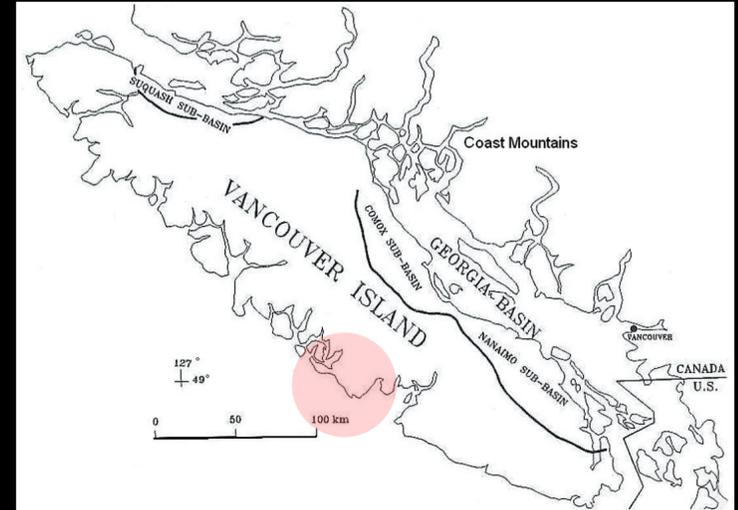


WHAT WE ARE DOING

Our communities are intrinsically tied to the local marine environment for food security, the economy, and cultural activities. Microplastics are fragments, nurdles and filaments smaller than 5mm. Microplastic pollution poses threats to the local economy and to the health of not only the marine life, but people as well. Over 180 species are known to ingest plastic pollution which has indirect impacts to human health through the food chain. Our study is one of the first to scientifically monitor microplastic pollution in beach sediment in British Columbia. By collecting valuable data with the help of citizen scientists, we are learning about the distribution, frequency and type of microplastic pollution affecting our coast. The results from this study are used to engage the public, and inspire change to reduce plastic consumption. Working together with visitors and community members we are raising awareness to protect the coastal ecosystem we are deeply connected to.



MAJOR STUDY GOALS

- 1) To collect valuable data to understand the type, distribution and frequency of microplastics on our coast with the help of citizen scientists.
- 2) To share our results with other marine debris and plastic pollution initiatives, the public, and government leaders to influence change and mitigate plastic pollution.
- 3) To provide educational materials and resources to engage our local community and visitors to limit single-use plastic items and find plastic alternatives.

WHAT WE ARE FINDING

48%

HARD PLASTICS

36%

STYROFOAM

15%

NURDLES

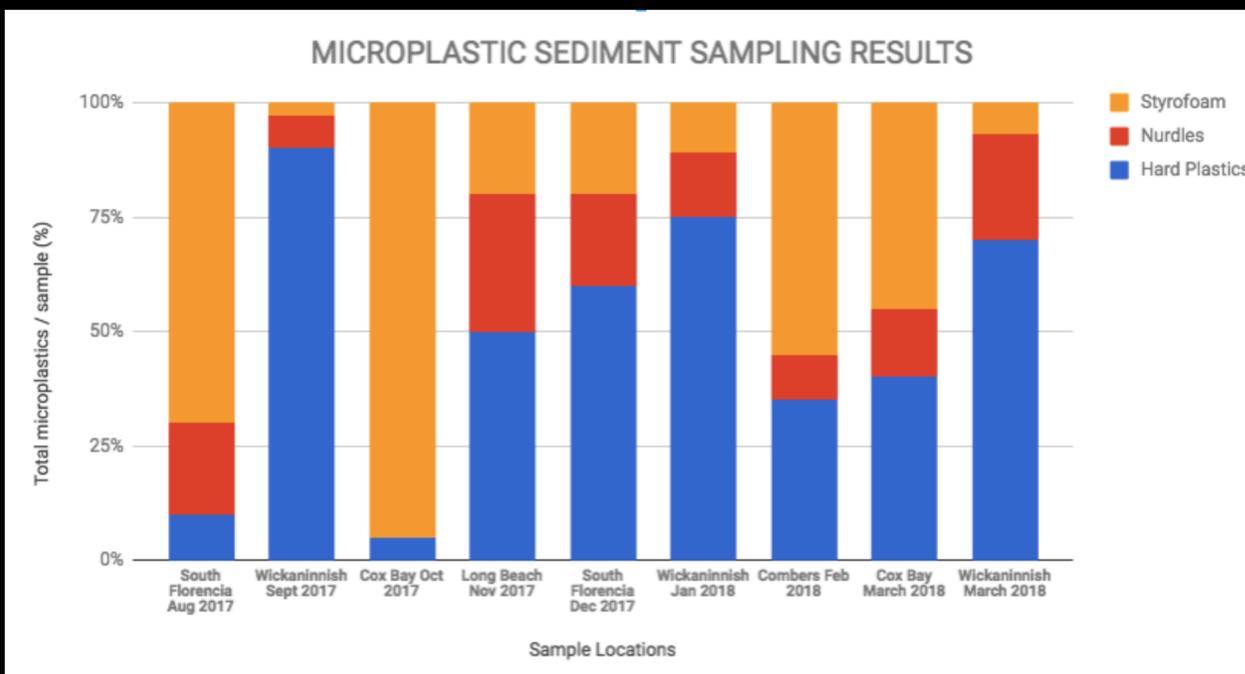


Figure 1. Total microplastic sediment sampling results by location, date and type (August 2017 to March 2018).

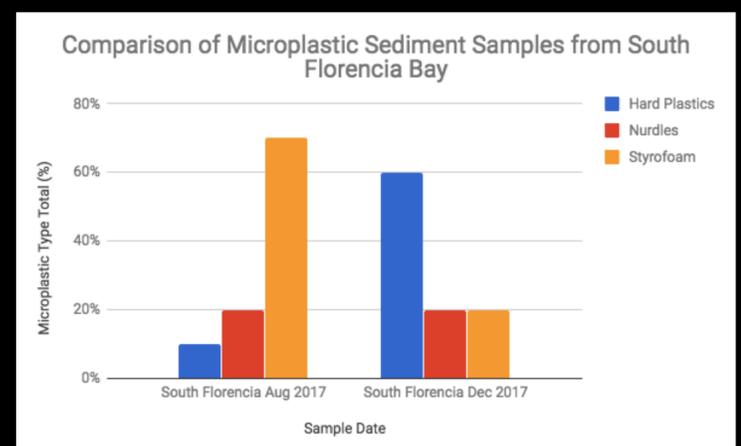


Figure 2. Comparison of microplastic type, in samples from South Florencia Bay in August 2017 and December 2017.

Our study sites are located in Ucluelet, Pacific Rim National Park Reserve, and Tofino, BC (see map above). We have found microplastics in EVERY sample, at EVERY study site (Figure 1). As we collect more data we are finding potential patters from our results (Figure 2). This research will help broaden our awareness of human impacts on the environment and strategies to protect the ocean we depend on.