

## ***ANNUAL REPORT STUDY NO. FIS 07-151***

### **PATTERNS AND TRENDS IN SUBSISTENCE FISH HARVESTS, NORTHWEST ALASKA, 2009–2010 ANNUAL REPORT**

#### **ABSTRACT**

This annual report summarizes the progress of the third year of a 3-year project to explore subsistence fishery harvest patterns and trends in 6 Northwest Alaska communities: Ambler, Kiana, Kobuk, Noatak, Noorvik, and Shungnak. Research efforts in 2009–2010 focused on analyzing responses from 92 household interviews, and on merging interview data with 11 years of household survey data (1994–2004) to create a balanced panel dataset of reported harvests and factors reported as affecting harvests. As a group, the 92 interviewed households reported an average harvest of 418 lb of salmon *Oncorhynchus* and sheefish *Stenodus leucichthys* each year from 1994 through 2004. Reported harvests showed no significant increasing or decreasing trend, either for the communities as a whole or for the interviewed households. Environmental factors, such as “unusual water levels” or “unusual weather,” were most frequently named as affecting fishing, and accounted for 34% of reported factors. Personal factors, such as health and age, accounted for 21%, while financial factors, such as employment and rising costs, accounted for 19% of reported factors. Within the stable overall harvest pattern, it was expected that 1) some households’ harvests would be decreasing while other households’ harvests would be increasing, 2) interviewed households would be able to identify factors contributing to these changes, and 3) factors contributing to changing patterns and trends in harvests could be identified. Researchers have not found such associations, at least in preliminary analyses for all fish harvests combined; however, associations between factors and harvests may emerge for individual species. Observed trends in community harvests have been at the species level (i.e., salmon decreasing, sheefish increasing), not for all species combined. The project is now in the data analysis and writing phases, with a final report due December 31, 2010.

**Key words:** subsistence fishing, chum salmon, *Oncorhynchus keta*, sheefish, *Stenodus leucichthys*, whitefish, *Coregonus*, Dolly Varden, *Salvelinus malma*, Ambler, Kiana, Kobuk, Noatak, Noorvik, Shungnak, Kotzebue District, Cape Krusenstern National Monument, Kobuk Valley National Park, Kotzebue Sound, Noatak National Preserve.

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