

# Subsistence Harvest Records for Ice Seals in Alaska, 1960-2010.

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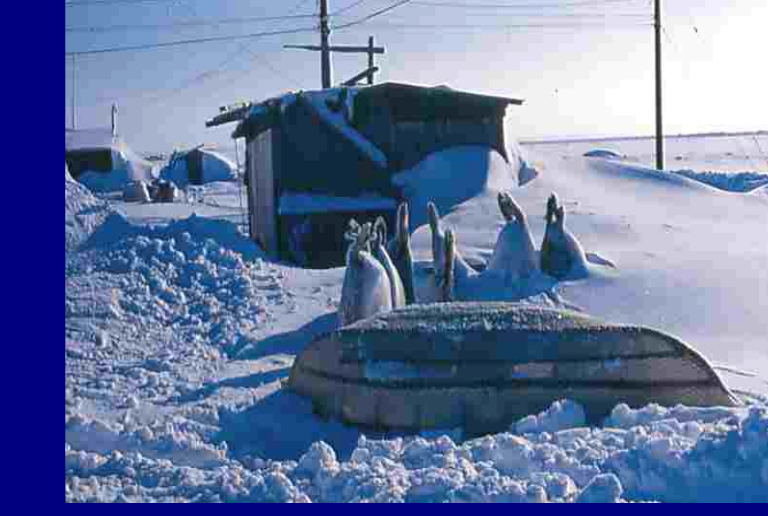
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Hunters bring bearded seal catch ashore.



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



Ringed seals and the skin boat used to retrieve them.



Bearded seal skins cover this umiak used for whaling.



Father and son with bearded and ringed seal harvest.

## Introduction

In Alaska, bearded (*Erignathus barbatus*), ringed (*Phoca hispida*), spotted (*P. largha*), and ribbon seals (*Histiophoca fasciata*) are called ice seals because of their association with sea ice. Ice seals are important to Alaska Native subsistence culture for food and oil; skins are used for clothes, boats, and crafts. Collecting harvest data is necessary to demonstrate community needs and will become more important if climate change or other factors reduce seal availability. Harvest data has been collected by a bounty system prior to 1972 and by household surveys since then. Records for a few communities are presented to illustrate what is available and what needs to be done. We have made recommendations for each region based on the information available and projects currently being conducted.

## Methods Used to Collect Harvest Information

### Bounty data

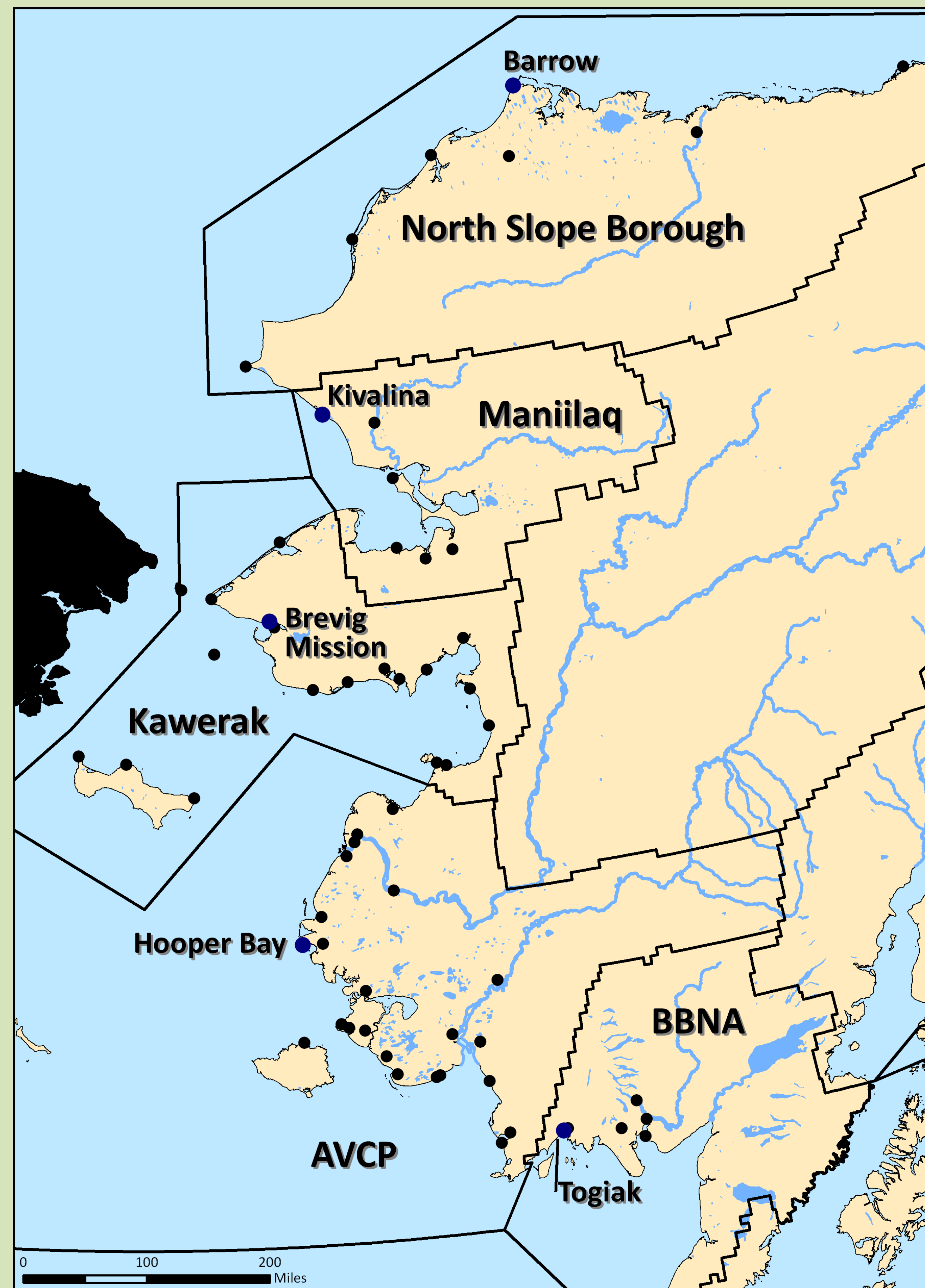
- Prior to 1972 a bounty was placed on seals first to decrease predation on commercial fish species and later to collect information on ice seal harvest.
- The quality of the bounty data was determined each year to be a good or poor representation of the actual seal harvest.

