

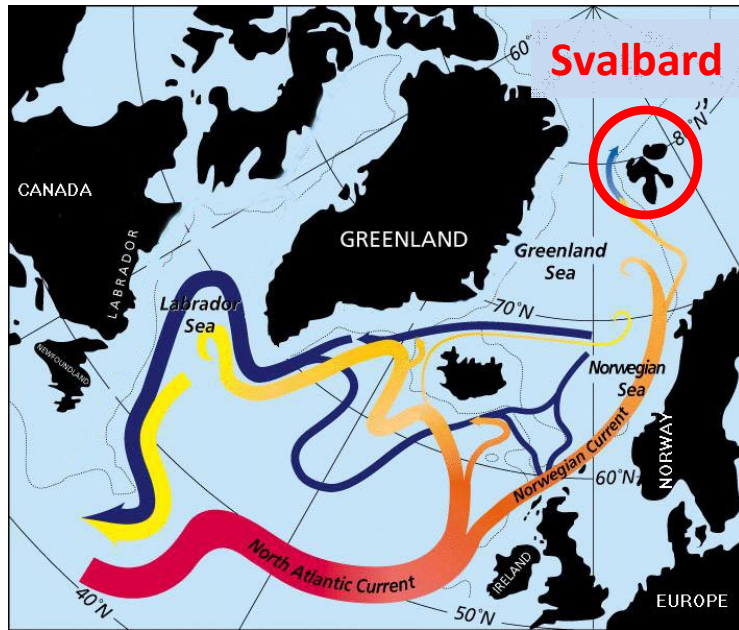
Microplastics in our seas: an invisible danger?

Michiel Claessens, Steven De Meester and Colin R. Janssen

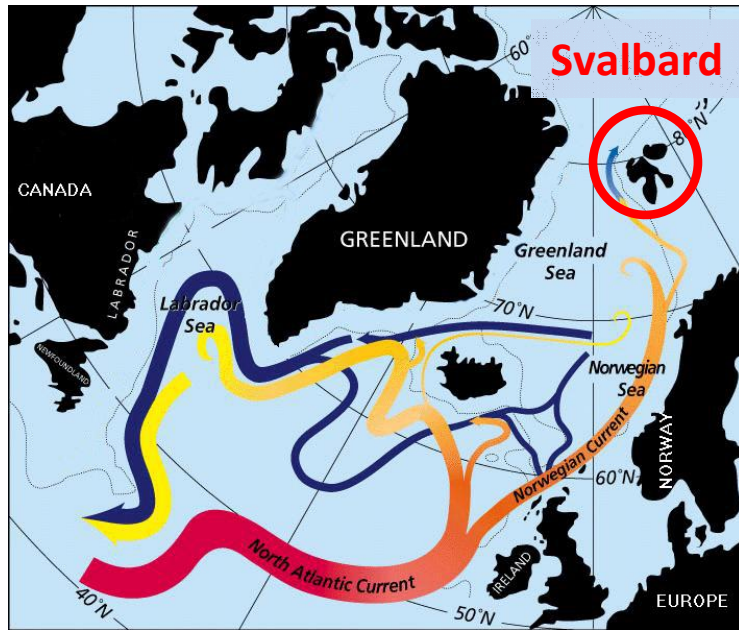
Laboratory of Environmental Toxicology and Aquatic Ecology

Ghent University

Marine litter is a global problem!



Marine litter is a global problem!



Clean up Svalbard
2007

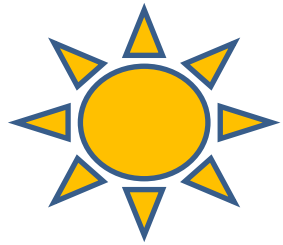
We thoroughly cleaned a beach
of Svalbard!



Really thoroughly?



