

## Spatial distribution and monitoring of heavy metal bioaccumulation in the Bransfield Strait, Antarctica

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Antarctica has long been protected from human impact due to its isolation and harsh climate. But atmospheric and oceanic currents brought pollutants (POPs, heavy metals, microplastics) since the beginning of the industrial revolution and technical progress has favoured the development of human activities in this remote territory. With them come a series of environmental impacts that we are just beginning to look at and study. King George Island is the most populated island of the Antarctic Peninsula and as such deserves increased attention. More and more scientists are interested in the concentrations of heavy metals in this zone, especially for monitoring or establishing baseline values for the future. Yet, no local map of trace metals could be found in the literature. The objective of this study is to establish the spatial distribution of several heavy metals as well as their potential bioaccumulation in two species of bivalves (*Laternula elliptica*) and sea stars (*Odontaster validus*), in order to improve the understanding of the behaviour of these metals and to uncover possible patterns.

Keywords: Heavy metals; Bioaccumulation; Bransfield Strait; Antarctica; *Laternula elliptica*; *Odontaster Validus*; Map