### Household Harvest Survey data

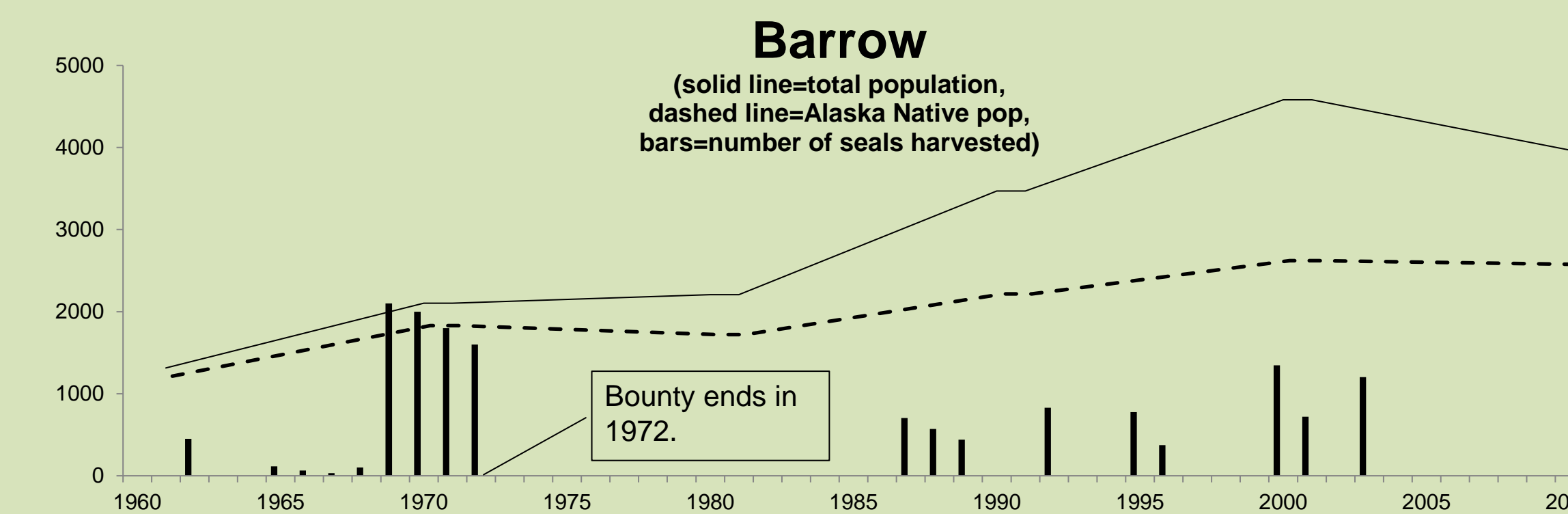
- A few household surveys occurred prior to 1972.
- Since 1972 household surveys have been conducted sporadically due to limited funding and though they collect good information in a single year, there are few communities with records for multiple years.

