

## Traditional Ecological Knowledge of Tlingit People Concerning the Sockeye Salmon Fishery of the Dry Bay Area

Judith Ramos<sup>1</sup>, Rachel Mason<sup>2</sup>

---

<sup>1</sup> Yakutat Tlingit Tribe, P.O. Box 418, Yakutat, Alaska 99689

<sup>2</sup> National Park Service, 240 W. 5<sup>th</sup> Ave., Anchorage, AK 99501

### Abstract

The Yakutat Tlingit Tribe and the National Park Service have collaborated to document Tlingit traditional ecological knowledge about salmon ecology and fisheries management in the Dry Bay/Alsek River Delta. Historically Northwest Coast Peoples including Tlingit have managed fishing and fish populations. Each Tlingit clan or house managed and controlled specific rivers or in larger river's sections of rivers in southeast Alaska. Traditional beliefs about reincarnation of animal spirits and a kinship with animals contributed to how Tlingit traditionally treated and handled salmon and animals. In recent decades, sockeye salmon have dramatically declined in the Dry Bay/Alsek area. It is hoped that this study, by showing how the Tlingits historically understood and managed sockeye habitat, population and harvest in the Dry Bay/Alsek area, will aid in developing a restoration plan.

### Introduction

The East Alsek River in Dry Bay has undergone a drastic decline in sockeye salmon return, affecting an important subsistence resource. A four-part multidisciplinary study combining western science and Traditional Ecological Knowledge (TEK) was designed to understand this decline and potentially remedy. This study was the first part of a larger four-part study design and gathered TEK from the Yakutat – Dry Bay area (northern Southeast Alaska) on traditional practices utilized by the Tlingit clans of Gunaxoo (Dry Bay).

### Methods

Phase I was development of an Annotated Bibliography of existing literature concerning Dry Bay history, culture, and ecology, with particular focus on: traditional Tlingit practices; knowledge of salmon ecology; stream management strategies; general traditional knowledge about area fisheries; and the role of clan social organization in the management of access and use of resources. Literature search and bibliographic product included published and gray literature sources. Major documents consulted for this study include: Dr. Frederica de Laguna's 1964 and 1972 published work on Yakutat; Yakutat Tlingit Tribes 2002 Household Harvest Survey, John P. Harrington's notes (1939-40), Land of the Ocean Mist by Francis Caldwell 1986, Kalervo Oberg's "The Social Economy of the Tlingit Indians", R.L. Olson's "Social Structure and Social Life of the Tlingits in Alaska and Haa Aani by Goldschmidt and Haas. Phase II was development of interview questions, preparation of a list of potential interviewees, arrangement of interview times, location's and parameters. Phase III was conducting interviews and mapping and interviews with Yakutat Elders and tribal members. Eleven elders were interviewed for this study. National Park Service helped with the interviewing and transcribing. Transcripts were reviewed and edited by the elders. Each elder holds the copyright to his or her interviews. Phase IV was report preparation by principal investigator, report review by collaborators, and acceptance of the final draft.

### Results

Dry Bay, Alaska is located along one of the most dynamic regions of the Alaska coast. Dry Bay is the delta of the Alsek River, which flows 240 miles from the Yukon to Dry Bay. At least twice in recent history the Lowell Glacier dammed Alsek River and formed Lake Alsek, which was about 200 m deep and over 100

## Glacier Bay Science Symposium

---

km long. This area was settled first by the Athabaskan Indians, then by the Tlingit. Trading routes led from the Dry Bay region overland to the Yukon and Klukwan, Alaska area.

Salmon was a major resource utilized by the Yakutat Tlingit. From late spring to Fall-time, Tlingits went to various streams and rivers to harvest salmon. Traditional beliefs about the salmon spirits and human's relationship to their environment governed how Tlingits related to and treated salmon. Only by following certain customs and rituals would a hunter or fisherman be allowed to harvest animals. The "Salmon Boy" story taught Tlingits the proper behavior toward salmon and about salmon behavior.

Traditionally, each clan "owned" and managed specific areas for hunting, fishing and berry areas. It was the clan leader (chief) along with his council, that determined when fishing was opened, where the traps were to be placed, who's allowed to harvest and how much they are allowed to harvest. If a man was caught violating any of the rules, his hunting equipment was taken away from his and sometimes his spear was broken up. Yakutat elder's related how Chiefs used to monitor the salmon, open and close fishing on the Situk River using a white flag and direct the cleaning of the river.

