



# Akhiok

Harvest and Use of Wild Resources in Akhiok, Old Harbor, and Larsen Bay, 2018. Alaska Department of Fish and Game, Division of Subsistence Technical Paper Number 477. Published 2021. By Lauren A. Sill, Jacqueline M. Keating, and Gayle P. Neufeld

Russian Orthodox church in Akhiok. Photo by Lauren A. Sill, ADF&G

*"I just love living the subsistence lifestyle down here. I like helping people out, getting their stuff for them."* –Akhiok resident, 2019

## Study Overview

In February 2019, ADF&G researchers, in collaboration with local tribal governments, conducted comprehensive subsistence harvest surveys in Akhiok, Old Harbor, and Larsen Bay. The purpose of the surveys was to document information about subsistence harvest practices and areas used for harvesting wild foods, and overall use of subsistence resources in the participating communities. In addition, researchers spoke at length with several knowledgeable residents to learn more about how subsistence practices and subsistence resources have changed over time, and to document local and traditional knowledge of sockeye salmon in the Olga and Akalura lakes region of Kodiak Island. Project results will help ensure the sustainable management of local resources and continued provision of reasonable opportunity to harvest subsistence resources. The research was funded by the U.S. Fish & Wildlife Service, Office of Subsistence Management.

## Harvest Survey Results: Akhiok

In Akhiok, researchers interviewed 11 of the 14 permanent households in 2018 (79%). Every household interviewed used some kind of subsistence resource during 2018: all households (100%) used marine invertebrates and 91% used salmon, nonsalmon fish, large land mammals, and vegetation. More than one-half of households used birds and eggs (73%) and marine mammals (55%), and the fewest households used small land mammals (9%). The 10 resources used by the most households are shown in Table 1. These are similar to, but not the same as, the resources with the most harvest weight. For example, chum salmon was one of the most harvested resources (6% of total harvest weight), but it was not among the resources used by the most households. Conversely, bidarkis composed a small percentage of the overall harvest (2%), but were used by 73% of community households.

The majority of the 2018 harvest was salmon; more than 2,800 salmon were harvested, equaling 11,437 lb usable weight, or 237 lb per person (Figure 1). Nonsalmon fish and marine invertebrates were the next most harvested resource categories, followed by land mammals. Making up the smallest proportions of the harvest by weight were vegetation, marine mammals, and birds and eggs.

Table 1.–Top wild resources used and harvested, Akhiok, 2018.

Top used resources	Percentage of households using	Rank <sup>a</sup>	Top harvested resources	Estimated total harvest (lb)
Sockeye salmon	90.9%	1. – 1.	Sockeye salmon	6,817.2
Pacific halibut	90.9%	1. – 2.	Coho salmon	2,048.2
Deer	90.9%	1. – 3.	Pacific halibut	1,713.6
Coho salmon	81.8%	4. – 4.	Deer	1,539.5
Pink salmon	81.8%	4. – 5.	Pink salmon	1,404.3
Butter clams	81.8%	4. – 6.	Chum salmon	1,029.4
Red king crab	81.8%	4. – 7.	Butter clams	559.4
Sea urchin	81.8%	4. – 8.	Harbor seal	427.6
Salmonberry	81.8%	4. – 9.	Salmonberry	384.4
Black (small) chitons	72.7%	10. – 10.	Black (small) chitons	361.5

Source ADF&G Division of Subsistence household surveys, 2019.

a. Resources used by the same percentage of households share the highest rank value instead of having sequential rank values.

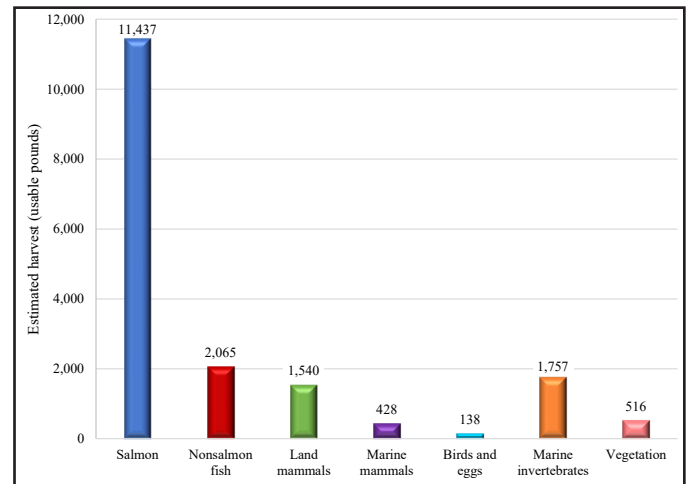


Figure 1.–Estimated pounds harvested by category, Akhiok, 2018.

