Subsistence Harvest Records for Ice Seals in Alaska, 1960-2010. Mark Nelson, John Goodwin*, and Lori Quakenbush



Introduction

Ice seals (bearded, ringed, spotted and ribbon) are important to Alaska Native subsistence culture for food and oil. Seal skins are used for clothes, boats, and crafts.

Collecting harvest data is important to document community needs. For example, coastal communities in Prince William Sound benefited from having harvest data documenting their subsistence needs after the Exxon Valdez oil spill.

Seal harvest data are available from a bounty program that was operated prior to 1972. Since then, information about seal harvests have been collected through sporadic household surveys. Here we present records for a few communities to illustrate what is available, and we make recommendations for each region based on the information available and surveys currently being conducted.

Methods Used to Collect **Harvest Information**

Bounty data

Prior to 1972 a bounty (\$1-\$6 per seal nose) was placed on seals to decrease predation on commercial fish species. These data were later used to estimate the size of the seal harvest.

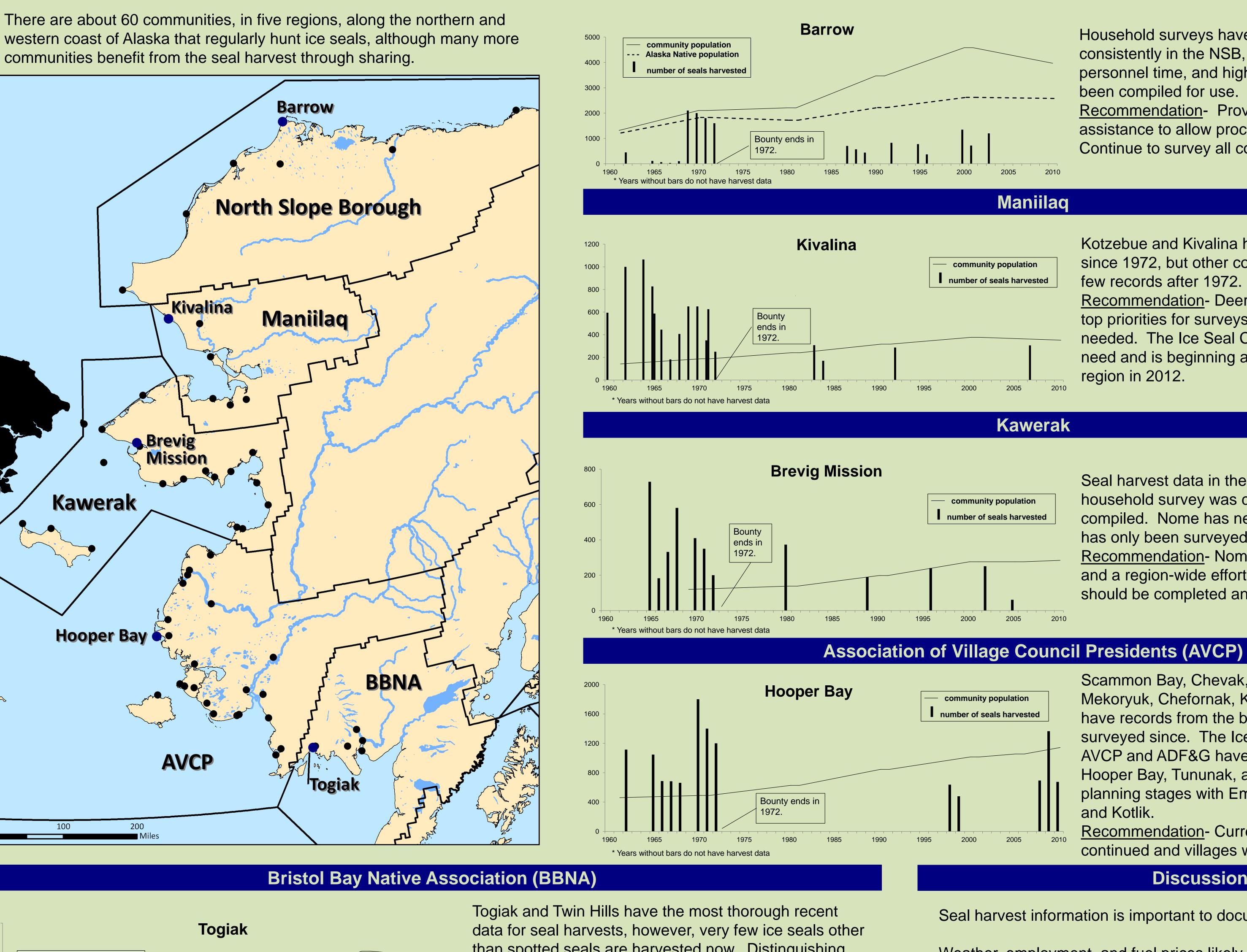
Household Survey data

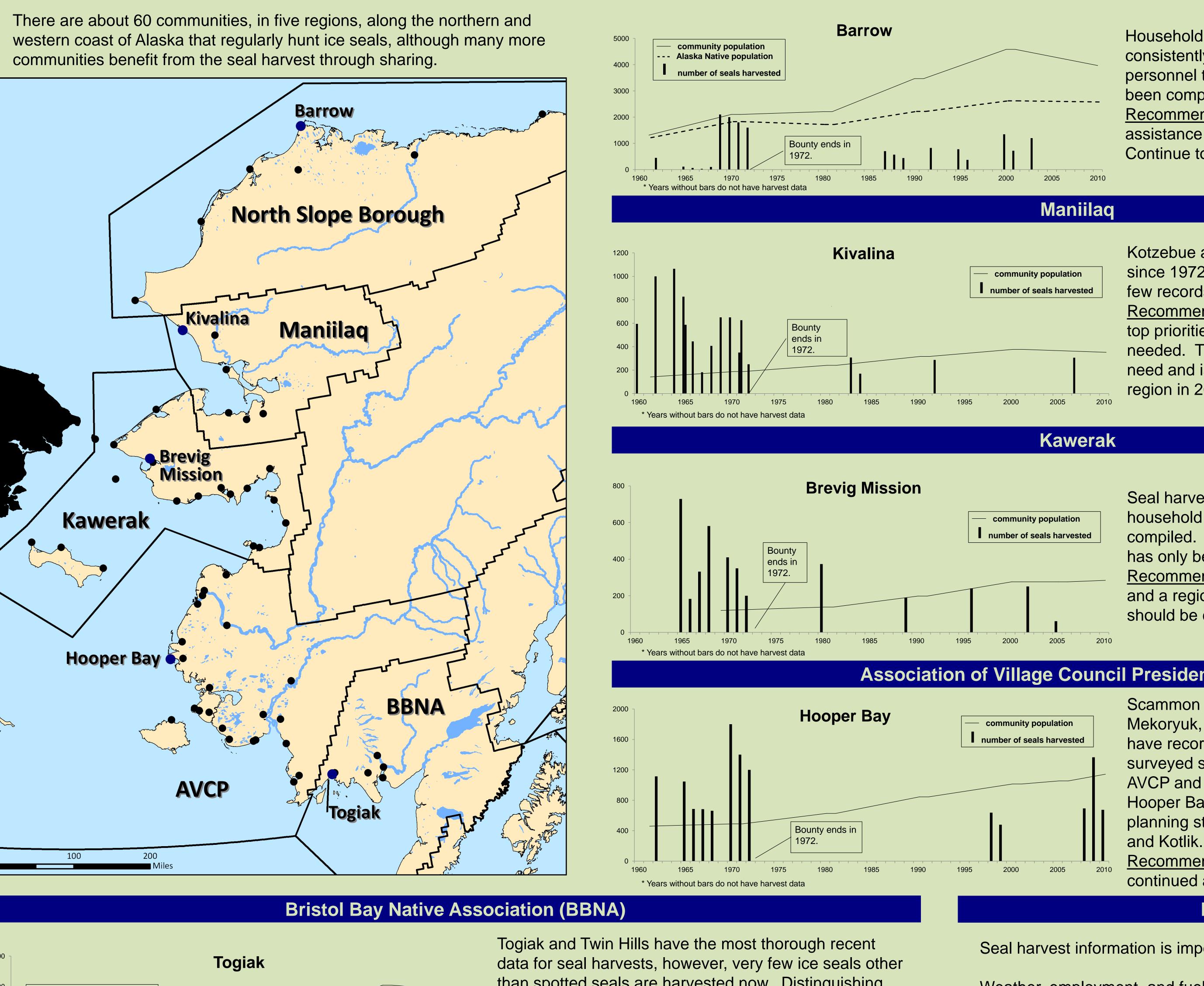
Since 1972, household surveys have been conducted sporadically to determine the number of seals harvested. Households were visited and asked how many of each species was harvested in the survey year.

