Barents Sea by ocean currents and winds or dumped directly in the sea from ships. Floating timbers were observed in the south part of the Barents Sea and compared to the previous year were absent in the central part of the Sea in 2014. Metal and paper were observed among floating garbage singly. Oil spot 300 m in diameter was found at the surface north of the Kolguev Island.

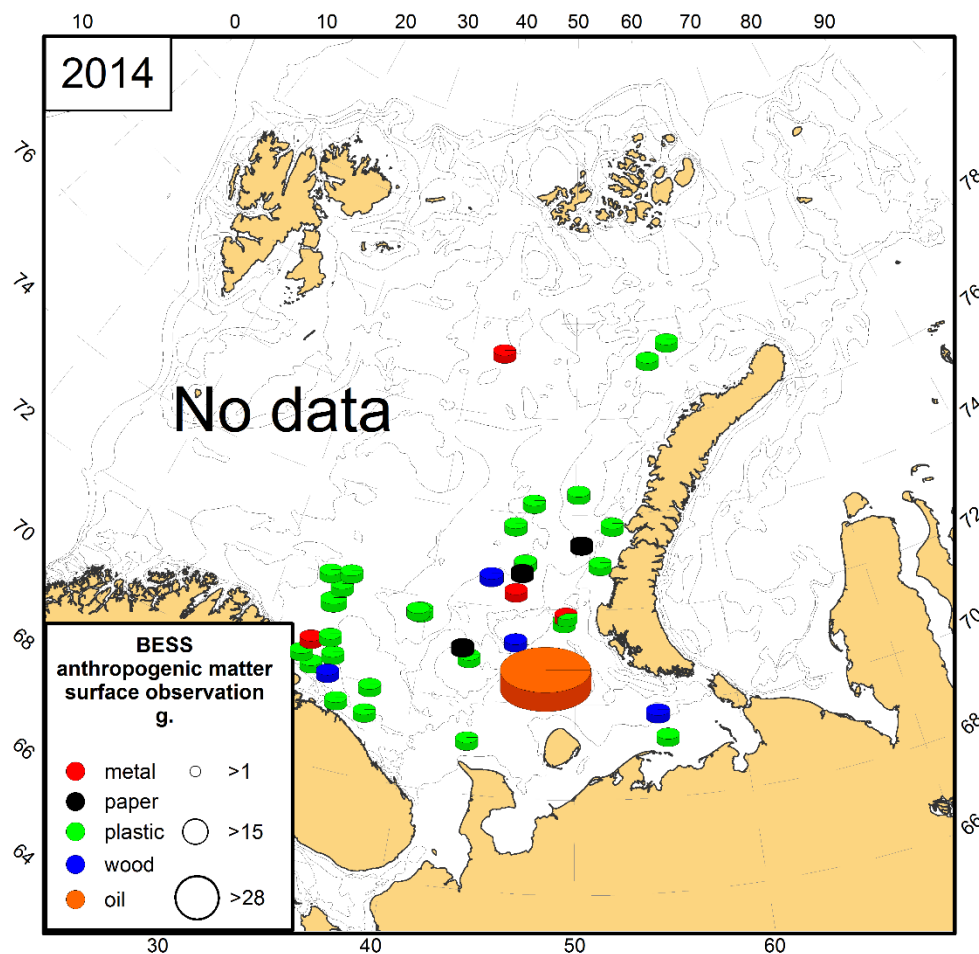


Figure 3.2.2.1 Type of observed anthropogenic matter (m^3) at the surface in the Barents Sea in 2014

Plastic litter was also dominated among man-made garbage in trawl catches, as in previous years (2010-2013) (Figure 3.2.2.2, 3.2.2.3). The number of pelagic stations, where pollutants were registered, increased in the western part of the Barents Sea and decreased along the Murman coast comparing with the previous years (Figure 3.2.2.2). It should be noted that catchability rate for polymer materials of low density is very low for pelagic trawl is low, and therefore amount of the anthropogenic garbage in the Barents Sea may be larger than that observed during the survey. Metal garbage was observed only at one station and textiles at two stations. Metal garbage was observed only at one station and textiles at two stations.