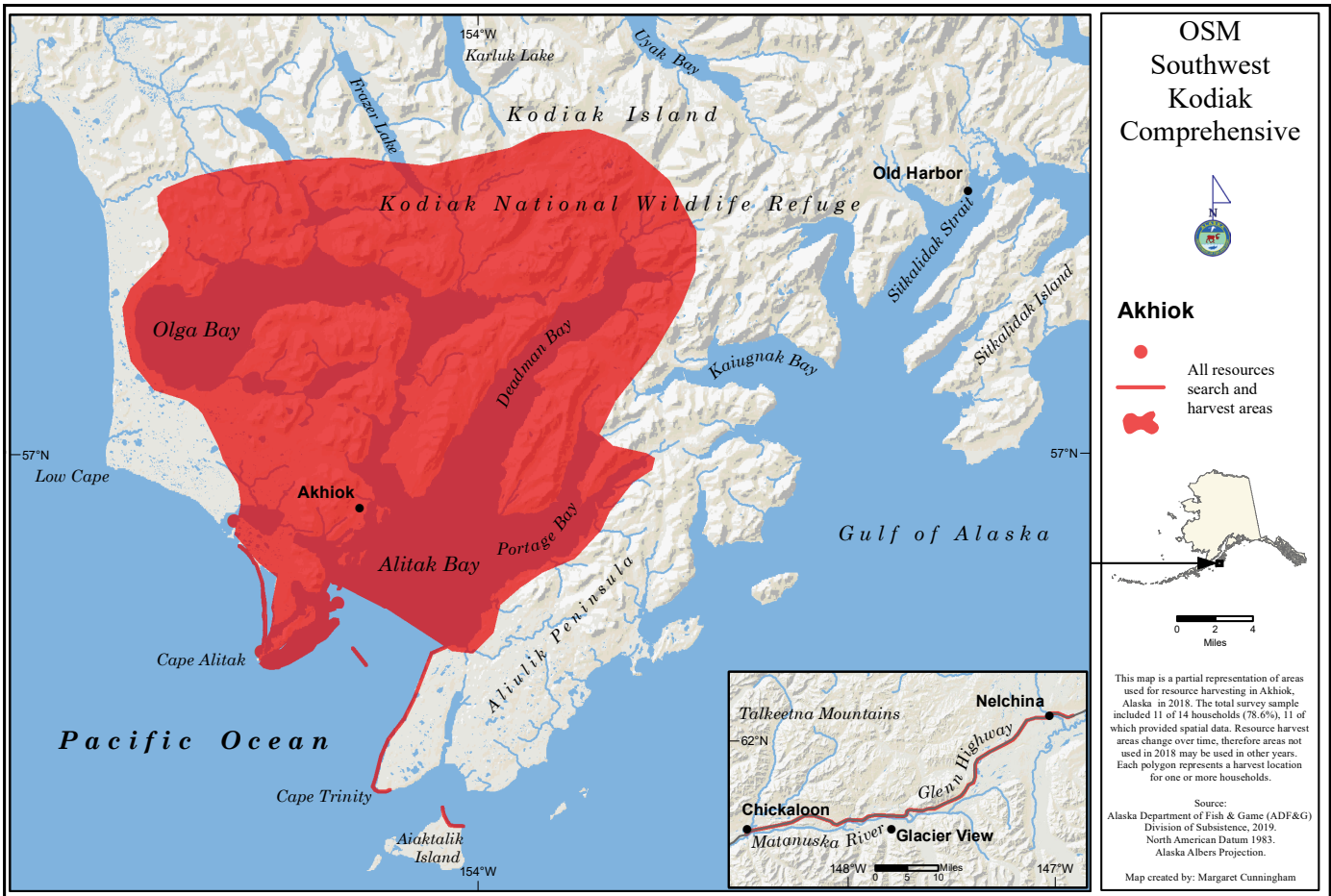


Figure 2.—Wild resources search areas and harvest locations, Akhiok, 2018.