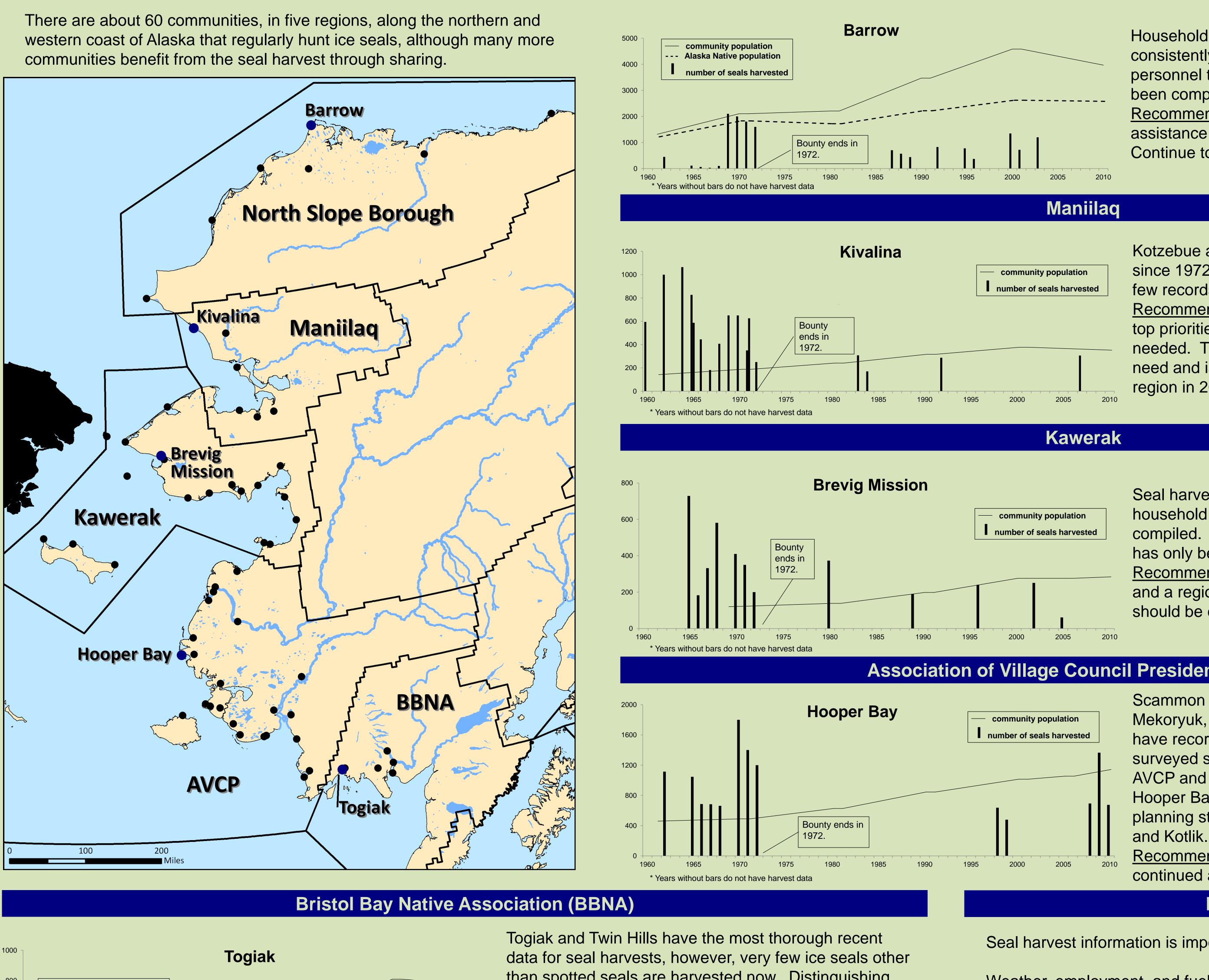
Due to limited funding there are few communities with records for multiple years.

