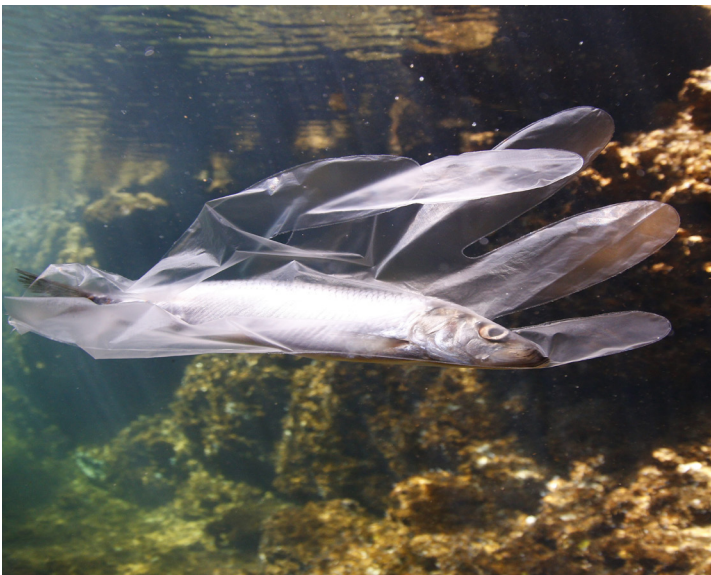


# Litter impacts on ecosystems



There are several physical effects to marine wildlife caused by the presence of marine litter in the environment. Some of them include:

- **Entanglement / Entrapment / Ghost fishing**

Abandoned, lost or discarded fishing gear, also known as ghost-nets, **continue to fish indefinitely** capturing marine species. Apart from nets other objects might also be stuck on the body of the animal causing harm, pain and in extreme cases even death.

- **Ingestion**

Several wildlife species such as marine birds, turtles, cetaceans and fish **ingest plastic**. This ingestion might lead to sub-nutrition, famine, asphyxia and in extreme cases, death. More than **90% of fulmars** (seabird) found dead in beaches of the Northern Sea had plastic in their stomachs. Plankton, the basis of the food chain at sea, as also been reported to ingest microplastics.

- **Invasion of exotic species**

**Macroplastics**, larger plastic fragments and items, can act as a substrate for some species to attach and therefore being transported by floating litter. Species attached to plastic might reach remote places from their origin and potentially compete with native species, therefore being a **potential menace to worldwide biodiversity**.

- **Bioaccumulation**

Little is known about long-term bioaccumulation effects throughout the food web. Yet, there are records of organisms with high concentrations of plastic particles in their stomachs. Since plastics are able to adsorb pollutants, these might directly or indirectly affect organisms **throughout the food chain**. The effects are unknown on top animals on the food web, such as predators and human beings.

- **Damage in benthic habitats**

Benthic habitats, such as coral reefs, might be damaged by abrasion caused for sinking litter, or when debris is transported along with currents. Litter accumulation in the sea bed might contribute to the **asphyxia of some benthonic species** by reducing sediment oxygenation.

## References

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