



MERI Fact Sheet

POTENTIAL IMPACTS OF AQUACULTURE ON MARINE MAMMALS

The Marine Environmental Research Institute (MERI) is a nonprofit organization dedicated to scientific research and education concerning the health of our marine environment. MERI's purpose is to advance our knowledge about ocean pollutants and their impact on the health of marine mammals and humans, to provide preventive solutions, and to ensure that our oceans and coastal waters are safe for marine mammals and humans. While the extent of the impacts of aquaculture on marine mammals has not been sufficiently documented to date, there is evidence to suggest that the rapid growth of the aquaculture industry poses significant concerns for the health and safety of marine mammals. Primary concerns include entanglement, habitat degradation, and harmful effects of deterrence practices.

Specific concerns associated with finfish aquaculture

Finfish aquaculture presents particular risks because marine mammals may be attracted to pens as potential food sources. Dependence on pens as foraging areas may alter the behavior of marine mammals by affecting their normal migratory patterns and/or by reducing their ability to hunt wild fish. A more obvious danger is the risk of entanglement in netting. Reports in the United States, Australia, and New Zealand have documented a number of marine mammal drownings resulting from sea pen entanglement.



Human attempts to deter marine mammals from aquaculture sites pose additional dangers. Studies report that the use of acoustic deterrent devices (ADDs), also called acoustic harassment devices (AHDs), may have wide-ranging effects, including temporary or permanent hearing damage of fish and marine mammals, displacement from and abandonment of significant habitats, masking of important

biological sounds, and impacts on a wide range of species, including whales. In some countries, including Canada, operators have used more drastic deterrence measures, including direct shooting of seals and sea lions. As reported in the February 2003 issue of *National Geographic*, salmon farmers in Vancouver legally shot 5,000 seals and sea lions over the past decade. In the United States, the Marine Mammal Protection Act prohibits the disturbance or harassment of marine mammals.

Contact MERI

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