

5. Populations Returning from the Edge of Extinction



Whaling in Georgia Strait, 1908.

Captain Larsen at the harpoon gun on the *St. Lawrence* in the Strait of Georgia in 1908. A whaling station operated there from October 1907 to February 1908, processing 98 humpback whales before it was closed.

PHOTO: D-03820 ROYAL BC MUSEUM ARCHIVES



Blue whale on the slip at Rose

Harbour. A blue whale on the slip at the whaling station in Rose Harbour, Haida Gwaii (formerly Queen Charlotte Islands). Between 1905 and 1967 more than 24,000 whales were slaughtered as part of BC's commercial whaling efforts. PHOTO: E-05033

ROYAL BC MUSEUM ARCHIVES

By their very nature, marine mammal populations are vulnerable to overexploitation and other human generated threats. Marine mammals are generally long lived, but have low reproductive rates. Consequently, recovery from significant population reductions can take many years. However, by controlling destructive human behaviour, the declining trajectories of some marine mammal populations have been reversed.

Return of the whales

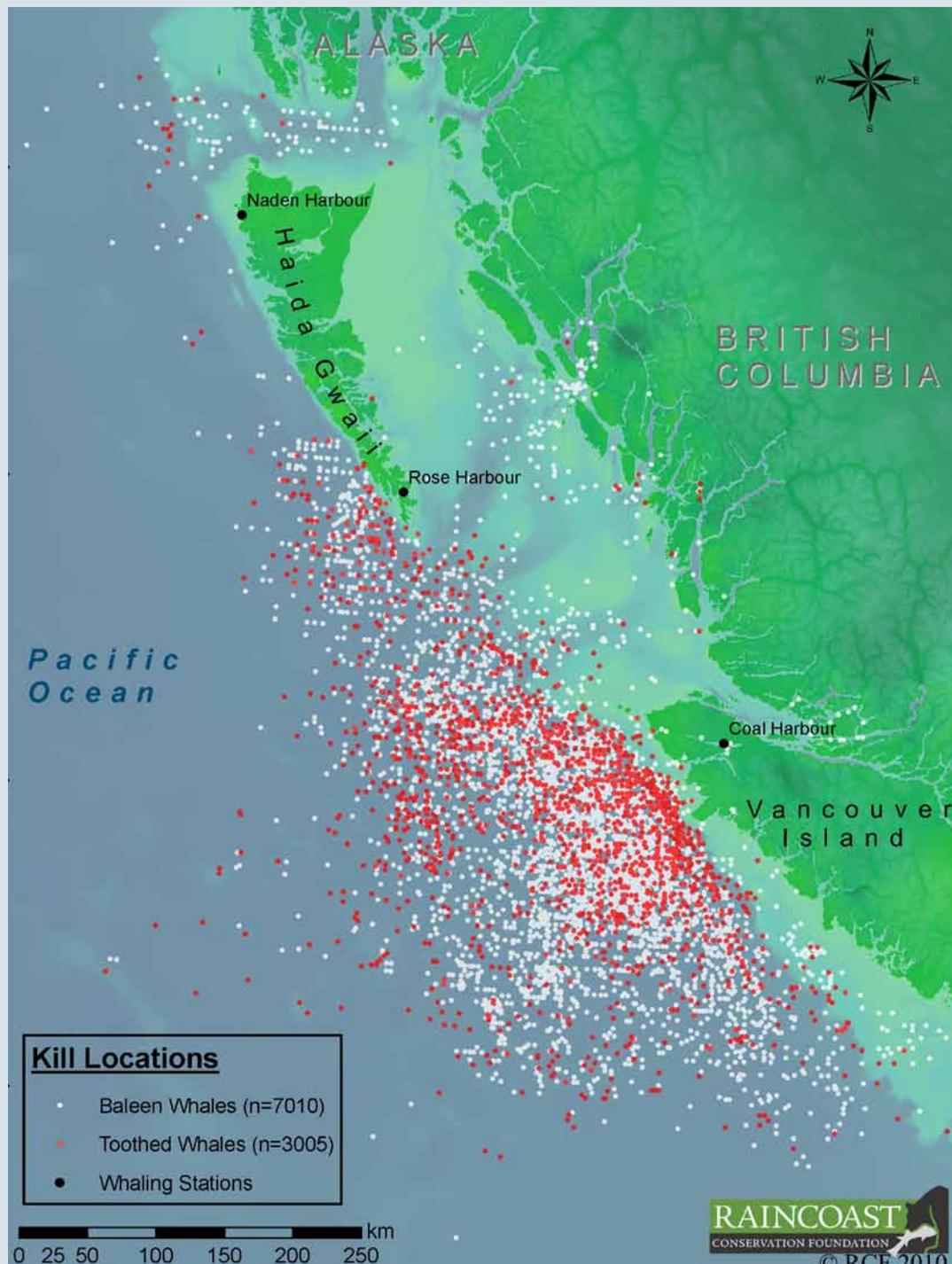
After a 40 year reprieve from whaling, these gentle giants are slowly returning to the coast. In the 1840s, large whales (such as sperm, blue, fin, humpback, grey and right whales) were so abundant in the Pacific Northwest that they became the target of whalers on sailing ships. By 1848, there were 292 sailing ships hunting whales in the region. By 1865, fewer than 20 years later, grey whales and right whales were commercially extinct.⁶⁸

