

## References

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(Delyamure, 1955). However, little attention has been given to the diseases caused by these parasites or their possible role as biological indicators. Reports on the parasites and associated damage in small odontocetes by Dailey and Perrin (1973) and Ridgway and Dailey (1972) have implicated various helminths as possible etiologic agents in the mortality of selected age groups or entire populations.

The primary objective of this research was to (1) assess the parasite burden of harvested whales in southern oceans, (2) determine the incidence of natural mortality with a parasitic etiology, and (3) identify geographically isolated populations by parasitic biological indicators.

From October 1976 to March 1977, whales were examined aboard the Japanese whaling factory ships *Nisshan Maru #3* and *Tonan Maru #2*. Animals sampled were taken from whaling regions I, V, and VI encompassing 140°E.-100°W. to 72°S.

Examinations of the external surface, organs (stomachs, intestine, lungs, liver, kidney, spleen, genitalia), blood and fecal samples were carried out on a total of 239 whales. [113 minke (*Balaenoptera acutorostrata*), 93 sei (*B. borealis*), and 33 sperm (*Physeter catodon*)]. Initial observations indicated that of the 239 whales examined 145 (60 percent) were parasitized, with incidence levels reaching 100 percent in the sei and sperm. Minimal infection levels were found in the Minke (17 percent).

Helminths of the acanthocephalan, cestode, and nematode groups were common in sei and sperm whales.

The material and data collected are under study.

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# Disease as a cause of natural mortality in some antarctic whale stocks and parasites as potential biological tags

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Previous investigations on the helminthofauna of cetaceans in the Antarctic have been reported by Soviet workers

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