

California Sea Lions in Tofino Inlet

The sea lion population in Tofino Inlet has reached unprecedented numbers, up from a handful of animals only a few years ago. As Global Warming continues, the California Sea lion's appear to be extending their northern range. The California Sea Lion (Zaca) was first noted in British Columbia in the early 1970s but was not seen in Clayoquot Sound until the late '80s. Once considered a peripheral species, the California Sea Lion, is now an intruding species. Initially, only adult males were sighted but over the last couple of years younger animals and possibly females have also been sighted in numbers. A recent count recorded over 1,100 animals on shore from Berryman Point to Cannery Bay, and a large number, possibly exceeding 500 in the adjacent waters. There has never, previous to the winter of 2005-06, been any established sea lion haul outs in this area. They have been accumulating in Tofino Inlet since last November, following large schools of pilchards. Both species, California and Steller are present but California males appear to dominate the herd. The feed requirements of these animals are very substantial. A 275 kg California bull requires about 10.6 kg of fish daily (based on the energy composition of herring), while a 900 kg Steller bull would eat up to 25 kg per day. A herd of this size and species composition would be expected to consume as much as 24 tonnes of fish daily. On an annual basis, the Tofino Inlet sea lion herd will eat an estimated 8,700 tonnes of fish, including a significant tonnage of wild salmon and other commercially valuable wild marine fish. This would be equivalent to 1.74 million 5 kg salmon if only salmon were consumed.

Although there can be significant annual mortality of sea lions due to toxic algae blooms (domoic acid), suspected PCB contamination, salmon farm nets, gill nets and other commercial fishing gear, the population of California sea lions, now estimated to be 300,000, animals is increasing. Although the Steller sea lion is in decline in Alaskan waters, it too appears to be increasing in number in Clayoquot Sound. The Steller sea lions do not seem to be involved in harassing the salmon farming sites in the Inlet, although they certainly contribute to the depletion of the wild feed fish. However as the pilchard biomass is reduced, the California sea lions have become increasingly problematic for local salmon farmers. Certain farm sites appear to be under continuous attack and the sea lions are taking their toll on the farmed salmon stocks. The pattern of sea lion attacks is similar to recent observations in Oregon, where California sea lions have learned coordinated hunting tactics to kill endangered spawning White Sturgeon around the Bonneville dam. In this case, wildlife workers are using explosives and rubber bullets in an attempt to discourage the sea lions in order to protect the vulnerable sturgeon. At Bonneville, sea lions are also causing serious damage to returning wild salmon brood stocks. The impacts of the increasing presence of sea lions on wild salmon stocks in Clayoquot have not yet been documented.

The only recent respite from sea lion attacks has been in the form of several small gangs of transient killer whales, who took a turn around Tofino Inlet, eating sea lions as they went. Since the sea lion herd is expected to leave the Inlet for their breeding grounds by the middle of May, the question that can well be asked is, are they here to stay and will Berryman Point become a permanent haul out? It is probable that they will return again next fall. In the mean time, improved understanding of sea lion behavior and local population dynamics will allow management and equipment strategies which minimize sea lion interactions with farms. The increasing populations of sea lions in B.C. are not only of concern to salmon farmers, since managers of marine wild-stock fisheries must now allot an increasing proportion of the total sustainable harvest of these limited resources to maintain the marine mammals.

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