## Ice Seal Hunting Communities

There are about 60 communities, in five regions, along the northern and western coast of Alaska that regularly hunt ice seals, although many more communities benefit from the seal harvest.

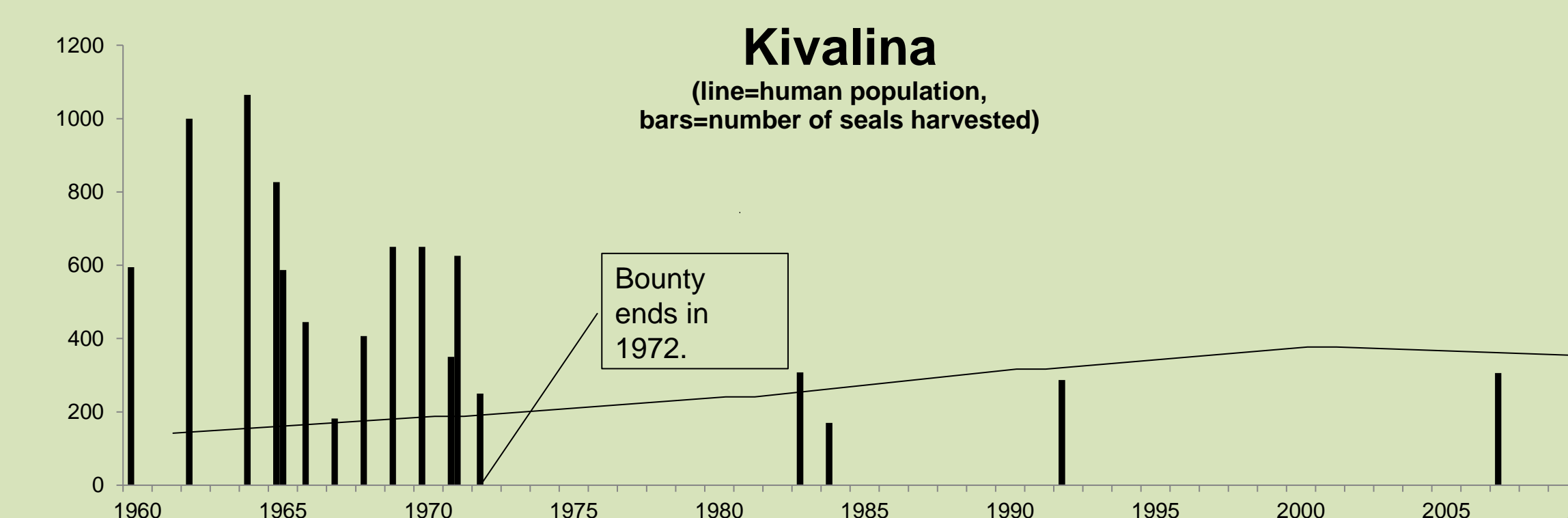


## North Slope Borough



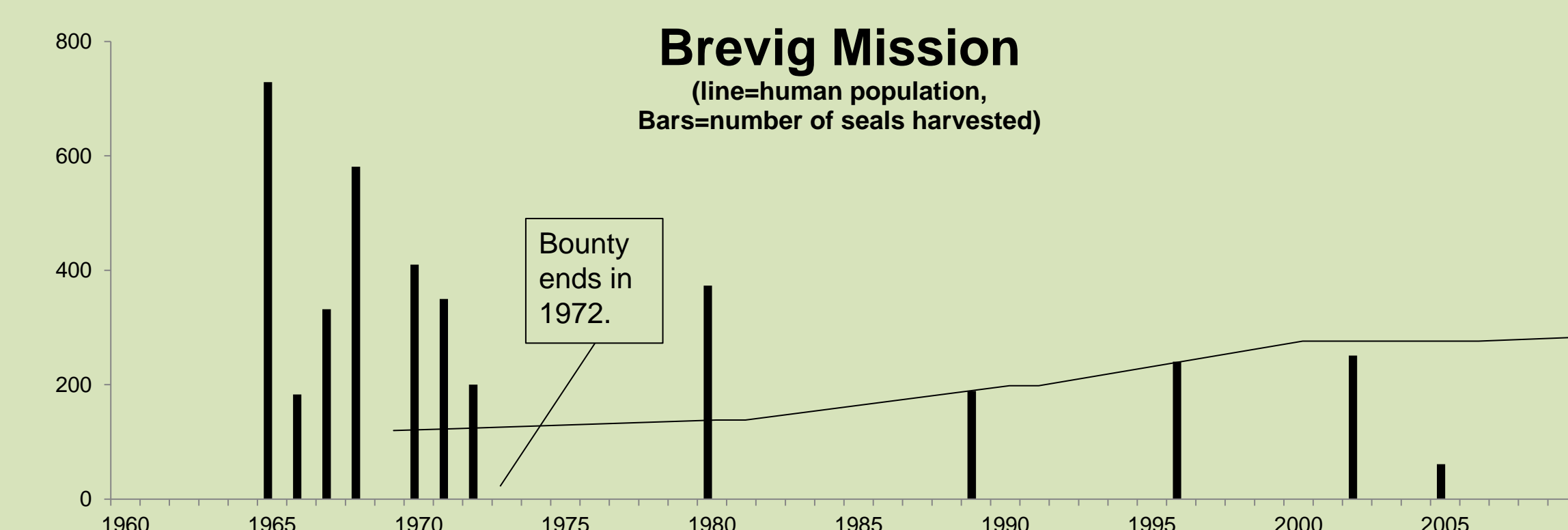
Household surveys have been conducted fairly consistently in the NSB, however due to funding, personnel time, and higher priorities the data have not been compiled for use. **Recommendation-** Provide funding