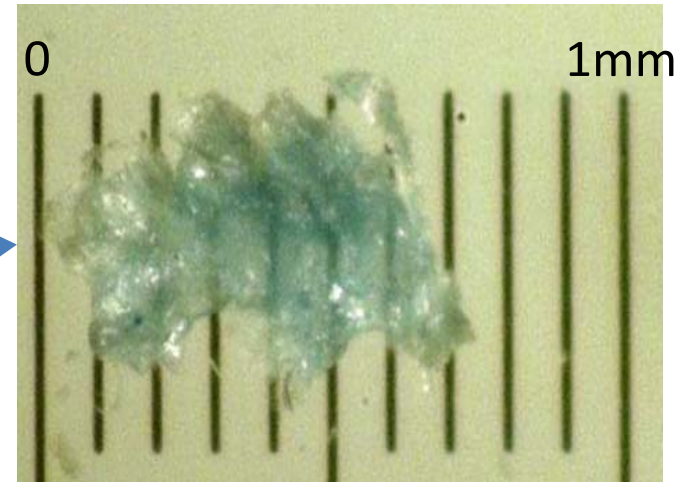
Plastics break up into little pieces



UV light



Mechanical forces

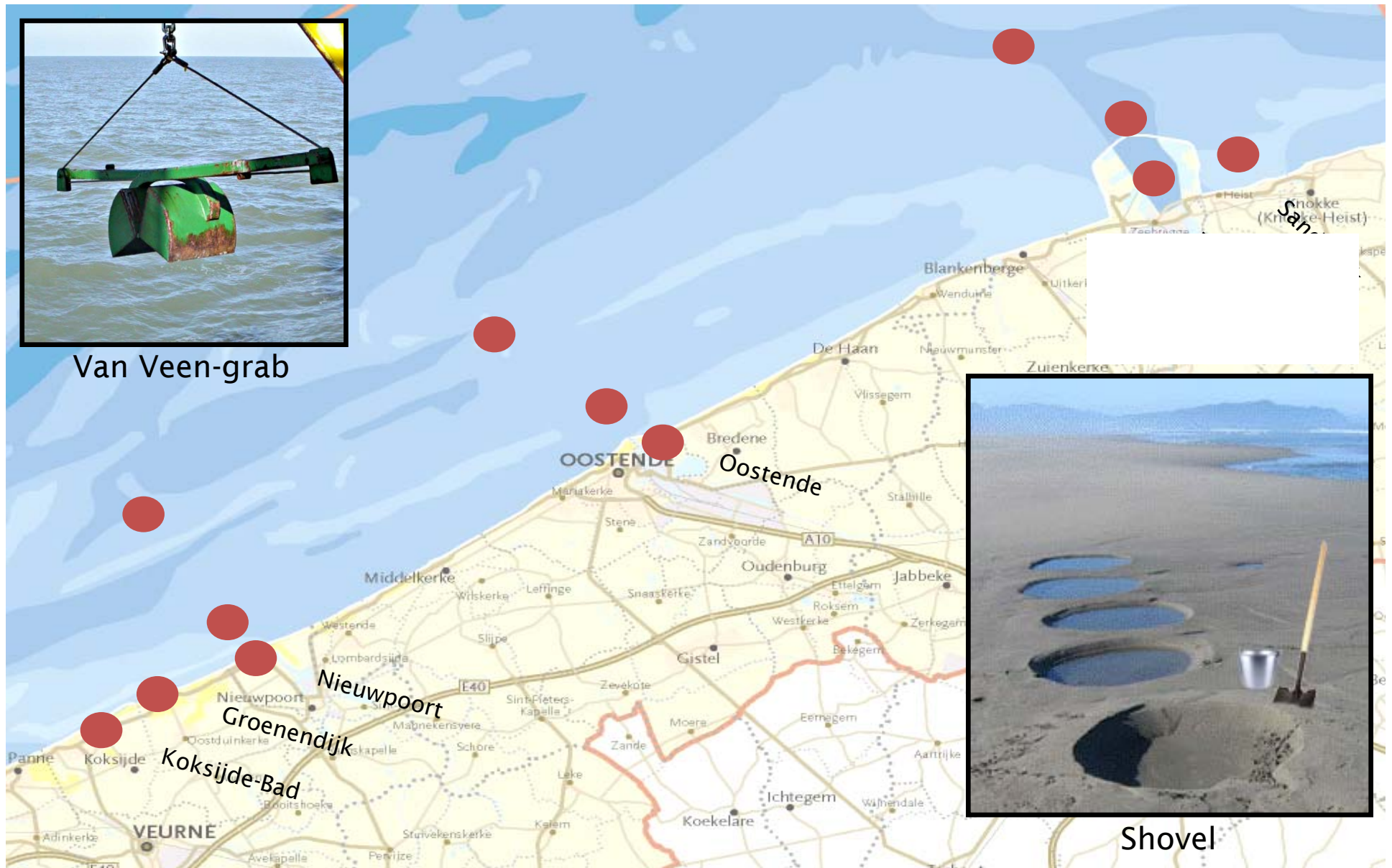


Microplastics

Occurrence of microplastics in Belgium

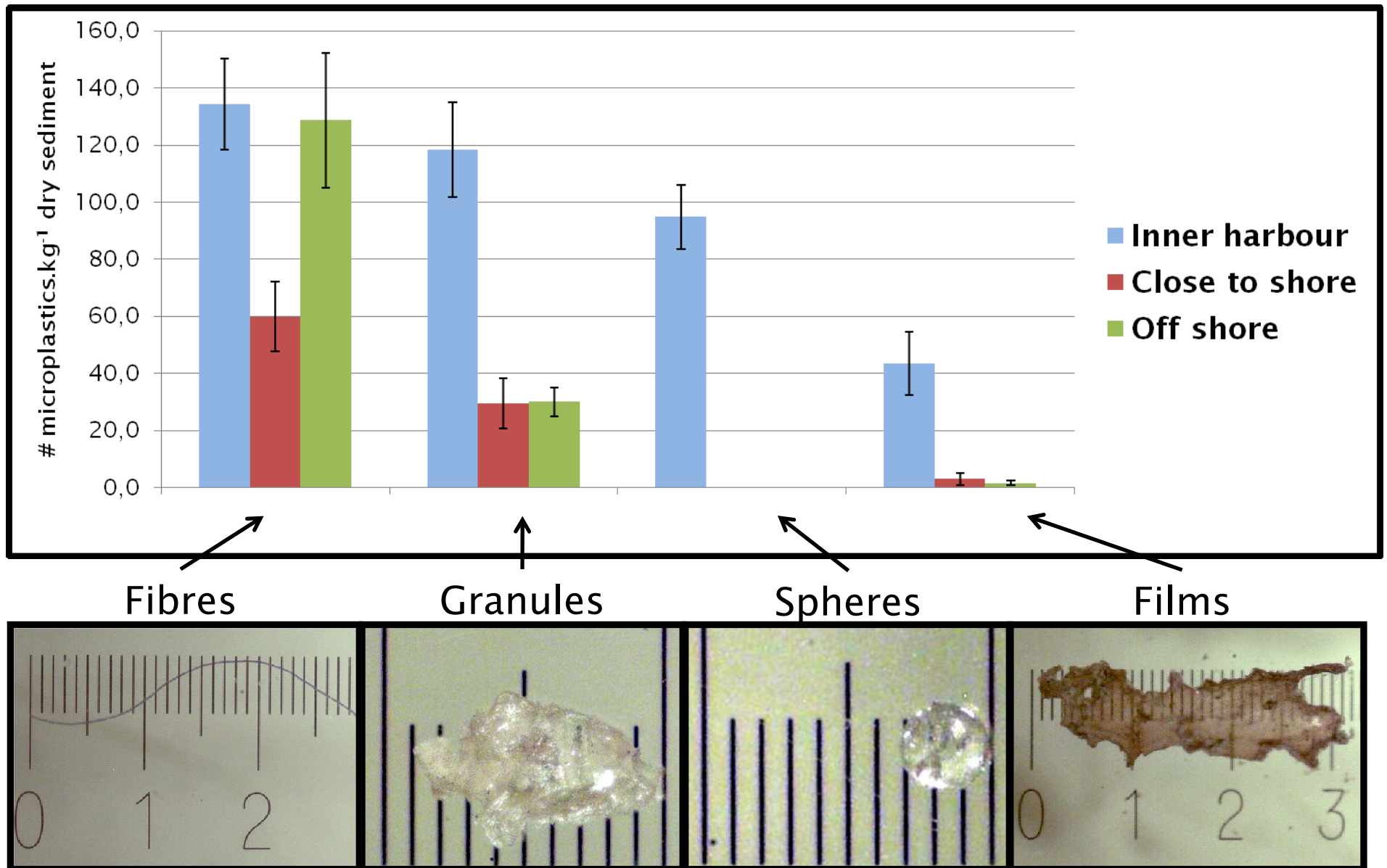


Van Veen-grab

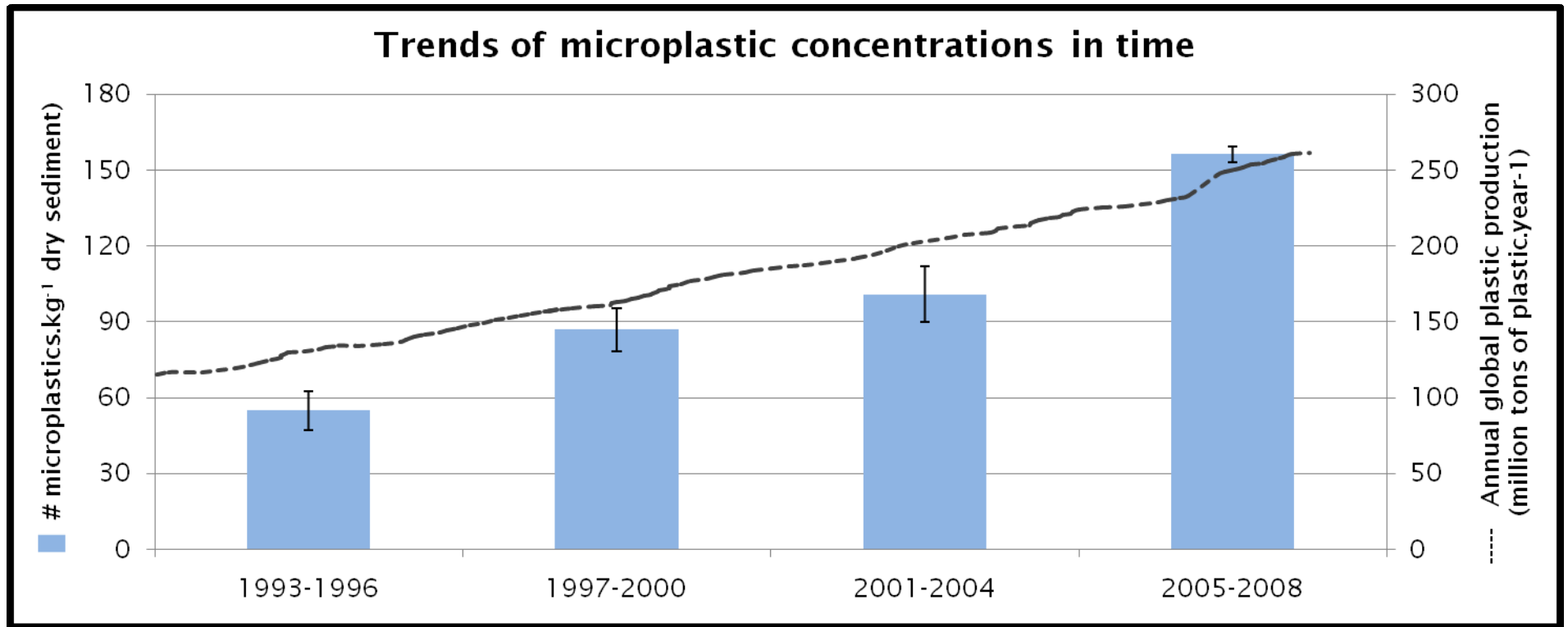


Shovel