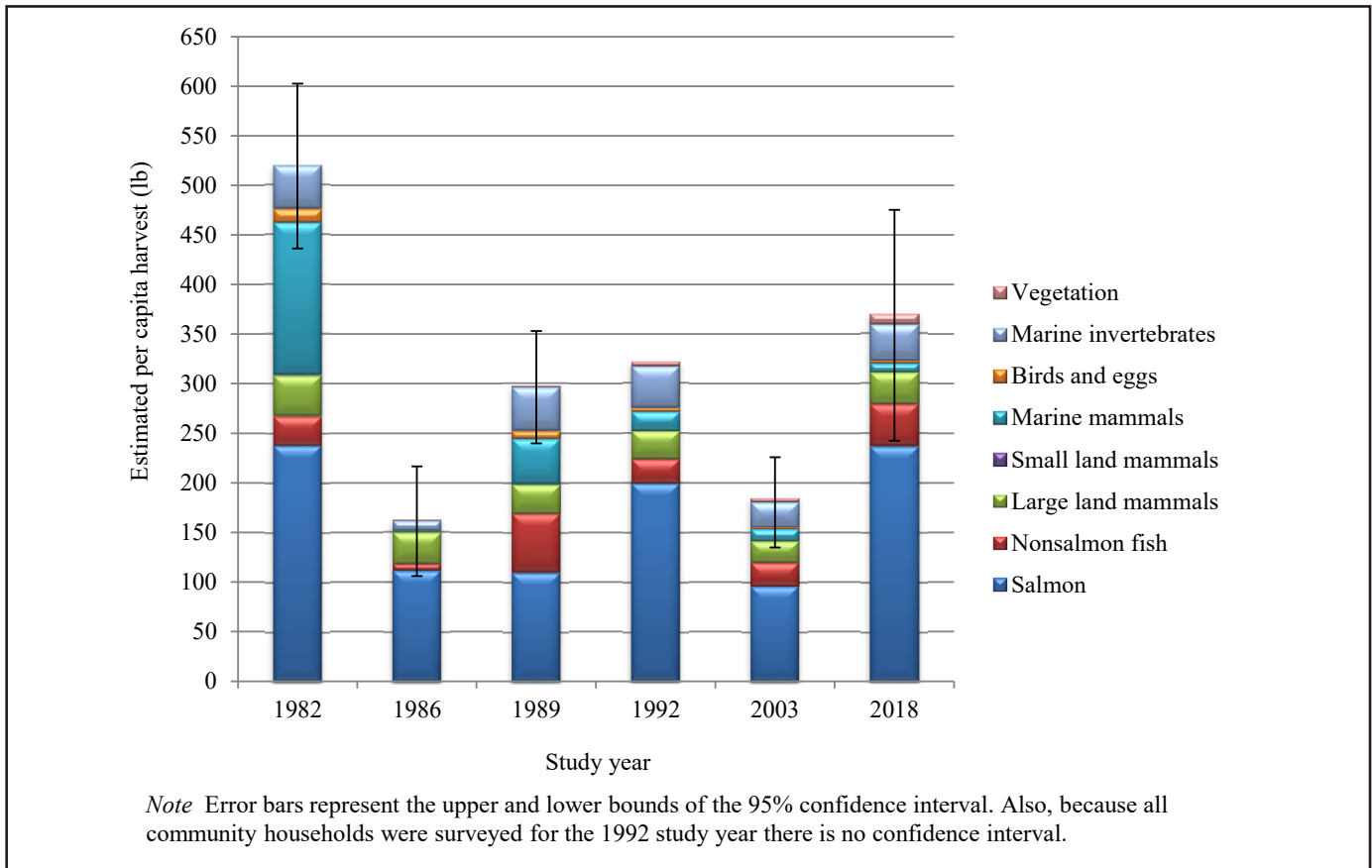


Figure 3.—Historical estimated harvests, by category in pounds per capita, Akhiok, 1982, 1986, 1989, 1992, 2003, and 2018.

