

## **Letter to Editor: Effects of microplastics**

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<https://www.mdislander.com/opinions/letter-to-editor-effects-of-microplastics>

To the Editor:

A Green Plan presentation by Madelyn Woods, M.S., marine research coordinator, Shaw Institute, made me curious about plastic's impact on the ocean, humans and our local economy.

The presentation showed a mussel ejecting microplastics ingested from Maine waters; the mussel eventually stopped eating.

Shaw Institute research (2012) detected microplastics in Blue Hill and Penobscot Bay — averaging 17 fragments per liter and (2014) found microplastics in oysters and mussels — averaging 177 fragments per creature, a potential health threat to the mollusks and seafood consumers (plastics may contain chemicals causing cancer, endocrine disruption and neurodevelopmental effects).

A 2017 Society of Environmental Toxicology and Chemistry study projects plastic waste increasing 20-fold by 2025.

Bio-Tec reports plastic products' lifespans: a water bottle or six-pack collar — 450 years; disposable diaper, 500 years; polystyrene foam — over 5,000 years.

A 2018 study reports gases emitted from plastics exposed to the environment affect climate change, accelerating the release of greenhouse gases and harmful chemicals (University of Hawaii).

The New York Times (2018) reported warming Maine waters since the 1980s became the ideal temperature for lobsters, increasing Maine's fishery to a half-billion-dollar industry. Last year's lobster landings dropped 22 million pounds. Scientists and fishermen worry our waters are warming too much for lobsters.

Card Brook cleanup contains many plastics, including numerous single-use bags.

Reducing plastics use is a start. Banning single-use plastic bags is a first step to slowing plastic's impact on the well-being of the ocean, consumers and our state's future fishing industry.

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