Science and Education

Anthropogenic Noise in Antarctic Waters: Recent Studies and Future Priorities

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Alongside terrestrial habitats, aquatic habitats are of great importance in various parts of the Earth. Studying and monitoring animals in terrestrial environments is easier and more accessible for researchers than aquatic environments. The Antarctic is a geographical area where studies on the effects of sound pollution on animal species are limited due to isolated areas, distance of habitat range and climatic conditions. Here, I aim to provide an overview of the importance of biological studies, behavioral aspects related to bioacoustics, and the potential impact of sound pollution resulting from human activities, also known as "anthropogenic sound", on the species diversity in the southern region of Antarctica. Considering the importance of the biodiversity of animal species, conducting behavioral studies for unique species in this geographical area is recommended. Passive acoustic monitoring can be used to conduct behavioral biology studies and identify unique species in Antarctic ecosystems. Furthermore, I suggest that it is essential to establish, develop and equip research stations for bioacoustics and behavioral studies of aquatic organisms in the Antarctic region to develop scientific collaborations with scientists from various international institutes.

Keywords: Antarctica, Bioacoustics, Climate Change, Behavioral Biology, Aquatic Habitats

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