## Recovery of Sea Otters in British Columbia

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During the Maritime fur trade that commenced in the mid 1700's, sea otters were intensively hunted throughout their range. In British Columbia, the last sea otter sighted was shot in 1929 and it was not until the early 1970's that sea otters were re-introduced to British Columbia with the transplant of 89 animals from Alaska between 1969 and 1970. The species was listed as Endangered in 1978 by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). By 1995 the population had grown to over 1500 animals. The species remained listed, although downlisted to Threatened, because of a small population size and a limited distribution. Oil spills remain one of the most significant threats to the species. In 2001, Fisheries and Oceans formed a Recovery Team consistent with the requirements of the Species at Risk Act, to set out a strategy that identifies threats to sea otter recovery and knowledge gaps that would impede our ability to assess and ensure recovery progress.

Knowledge gaps emerged regarding sea otter population size and distribution. Population surveys, field studies and habitat modelling were embarked on to address some of these gaps. Building on previous survey work by J. Watson, we carried out surveys in 2001, 2002, and 2003. Our objective was to develop a survey method suitable for counting sea otters along the British Columbia coast and to provide a minimum population estimate. The species is challenging to count. Sea otters are primarily found along exposed and remote portions of British Columbia's complex coastline. Furthermore they are small and easily disturbed. Sea otters congregate in groups called rafts that can range in size from a few animals to hundreds of animals. Throughout the sea otter range, counts were made from boat, and helicopter. Variation in sea otter raft size with time of day and varying conditions were documented during a shore-based study. Habitat modelling was undertaken to estimate a theoretical equilibrium population size for the British Columbia coast. The results of these studies will be discussed in the context of sea otter recovery.