The introduction of steam powered vessels opened up the oceans to a second round of intense harvesting of whales. Here in BC, between 1905 and 1967 more than 24,000 large whales were taken from the BC coast. Six shore-based whaling stations were constructed, including two on Haida Gwaii (at Rose and Naden Harbours) and a third, the largest, at Coal Harbour, on northern Vancouver Island.

Over time, whalers targeted different species, driving each to commercial extinction before shifting their focus to other species. In the early part of the century, primarily humpback whales were taken. In later years, faster swimming fin whales and sperm whales dominated the catch.

Whales were afforded protection from commercial slaughter in 1968, which has led to the gradual return of humpback

Figure 8. Kill locations of whales hunted on the BC coast between 1905 and 1967. Known locations where whales were harvested by BC whalers between 1905 and 1967. This map represents roughly 40% of the whales actually harvested in BC. Grey and right whales were already commercially extinct on the coast before land based whaling stations were constructed.⁶⁹ Targeted whales between 1905 and 1967 were primarily humpback, fin, and sperm whales. Individual species maps are available in our [on-line supporting materials](#). Data for these maps were compiled by the Cetacean Research Program, Pacific Biological Station, Fisheries and Oceans Canada.





Where's your passport? Steller sea lions do not recognize international boundaries. The largest breeding rookery for the eastern population of sea lions is just north of the British Columbia – Alaska border on Forrester Island, where this sea lion was born and branded by Alaska Fish and Game in 2001. It has since travelled more than 300 km to the Caamaño Sound area, where it was observed in the fall of 2006.



and fin whales to portions of the BC coast. In addition, the numbers of grey whales appear to have returned to the levels that preceded whaling. We have yet to see any signs of significant population recovery in sei whales and right whales.

A stellar story of decline and recovery

Steller sea lions are one of the most studied marine mammals in the North Pacific. This is because the western population in Alaska (west of 144° W) has experienced population declines of 80% since the 1970s. The species is now considered “endangered” in the US.⁷⁰ Causes for the decline are the focus of much research and debate. Nutritional stress caused by changes that reduced the availability or quality of their prey seems the most likely explanation for the decline, although this theory remains controversial.⁷¹

The eastern population of Steller sea lions (east of 144° W and extending down into BC and California) was given Special Concern status in Canada, but at present the population remains at historically high levels. When listed in 2003, only 3 breeding rookeries were found in the province.⁷² Canadian government biologists recognized that sea lions were sensitive to disturbance while on land, and expressed concern that the precipitous decline observed in the western population could spread.

The abandonment and recovery of the Sea Otter group as a sea lion rookery⁷³ In 1913, the rocky islets comprising the Sea Otter group was a small breeding rookery for Steller sea lions on BC's north coast. However, between 1923 and 1939, fishery officers used to visit the rookery near the end of the pupping season, using machine guns to shoot adults from their patrol boats. Then, they would then go ashore and kill the pups, which were generally too young to escape. As a result, the number of animals that returned to the rookery each year declined exponentially and the sea lions eventually abandoned the site, although a few animals were occasionally seen using it as a haul out. When sea lions were given protected status in 1970, they slowly began returning to the Sea Otter group. By 2006 enough animals had returned to breed that the islands were given official rookery status once again. PHOTOS: P.C. PAQUET



Steller sea lions: voracious salmon predators? The evidence from their scats (faeces) says no. Scats are collected from haul out sites and rookeries and then washed in a special machine called an elutriator. Only the hard parts remain (bones, eye lenses, squid beaks etc.), which can often be identified to species. Analyses of these hard parts reveal that Steller sea lions prey primarily on small and medium sized schooling fish that are seasonally abundant and/or accessible, such as herring, hake, sand-lance, salmon, dogfish, eulachon, and sardines. Salmon constitute only 10% of their summer diet based on preliminary analysis of scats collected at Cape St. James.⁷⁶ In winter, sea lions prey primarily on herring.⁷⁷

PHOTO: M. CARWARDINE



More seals, more seal eaters. An increase in the abundance of transient (mammal-eating) killer whales coincides with a dramatic increase in the number of harbour seals, their primary prey.⁷⁸ Between 1879 to 1968 more than half a million harbour seals were killed in British Columbia. In 1970, they received protection from culling.⁷⁹ Since then, the harbour seal population has grown and stabilized at approximately 110,000 animals coast wide.⁸⁰ PHOTO, TRANSIENT KILLER WHALE:

K. HEISE/L.BARRETT-LENNARD. PHOTO, HARBOUR SEAL: P. ROSS