Harvest and Biological Characteristics of the Subsistence Fishery in Arctic Village, Alaska, 2001-2003

The subsistence fishery in Arctic Village during 2001-2003 was described from post season user interviews and biological sampling. An educational component to build village capacity for similar projects was also conducted during this time. Interviews and sampling were conducted by local technicians during the open water and ice cover seasons over the two years. Ten species of fish were harvested. An estimated 10,944 fish, weighing 11,230 kg were harvested with humpback whitefish comprising the largest number and weight of all species harvested. Annual harvests for all species except whitefish were similar to those reported from 1973, but the harvest of whitefish increased 32-85% during 2001-2003. Gill nets harvested almost ten times the amount harvested by all the other methods combined. The highest number and amount of fish harvested with all gear combined occurred during the ice cover season of the second year. The Chandalar River and Old John Lake provided the largest numbers of fish harvested. Most households considered fishing quality to be good regardless of the location or period, and fishing frequency was consistent during the study. More households received fish than gave away fish. Despite the difficulties in accurately recalling the number and species of fish that were harvested several months prior to the interview, results from the interviews were consistent with the species and their distributions from the literature. Broad whitefish, Arctic grayling, lake trout, and northern pike were sampled for length and age, but small samples sizes prevented further interpretation. The local technicians assisted with educational outreach at elementary school classes. A Gwich'in/English fish identification chart, a poster and a fact sheet describing the study were distributed to the village council, the school, and individual community members. Presentations by the local technicians were conducted during village meetings, coordination meetings, and Traditional Gatherings. Harvest surveys and educational outreach for the village should be conducted on a regular basis to identify trends and strengthen rapport with the community.

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