

Sampling for (micro)plastics

Improperly discarded plastic ends up in both terrestrial and aquatic ecosystems and, due to its longevity, is becoming an emerging environmental problem.

Plastic sources are not only discarded bottles on lake shores but can also originate from agriculture (plastic wrappings) or fishing activities (broken lines etc.). Microplastics are plastic pieces smaller than 5 mm which originate mostly from cosmetic sources or synthetic clothing. Think about peelings and toothpastes that use plastic beads to remove skin cells and stains, or washing fleece clothing of which small fleece particles are washed away with the draining water.

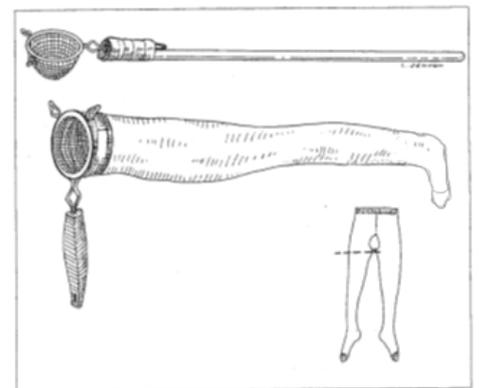


Please read the entire protocol before starting! Normal health and safety precautions should be taken at all times, for more information see website: www.nioo.knaw.nl/en/Netlake-Citizen-Science



Preparations and materials

- Wire kitchen sieve (any size) with handle
 - Transparent pantyhose (60 denier without holes)
 - Electrical or duct tape
 - Broom handle/stick
- Cut off one leg of the pantyhose
 - Attach the larger end of the pantyhose to the back of the kitchen sieve. If sieve has metal loops, cut small slits in the pantyhose and slip over the loops. Secure in place with tape (as much as you need).
 - Use tape to join the broom handle to the broom



Method

- Put on boots, waterproof sandals or remove shoes.
- Walk to the water (you can even go in knee deep for instance)
- Hold the sampler alongside yourself while walking slowly for 50 meters. Make sure the net doesn't catch on anything and still is horizontally placed in the water.
- Keep your plastic sampler at the water surface (that's where the plastic is).
- Avoid catching the sediment you disturb by walking in your net.
- After 50 meters pull the sieve up from the water and hang it vertically to allow the water to seep through the panty.
- Remove pantyhose from sieve and **knotting** and air-dry the pantyhose (e.g. on top of radiator).
- Fill in the form on www.nioo.knaw.nl/en/Netlake-Citizen-Science
- When dry, send the pantyhose to:
Lisette de Senerpont Domis
NIOO-KNAW
Droevendaalsesteeg 10
6708PB Wageningen, the Netherlands
- **Don't forget to add your name, country, lake/site name, date of sampling and your email address.**