and other assistance to allow processing and reporting the data. Continue to survey all communities annually.

## Maniilaq



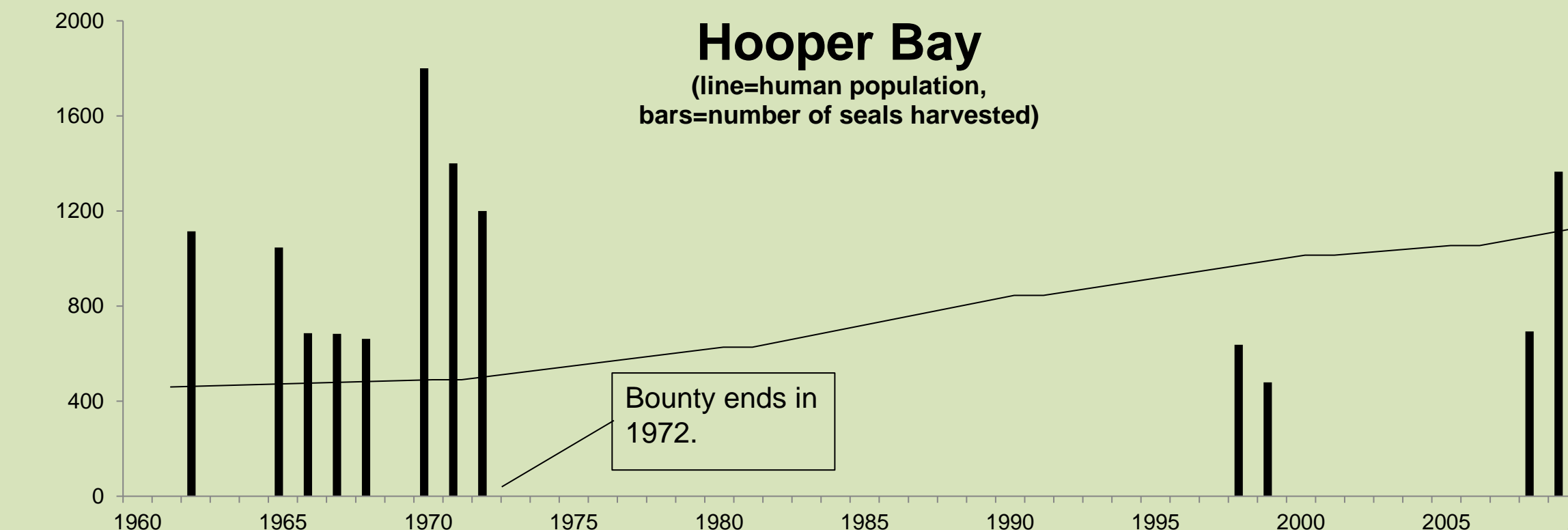
Kotzebue and Kivalina have been surveyed a few times since 1972, but other communities in the region have very few records after 1972. **Recommendation-** Deering, Kotzebue, and Kivalina are top priorities for surveys, but a region-wide effort is needed. The Ice Seal Committee has responded to this need and is beginning a harvest monitoring project in this region in 2012.