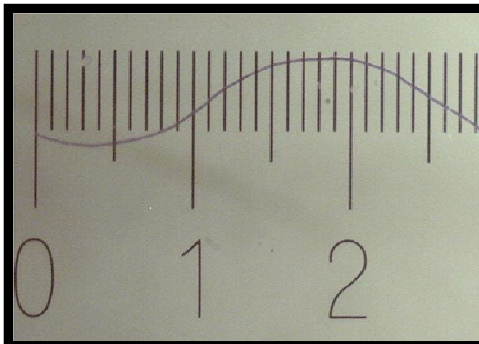
Occurrence of microplastics in Belgium



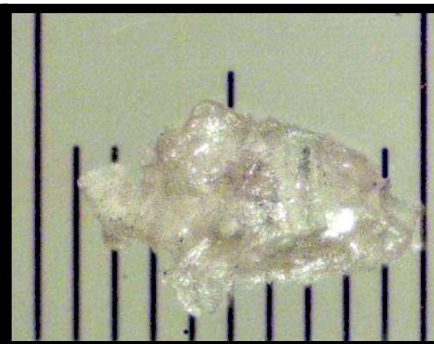
Occurrence of microplastics in Belgium



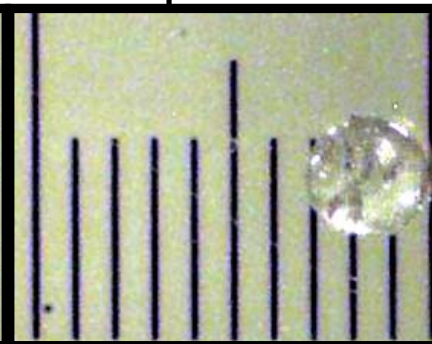
Fibres



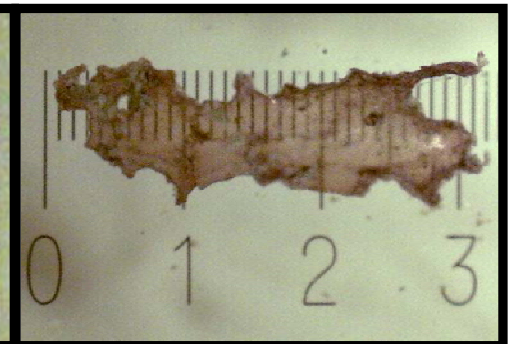
Granules



Spheres



Films



Is this a problem???

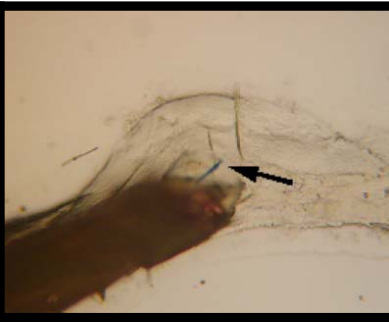
We don't know yet...

Facts:

- Different organisms ingest microplastics
- (Micro)plastics absorb chemicals



Amphipods



Mussels



Barnacles



Sea cucumbers

Unknowns:

- Do ingested microplastics cause negative effects?
- Can absorbed chemicals be transferred to organisms?