

Important Areas (IAs) were identified for blue, sei and fin whales in 2006 through interviewing experts and considering relevant literature during the process of establishing Ecologically and Biologically Significant Areas (EBSAs) in PNCIMA. These cetacean species range over large ocean areas. To feed, in particular, on zooplankton these species are thought to move to mid- and high-latitudes during seasons when productivity is high. Canada's Pacific waters, including PNCIMA, represent feeding areas for these species. Breeding is thought to occur in warmer latitudes. These species were once abundant here, as evidenced by catch records from BC's whaling era (1905 to 1967).¹

Blue Whale

The eastern north Pacific blue whale (*Balaenoptera musculus*) has an estimated minimum population of 1,384 individuals based on surveys conducted off California, Oregon and Washington between 1996 to 2002. Analyses of acoustic data suggest that there are at least two populations of blue whales in the North Pacific, an eastern North Pacific population and a central/western North Pacific population.² The Pacific population of blue whales, as defined by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), is listed as Endangered under the *Species at Risk Act* (SARA) and by COSEWIC.^{1,3,4}

Blue whales are still relatively rare within PNCIMA, and much of what is known about them comes from analyses of historical whaling records. These records reveal that blue whales were mainly found along the edge of the productive continental shelf, and in the open Pacific.² Sightings of blue whales within PNCIMA have been recorded since 1972. Their most western extent extends beyond PNCIMA, and is not shown on the accompanying map.⁵

Based on physical modelling and whaling data, the continental shelf break and offshore areas were identified as critical habitat and an IA for blue whales.¹

Sei Whale

The sei whale (*Balaenoptera borealis*) was heavily harvested, particularly during the final years of commercial whaling in BC (1962 to 1967), and continued to be heavily hunted in the northeast Pacific until 1975. In Canada's Pacific waters, sei whales appear to have inhabited areas primarily off the continental slope. The species is now rarely seen. The minimum estimate off the California, Oregon and Washington coast is 35 sei whales based on surveys conducted in 1996 and 2001.² The Pacific population of the sei whale is currently listed as Endangered under SARA^{1,3} and by COSEWIC.⁴

Based on historical catch records and modelling of oceanographic variables, the continental shelf break and offshore waters of BC have been identified as potentially important habitat for sei whales and were identified as an IA for this species.¹



Blue whale. Illustration: A. Denbigh



Sei whale. Illustration: A. Denbigh



Fin whale. Illustration: A. Denbigh

Fin Whale

There are no completed estimates of the current abundance of fin whales (*Balaenoptera physalus*) in the northeastern Pacific. Surveys conducted off California, Oregon and Washington in 1996 and 2001 indicate a minimum of 2,541 in that region, while there is a minimum estimate for Alaska of 5,703 from surveys in 1999 to 2003. The fin whale is currently listed as being of Special Concern under SARA. Its Pacific population is listed as Threatened by COSEWIC and SARA.^{2,3,4}

Fin whales were taken in great numbers during BC's whaling era. They were taken from areas in Hecate Strait, Dixon Entrance, and along the continental slope, particularly between Vancouver Island and Haida Gwaii. Although less commonly encountered now, recent sightings of fin whales are consistent with their historical geographical extent and also reveal that these whales may be present year round in BC.

The IA for this species in PNCIMA includes predicted critical habitat on the continental shelf break, and Moresby Trough and Dixon Entrance where aggregations of whales have been recorded in historical whaling data and recent sightings.¹

Blue, sei and fin whales are species at risk

Material presented is drawn from the following literature reviews, which include primary references:

- 1 Clarke, C.L. and Jamieson, G.S. 2006. Identification of ecologically and biologically significant areas in the Pacific North Coast Integrated Management Area: Phase I – Identification of important areas. Can. Tech. Rep. Fish. Aquat. Sci. 2678: vi + 89 p.
- 2 Heise, K., Ford, J. and Olesiuk, P. 2007. Appendix J: Marine mammals and turtles. In Ecosystem overview: Pacific North Coast Integrated Management Area (PNCIMA). Edited by Lucas, B.G., Verrin, S. and Brown, R. Can. Tech. Rep. Fish. Aquat. Sci. 2667: iv + 35 p.
- 3 The Species at Risk Act (SARA) was created to protect species under threat of extinction. Species are assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), then by the federal government, based upon scientific information and consultations, to determine whether those species receive legal protection under SARA.
- 4 COSEWIC. 2011. Wildlife species search. http://www.cosewic.gc.ca/eng/sc11/searchform_e.cfm (Accessed February 2011).
- 5 Clarke, C.L. and Jamieson, G.S. 2006. Identification of ecologically and biologically significant areas in the Pacific North Coast Integrated Management Area: Phase II – final report. Can. Tech. Rep. Fish. Aquat. Sci. 2686: v + 25 p.

