



# Factsheet Plastics

The Sea Ranger Service carries out period plastic pollution research in the North Sea area, in collaboration with partner Royal Netherlands Institute for Sea Research (NIOZ). Samples are processed and conserved onboard for analysis at NIOZ.

## PLASTICS RESEARCH

Sea Rangers have brought additional capacity to sample microplastics in the North Sea since 2018. Collaborating directly with the Royal Netherlands Institute for Sea Research (NIOZ), samples are collected, preserved onboard and sent to the NIOZ laboratory for further analysis.

Scientists Linda Amaral-Zettler and Eric Zettler lead the research, which is focused on how microplastics pollutions affects micro-organisms in the marine ecology.

## EQUIPMENT

For sampling, Sea Rangers deploys simple nets, which can collect samples of microplastics at sea surface level. Samples can be collected and preserved onboard through the use of a lab freezer, which can deep freeze at  $-80^{\circ}\text{C}$ .

Technical specifications:

- Nets: simple nets of different sizes for collecting microplastics
- Lab freezer: onboard with deep freezing capacity
- Range: ability to work offshore out at sea 12 days unlimited
- Longer periods at sea possible in consultation
- Periodic sampling optional to combine with other assignments



A special net, dragged along the side of the Sea Ranger vessel, collecting microplastics at the water surface.



Sea Rangers lift the sampling net from the water to collect microplastics for research.



Sea Rangers process and conserve microplastic samples onboard the Sea Ranger vessel.

## Partners



Koninklijk Nederlands Instituut voor Onderzoek der Zee

## Contact



**Bart Waals**  
Head of Operations

bart@searangers.org  
+31 (0)6 52870826