# Determining the Presence of Microplastics in Spot Prawns (Pandalus platyceros) in Haro Strait, British Columbia, Canada

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The anthropogenic effects of plastic pollution in the marine environment is a growing global phenomenon. Of particular concern is the ubiquity of small pieces of "microplastic" debris (<5 mm) that enter the world's oceans through sewage wastewater, unconscious litter disposal, or incidental pollution. Microplastics have been found in marine organisms throughout the food chain and studies indicate that ingesting and internalizing them may cause physical damage or toxin exposure. Spot prawns (*Pandalus platyceros*) are an important shellfish species harvested off the coast of British Columbia (BC) and play an ecological role as both benthic prey and predator. This preliminary study examined microplastic contaminants in spot prawns within Haro Strait, BC. Presence was assessed using a standardized method that involved digestion of soft-body tissues in 10% potassium hydroxide followed by suction filtration. Digested samples were examined using standardized compound microscope techniques. Microplastics were found in 84.7% of the prawns sampled, with an average of 0.19 ± 0.16 microplastics per gram of tissue wet weight. The most common microplastics found were "fibres" (85.7%). Particle counts were statistically higher ($p = 0.008$) in prawns from southern Haro Strait at depths of 90 to 100 m (0.26 ± 0.18), compared with those from northern Haro Strait in depths of 60 to 75 m (0.15 ± 0.14), whereas no statistical differences were observed between gender type. This study is the first to look for the microplastic presence in wild BC Pacific spot prawns; future studies should consider sampling across a wider geographic range, as well identifying sources of contamination and the potential for harmful biological impacts of microplastic pollution.