A BALANCING ACT FOR HARBOR SEALS ON ICE: Weighing Long-term Protection for Seals with a Growing Interest in Vessel-based Tourism

Alzenia S. Jensen1, John K. Jansen2, and Alicia Bishop3
1Protected Resources, Alaska Regional Center, National Marine Fisheries Service, NOAA, PO Box 21668, Juneau, AK 99802-1668. Alzenia.Jensen@noaa.gov, Alicia.Bishop@noaa.gov

Abstract
Recently, the National Marine Fisheries Service (NMFS) published an Advance Notice of Proposed Rulemaking (ANPR) to consider regulations to protect tidewater-glacier habitats of harbor seals in Alaska, and limit vessel disturbance of seals using floating ice in those habitats. Despite vessels regularly operating within these habitats, they receive no specific protection other than voluntary guidelines to help prevent seals from human activities. The ANPR was precipitated by numerous factors: stakeholder concerns; the essential role of habitats for seals to rest, birth, nurse, and molt; a dramatic increase in vessel-based tourism over several decades; broadly-defined protections in the Marine Mammal Protection Act (MMPA) that are difficult to enforce; and recent findings suggesting that voluntary guidelines were inadequate to prevent disturbance. The scope of the ANPR encompassed any vessel or person that may diminish the value of glacial habitats for harbor seals, result in unauthorized take under the MMPA, or cause detrimental individual- or population-level impacts. While the ANPR did not propose specific measures, public comments were solicited as to whether regulations are needed, and if so, what type of measures would be appropriate to protect seals. During the 60-day comment period, the agency convened public meetings to provide background on this action. NMFS received seventy-five comments in response to the ANPR, from industry(29), general public(21), Alaska Native seal hunters and/or subsistence users(14), federal, state and municipal agencies(6), and non-profit organizations(5). Thirty-six of the commenters opposed regulatory action, thirty-two favored such action, and seven were neutral/undecided. Comments opposing regulation expressed the need for further study, a lack of information for adopting regulations, the adequacy of existing MMPA protections, the lack of evidence for population-level impact, concern over economic impact, and the effectiveness of voluntary guidelines. Comments favoring regulation expressed the inadequacy of existing guidelines to protect seals, scientific findings that vessel disturbance negatively affects seals, concern over cumulative impact of repeated disturbance, non-compliance with MMPA take provision, lack of effectiveness of voluntary guidelines, recommendations for enhanced enforcement and time-area closures/speed limits/approach distances. NMFS is taking these responses under consideration as it proceeds with its decision-making process.

Background and Need for Action

• Vessel-based tourism in Alaska has markedly increased since the 1980’s, including cruise ships, mid-size vessels, and small tour boats.

• Jansen et al. (2010) showed that seals × 500 m (1,640 ft) from ships flushed into the water with increasing frequency. Cruise ships caused seals to spend more time in the water.

• Alaska Native Organizations have expressed concern about vessel impacts to harbor seals and requested that NMFS exercise authority to pass regulations. Harbor seals are an important subsistence resource for Alaska Natives in many coastal communities and are used for food and traditional handicrafts.

• No specific measures exist to protect sensitive seal habitats in four of the five most heavily visited glacial fjords in AK: Tracy Arm, Endicott Arm, College Fjord, and Disenchantment Bay.

Challenges and Outstanding Questions

• What type of management will be enforceable?

• If an area is regulated, will that displace vessel traffic and viewing pressure into another glacial habitat for seals?

• What is the population level impact of disturbance to harbor seals in AK?

• What is the impact to an individual seal from repeated/cumulative boats of disturbance?

• How much will vessel-based tourism continue to grow in AK in the future?

• Will ice loss from tidewater glacier retreat make harbor seals more vulnerable to the effects of disturbance?

Acknowledgements

The authors thank the Alaska Native Harbor Seal Commission for their collaboration as NMFS co-management partner on the issue of disturbance to harbor seals.