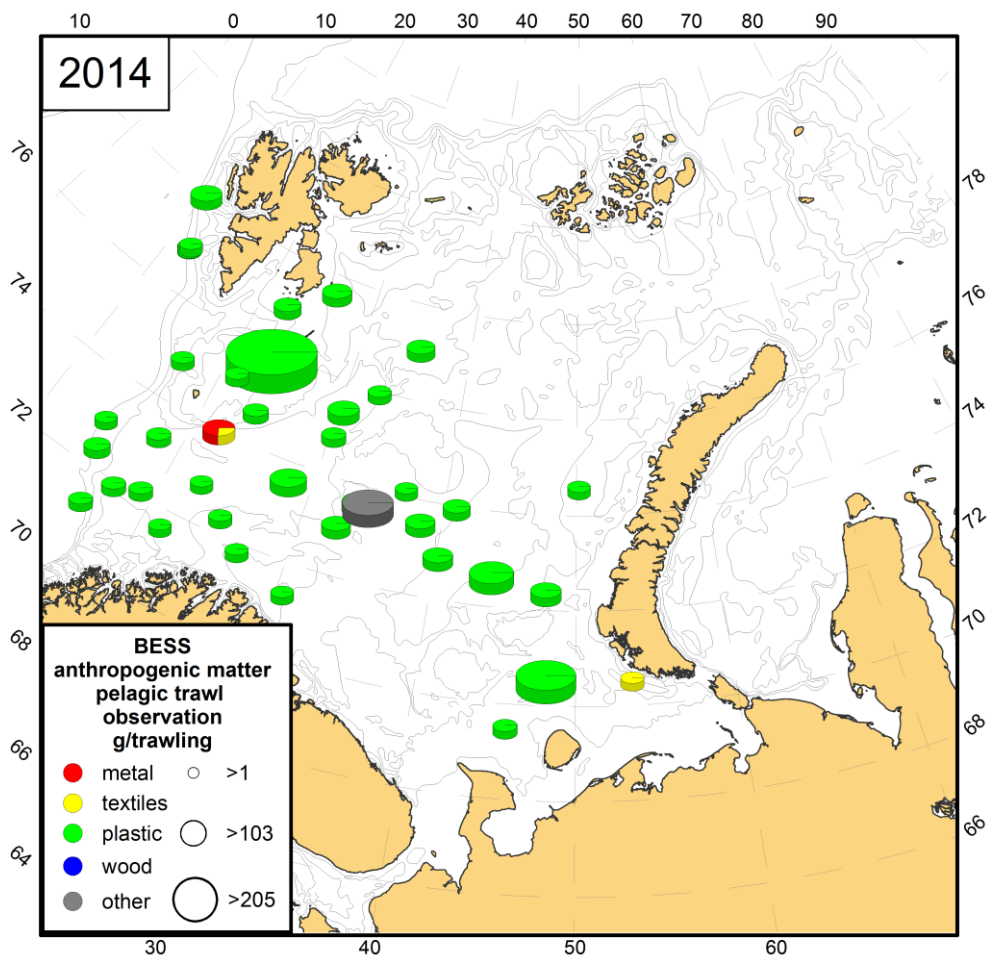


Figure 3.2.2.2 Types of garbage collected in the pelagic trawls (g) in the Barents Sea in 2014

Plastic litter was dominated in the bottom catches also (Figure 3.2.2.3). In 2014, no man-made pollutants were found in pelagic and bottom catches along the Murman coast, but they were found in previous years. Wood was found only in the two bottom stations north-west and west of the Novaya Zemlya. Wood were dominated in the bottom catches among the man-made pollutants in the southwest Barents Sea in 2010-2013, but some few observation of low value were done in 2014. Metal and textiles were observed in the bottom catches sporadically.

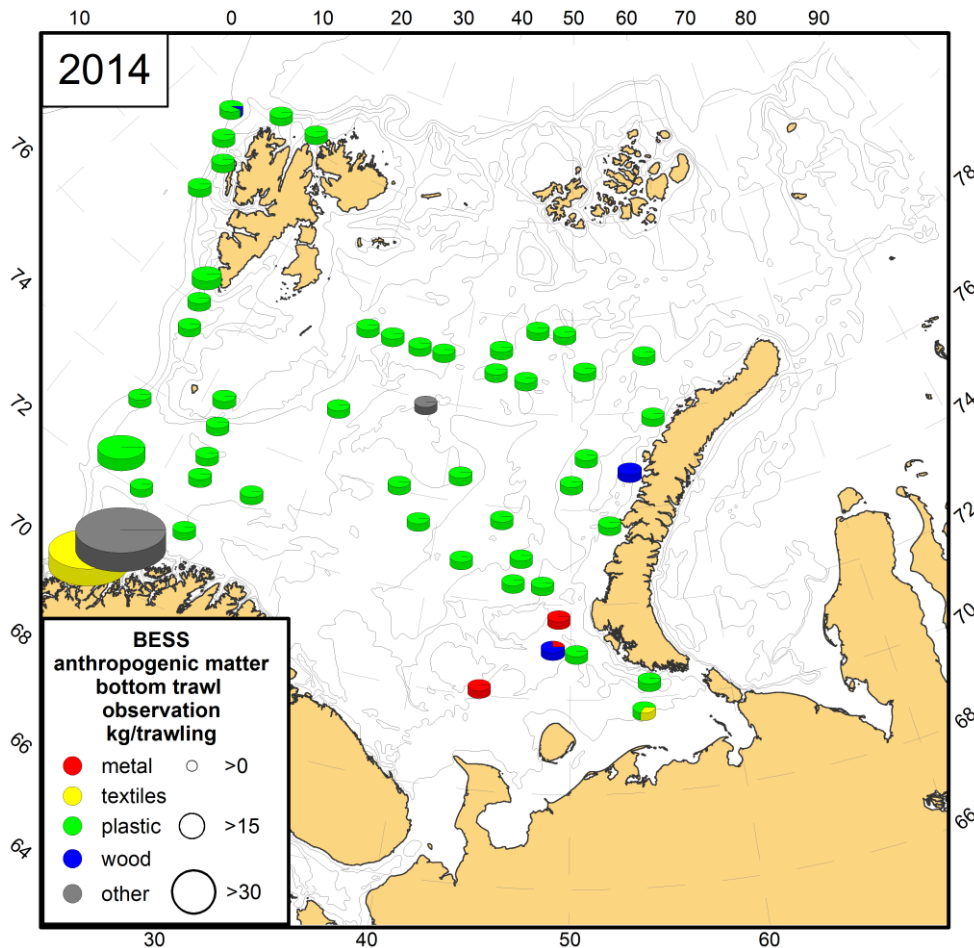


Figure 3.2.2.3 Types of garbage collected in the bottom trawls (g) in the Barents Sea in 2014

Pollutants, which are potentially dangerous for the marine environment were not registered in 2014. Only inactive pollutants, which are not directly harmful for the environment, were found. However, big lumps of threads, lines and nets were found during the survey. Fishing gear or part of them effect negatively both demersal fish and bottom organisms due to they are still the capable to capture organisms after they have been lost.