Shorebird Harvest and Indigenous Knowledge in Alaska



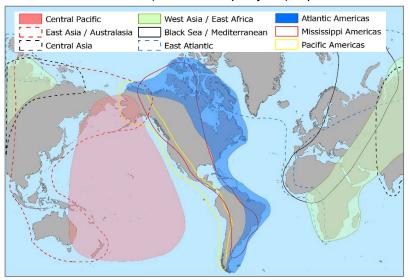




Background

Five migratory bird flyways converge in Alaska. As long-distance migrants, Alaska's shorebirds (sandpipers, plovers, and phalaropes) rely on healthy ecological conditions in multiple sites along their annual journeys. Because of deteriorating environmental conditions across the globe, shorebird populations have sharply declined, especially those in the East Asia-Australasia Flyway. Habitat loss at migration and wintering sites, climate and environmental changes, and hunting are involved. Seventeen of the 41 shorebird populations that regularly occur in Alaska are now considered imperiled or of high concern. This situation has increased the need for information and collaboration along shorebirds' migratory routes.

The shorebird harvest (4,676 birds per year) represents about 1% of the total subsistence harvest of



all birds in Alaska (about 400,000 birds per year). However, available harvest data on shorebirds were not readily available and little was known about the importance of shorebirds as subsistence resources for Alaska Native peoples.

Objectives

- To learn about the importance of shorebirds as food and cultural resources for Alaska's subsistence communities; and
- To summarize existing shorebird subsistence harvest data and produce Alaska-wide harvest estimates.

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A complete study report is available at https://www.fws.gov/alaska/ambcc/harvest.htm

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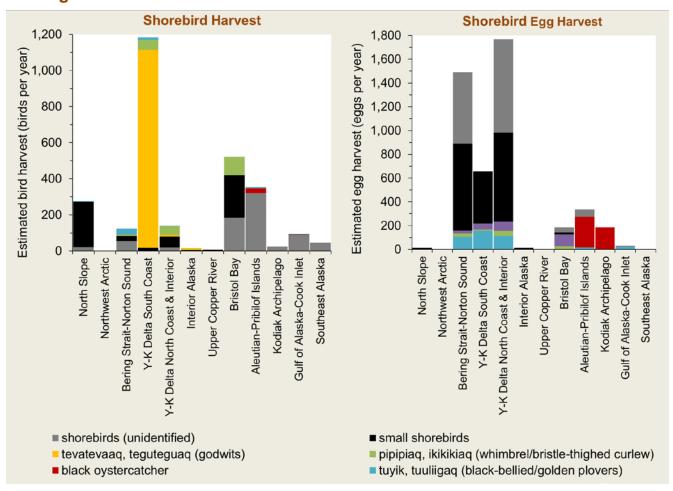




Methods

- Researchers conducted 72 indigenous knowledge interviews with 80 respondents in the Yukon-Kuskokwim Delta communities of Hooper Bay, Toksook Bay, Quinhagak, Platinum, and Bethel.
- The databases of the Harvest Assessment Program of the Alaska Migratory Bird Co-Management Council (AMBCC) and the Community Subsistence Information System of the ADF&G served as the primary sources of harvest data:
- Bosco and Marion Olson, Hooper Bay
- http://www.adfg.alaska.gov/index.cfm?adfg=subsistence.migratorybird_cmc
- http://www.adfg.alaska.gov/sb/CSIS/

Findings



"With any of the species we have, they don't need to be food sources, they contribute to the natural diversity we have here." Bethel Respondent

"I haven't hunted [shorebirds] in a while. I hardly see them around. Their numbers are going down and I don't want them to go extinct, so I wait [to hunt] until there are more." Hooper Bay Respondent

I grew up with Yup'ik and nowadays we speak mostly English to our grandchildren. It's hard for us to remember those long-time-ago words that we hardly use nowadays. Those birds that we hardly see, we hardly remember. My grandma has been gone for about 30 years; she was the one who taught me. Maybe we are the last ones that know how to speak the true Yup'ik and we're forgetting so much. That is too bad." Hooper Bay Respondent

Shorebird Yup'ik Names - Ceńair







sugg'erpak































Shorebirds in Yup'ik Culture

"When the birds leave in fall, I say to them: goodbye and come back again. My grandmother said the same thing. We don't say goodbye in Yup'ik; we say come back again." Quinhagak Respondent

Singing shorebirds and other birds are an integral and joyful part of the landscape. Nowadays, shorebirds and their eggs are harvested in relatively small numbers. Egg harvesting is an activity enjoyed by families and children; tuyik/tuuliigaq/plover eggs are highly prized. Adults harvest large shorebirds with shotguns for an occasional meal. Children harvest small and large shorebirds with BB guns as part of learning hunting skills.

Older generations associate shorebird harvest with the past when people were in closer contact with nature, and are concerned about loss of the traditional culture and language, which is reflected in changing harvesting practices.

There is a broad understanding that shorebirds are now less abundant than in the past. Reduced numbers of shorebirds and songbirds are of concern because birds reflect the quality of the environment: people, animals, and plants are connected.

Interviews in this study show how shorebirds represent connections with the Yup'ik traditional subsistence way of life, the older generations, the surrounding environment, and the Yup'ik language. These socio-cultural components are key for the well-being of subsistence communities. The research on shorebird names and grouping highlights an interest in learning and

Frances Hale and granddaughters, Hooper Bay





revitalizing Yup'ik names and creating opportunities for younger generations to interact with elders. Learning and using Yup'ik names for shorebirds, other animals, and plants is important for preservation of indigenous knowledge, language, and the culture associated with them.

How can we help shorebirds to rebound?

Because of human activities worldwide, shorebird numbers are quickly declining. Efforts are underway to identify and rank threats, but there are still many knowledge gaps. Meanwhile, shorebirds need help at the local, regional, and flyway scales.

- Seek opportunities to learn about shorebirds and their importance in Yup'ik culture. Ask your elders, the Yukon Delta (907-543-1037) and Togiak (907-842-8408) National Wildlife Refuges.
- Share knowledge and ideas on how to help and voice your concerns about shorebirds and other birds.
- Practice non-wasteful harvest and avoid disturbing shorebirds.
- Engage in bird harvest management and conservation:
 - Alaska Migratory Bird Co-Management Council (907-786-3499; https://www.fws.gov/alaska/ambcc/index.htm);
 - AVCP Waterfowl Conservation Committee (907-543-7471);
 - Audubon Alaska (907-276-7034; http://ak.audubon.org).
- Minimize ATV traffic on tundra and other sensitive habitats important for birds.
- Appreciate and enjoy shorebirds and other birds: they are food, beauty, music, and inua (spirit) connecting Yup'ik people to their lands, waters, and air as well as to other peoples and lands along the birds' migratory routes.