Most of the documented subsistence harvesting in 2018, with the exception of hunting in the Matanuska–Susitna Valley, occurred within a 24-mile radius of the community (Figure 2). Because researchers only asked about activities in 2018 and did not interview every household during this project, the map likely does not show all of the areas that are important for subsistence.

ADF&G researchers have conducted similar studies estimating subsistence harvests since 1982 (Figure 3). While overall harvest amounts have changed, the composition of the subsistence harvest has remained relatively constant, with salmon composing the majority of the harvest in each study year. One noticeable change has been a decline in marine mammal harvests since 1982.

## Key Respondent Interviews

The harvest survey captured in-depth information about harvesting activities during 2018. It provided a snapshot of community life and subsistence activities, but could not provide the necessary context for understanding all the results. Through key respondent interviews, residents created a broader picture of life in the community and the important role subsistence activities play. This qualitative information also provided a temporal component that was unavailable through the harvest surveys. Researchers spoke with four individuals in Akhiok, six in Old Harbor, and one in Larsen Bay. Overall, several themes emerged during these interviews, focused on:

- The importance of salmon and subsistence;
- Perceptions of abundance of subsistence resources;
- Changes in quality of subsistence resources;
- Access to subsistence resources;

- Local commercial fishing effects;
- ADF&G management practices;
- Observations of environmental patterns and changes;
- Salmon harvest and processing methods;
- Sharing of resources;
- Characteristics of rural life;
- Subsistence practices and culture;
- Changes in community composition; and
- Habitat changes and use of Olga and Akalura lakes.

## Acknowledgments

Division of Subsistence staff acknowledge all those who helped make this research possible. In particular, thanks are extended to the Native Village of Akhiok, Alutiiq Tribe of Old Harbor, and Native Village of Larsen Bay for approving this research. In Old Harbor and Akhiok, the tribal staff allowed researchers the use of their buildings as the center of our research efforts, for which we are very grateful. In Larsen Bay, we appreciate the use of the clinic apartment for lodging and fieldwork. Without Frieda Panamaroff in Larsen Bay, Jeanetta Rastopsoff in Akhiok, and Katherine Alexanderoff and Lepani Nadore in Old Harbor, our survey efforts would have been nowhere near as successful as they were. Finally, we would like to especially acknowledge all the people in these communities who opened their homes to us, talked for hours about subsistence and community life, took us on tours of the town, participated in the survey, and made us feel welcome. We hope that this summary and information in the report will be useful to the residents of these communities.

*“My husband and I go out and do a lot of subsistence for the community for people that don’t have boats or ways of getting subsistence food. They’ll usually pitch in and either help buy gas or something just to get us out there to go and get it but we provide the community with the fish, salmon, clams, and octopus.” –Akhiok resident, 2019*

## Subsistence Harvests on Kodiak Island

During this study, researchers documented subsistence harvests and uses in three Kodiak Island communities in 2018: Akhiok, Old Harbor, and Larsen Bay. Most households in all the communities used subsistence resources during the study year, and nearly all households hunted, fished, or gathered wild resources (Figure 4).

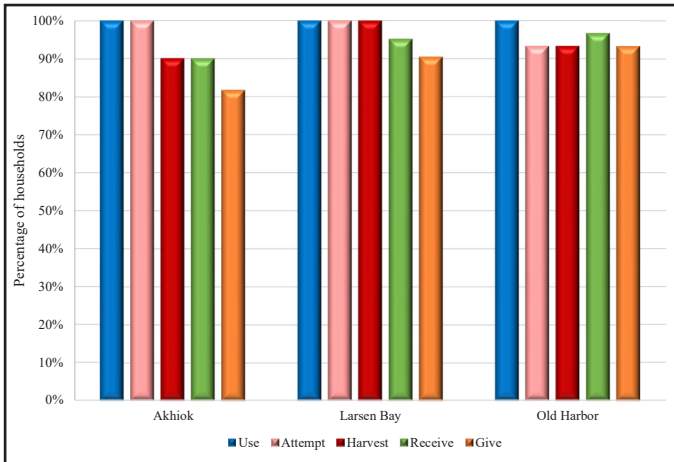


Figure 4.—Estimated household participation, all communities, 2018.