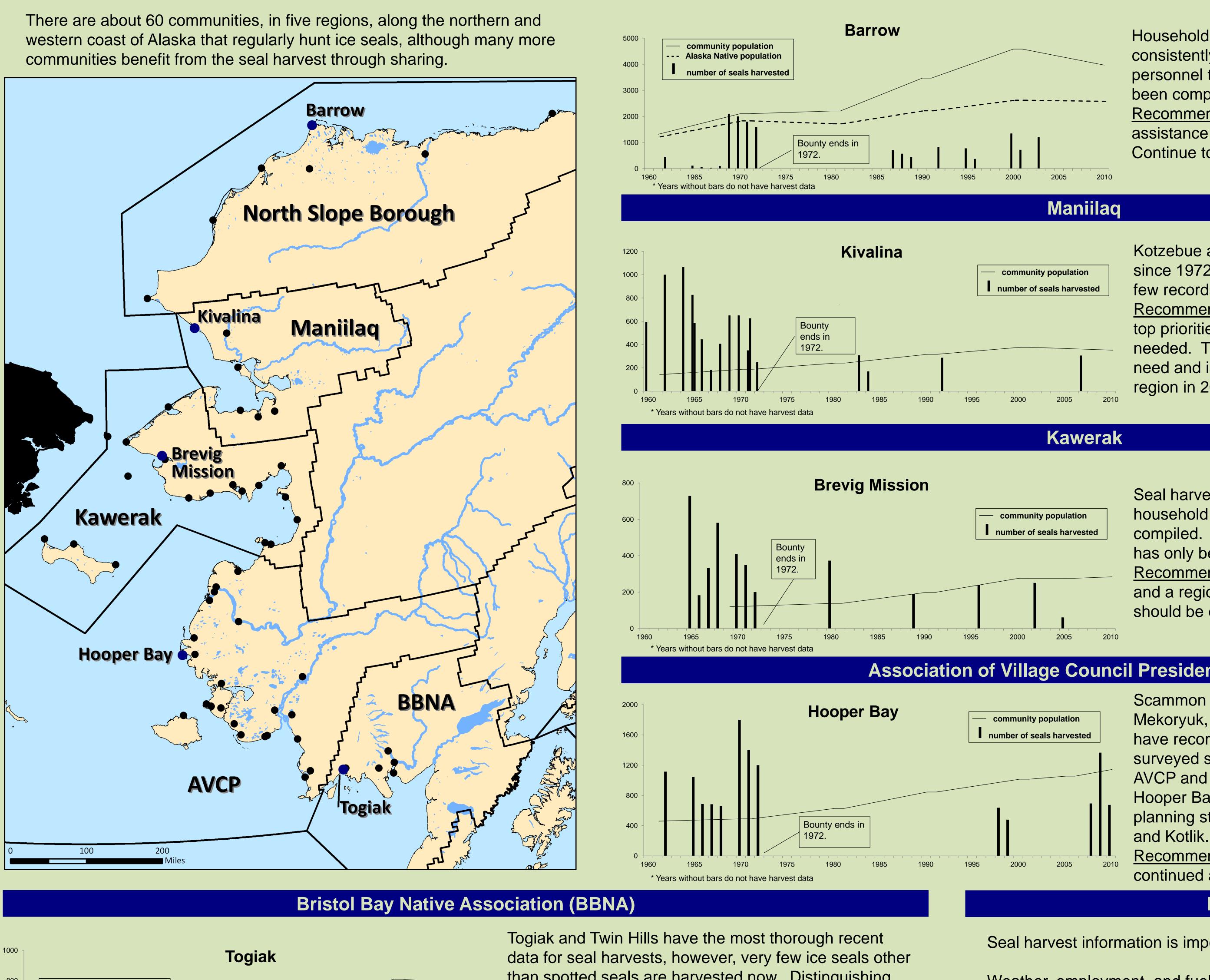


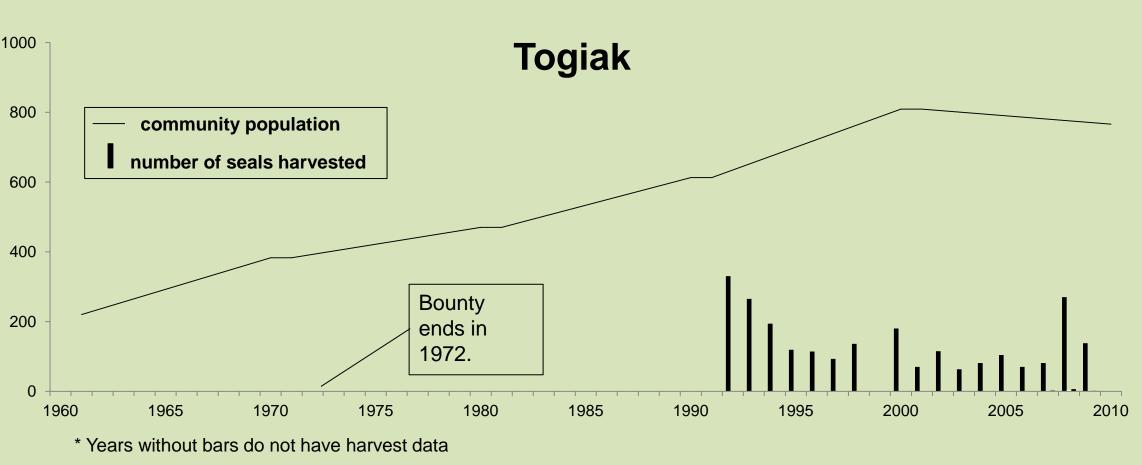
Bearded seal meat hung to dry, blubber will be made into seal oi











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Ice Seal Hunting Communities

than spotted seals are harvested now. Distinguishing between spotted and harbor seals has been difficult in this region; we have begun to collect samples for genetic testing to differentiate between these species. <u>Recommendation</u>- Collect Traditional Knowledge to determine when ice seals became less available and what factors may be responsible. Continue to collect biological samples for genetic testing.

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boat used to retrieve them.

North Slope Borough

Weather, employment, and fuel prices likely influence harvest levels. Regular data collection will help identify annual variability in harvest levels and the causes.

This information will help determine how many villages need to be surveyed, and how often, in order to estimate annual seal harvest by species.







Household surveys have been conducted fairly consistently in the NSB, however, due to funding, personnel time, and higher priorities the data have not been compiled for use.

<u>Recommendation</u>- Provide funding and other assistance to allow processing and reporting the data. Continue to survey all communities annually.

Kotzebue and Kivalina have been surveyed sporadically since 1972, but other communities in the region have very few records after 1972.

<u>Recommendation</u>- Deering, Kotzebue, and Kivalina are top priorities for surveys, but a region-wide effort is needed. The Ice Seal Committee has responded to this need and is beginning a harvest monitoring project in this

Seal harvest data in the Kawerak region is sparse. A household survey was conducted in 2002 but not compiled. Nome has never been surveyed and Diomede

has only been surveyed once. Recommendation- Nome and Diomede are top priorities

and a region-wide effort is needed. The 2002 survey should be completed and made available.

Scammon Bay, Chevak, Toksook Bay, Nightmute, Mekoryuk, Chefornak, Kipnuk, Eek, and Goodnews Bay have records from the bounty, but have not been surveyed since. The Ice Seal Committee working with AVCP and ADF&G have conducted household surveys in Hooper Bay, Tununak, and Quinghak and are in the planning stages with Emmonak, Kipnuk, Scammon Bay,

<u>Recommendation</u>- Current survey efforts should be continued and villages with bounty data should be added.

Discussion

Seal harvest information is important to document community needs.