## Kawerak



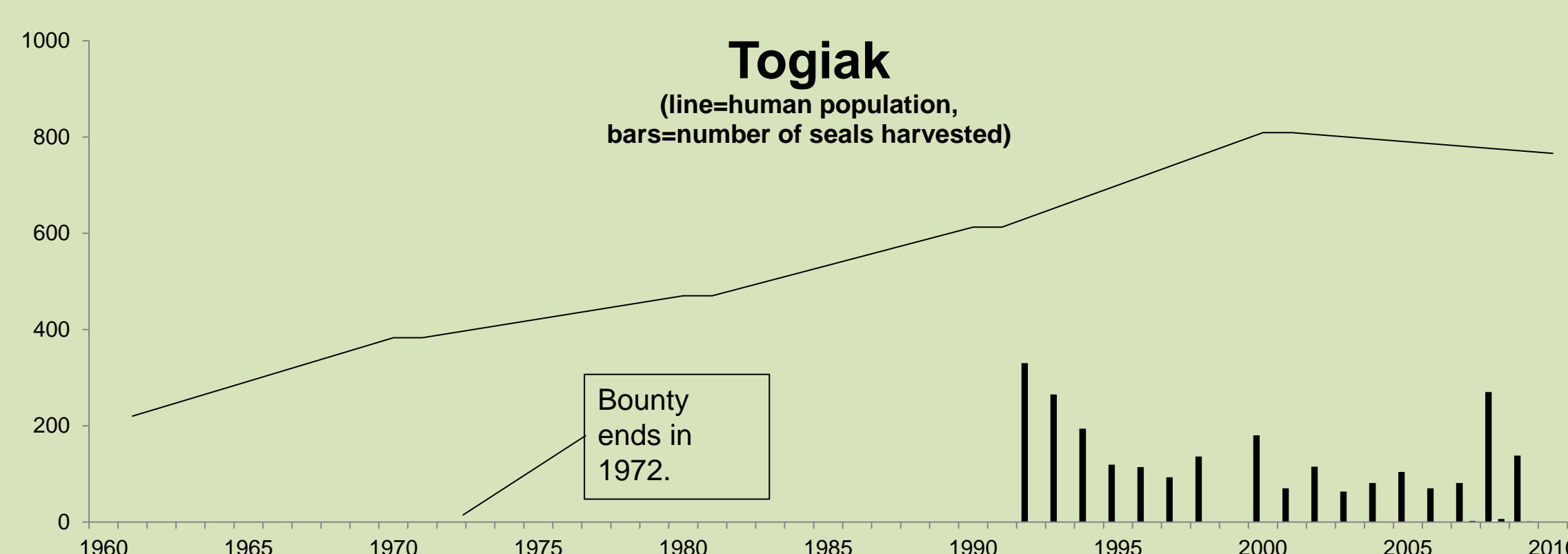
Seal harvest data in the Kawerak region is sparse. A household survey was conducted in 2002 but not compiled. Nome has never been surveyed and Diomedes has only been surveyed once. **Recommendation-** Nome and Diomedes are top priorities and a region-wide effort is needed. The 2002 survey should be completed and made available.

## Association of Village Council Presidents (AVCP)



Scammon Bay, Chevak, Toksook Bay, Nightmute, Mekoryuk, Cheforak, 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, and Kotlik. **Recommendation-** Current survey efforts should be continued and villages with bounty data should be added.

## Bristol Bay Native Association (BBNA)



Togiak and Twin Hills has the best recent data for seal harvests, however, very few ice seals other than spotted are harvested now. Distinguishing between spotted seals and harbor seals has always been a problem here and we have begun to collect samples for genetic testing to tell the species apart. **Recommendation-** 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.

## Conclusion

Seal harvest information is important to document community needs. Consistent harvest data collection will help identify the amount of annual variability in harvest levels and their causes. How does weather, employment, and the price of fuel affect harvest levels? Recording community needs and understanding harvest trends will ensure that this information will be available. Management decisions made without this information will be much more conservative and potentially harmful to the communities.

References available upon request.