Figure 5 shows the harvests of wild resources in each study community as estimated in pounds usable weight per person. Harvests ranged from 252 lb per person in Larsen Bay to 578 lb per person in Old Harbor. Sharing of subsistence resources was widespread: in Akhiok, 82% of households gave away a subsistence resource, as did 91% and 93% of households in Larsen Bay and Old Harbor. More than 90% of households received subsistence resources during the study year. Salmon composed the largest part of the overall estimated harvest, but the composition of the salmon harvest varied among the three communities.

Salmon harvests in Larsen Bay and Akhiok were dominated by sockeye salmon (73% of the total harvest in Larsen Bay, 60% in Akhiok), followed by coho salmon at 24% and 18% of harvests, respectively (Figure 6). The converse was true in Old Harbor: sockeye salmon composed only 26% of the harvest while coho salmon composed 48%. Chum and pink salmon were also important components of the harvest in Akhiok and Old Harbor, but few Chinook salmon were harvested in any community.

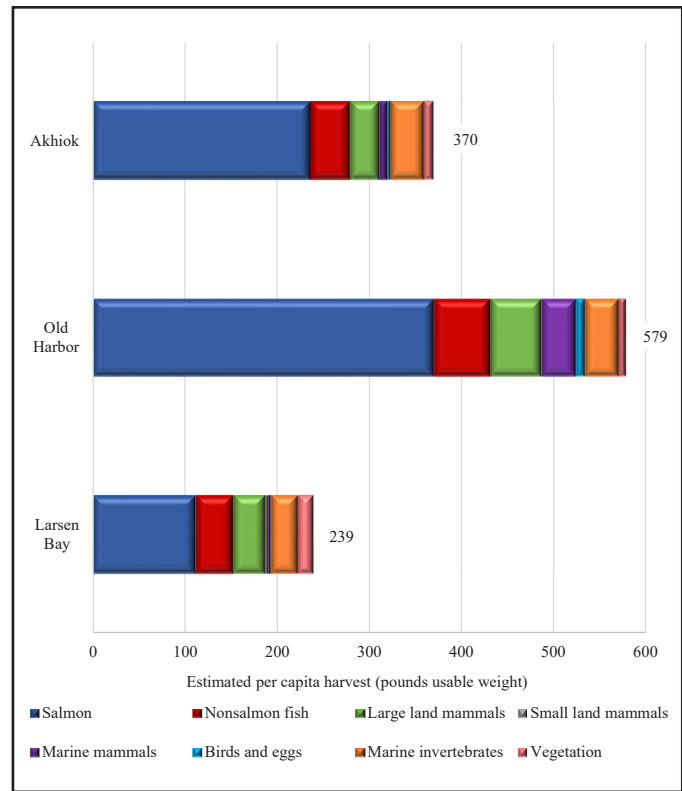


Figure 5.—Estimated per capita harvest, by resource category, all communities, 2018.

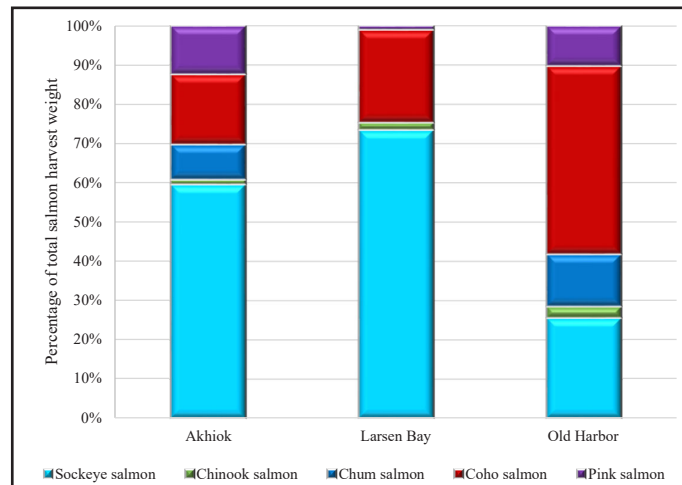


Figure 6.—Salmon harvest composition, all communities, 2018.

### Source for this information

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