### Discussion and Conclusions

Traditional Tlingit Knowledge of Salmon in Yakutat and Southeast Alaska is based on thousands of years of collective observation and interaction with salmon. Traditional methods of management based on local control by clan, fishing methods and allocation of resources is different from contemporary methods were fishing sites are now privately owned, traditional fishing method are not used and allocation is by permit. The state is now divided into regulatory areas instead of clan territories, local state fish and game biologists monitor salmon runs instead of local clan leaders. Opening and closing of fishing based on monitoring of salmons escarpment is similar to traditional management.

### Acknowledgements

The elders for Yakutat for their time and knowledge, the Yakutat Tlingit Tribe Council, Catherine Moncrieff (NPS intern) for help with the interviewing and transcribing; Ken Pratt and Rita Miraslia (BIA) for Historic Sites information; John Johnson (Chugach) for Controller Bay information; Dr. Frederica de Laguna for her letter and "Under Mt. St. Elias"; Ian Colvert for the maps and Bob Schroeder and the Southeast Regional Subsistence Committee for their support. The Office of Subsistence Management, Fishery Information Services contributed \$25,00 for the cost of the project.

### References and Notes

- Abraham, Olaf. 1973. Haa Kusteeyee Aya, Yakutat History, Translated by Elaine Abraham. Sheldon Jackson College, Sitka, Alaska.
- Ames, Kenneth M. and Herbert Maschner. 1999. Peoples of the Northwest Coast, Their Archaeology and Prehistory. Thames and Hudson, New York.
- Barclay, David. 1998. Holocene Glacial History of Yakutat Bay and Russell Fiord, Southern Alaska. Ph. D. Dissertation, State University of New York at Buffalo, Buffalo, NY.
- Caldwell, Francis E. 1986. Land of the Ocean Mist, The Wild Ocean Coast West of Glacier Bay. Alaska Northwest Publishing Company, Alaska.
- Careless, Rick. 5/15/2000. The Lost Coast. Anchorage Daily News.
- Champagne-Aishihik Indian Band and Sha-Tan Tours. 1988. From Trail to Highway. Morriss Printing Company Ltd., Victoria, British Columbia.
- Chatham Ranger District. 1963. Salmon Habitat Reconnaissance. U.S. Forest Service, Yakutat, Alaska.
- Claude, JJ & VN Rampton. 1982. Neoglacial Lake Alsek. Canadian Journal of Science. <http://cgrg.geog.uvic.ca/ClagueNeglacialLowell1982.html>
- Davis, Stanley. 1996. The Archaeology of The Yakutat Foreland: A Socioecological View, Volume I and II. Ph. D. thesis, Texas A&M University.
- Davis, Stanley and Karen Iwamoto and Michael Shepard. Lost River Fish Trap; Yakutat Alaska, A Recovery Plan. National Forest Service, Chatham Area, Juneau, Ak.

## Glacier Bay Science Symposium

---

- Davis, T. Neil. 7/3/79. Sandblows. <http://www.gi.alaska.edu/ScienceForum/ASF3/323.html> Alaska Science Forum, Article #323.
- De Laguna, Frederica. 1972. Under Mount St. Elias: The History and Culture of the Yakutat Tlingit: Smithsonian Institution Press. Washington, D.C.
- De Laguna, Frederica; Francis A. Riddell; Donald F. McGeein; Kenneth S. Lane & J. Arthur Freed, Carolyn Osborne. 1964. Archeology of the Yakutat Bay Area, Alaska. U.S. Government Printing Office, Washington, D.C.
- Dauenhauer, Nora Marks and Richard Dauenhauer, ed. 1987. Haa Shuka, Our Ancestors, Tlingit Oral Narratives. University of Washington Press, Seattle.
- Emmons, George Thornton. 1991. The Tlingit Indians. American Museum of Natural History, New York.
- Gedney, Larry. 11/27/86. The Southeast Flood of 1950, Article #792. Alaska Science Forum. <http://www.gi.alaska.edu/ScienceForum/ASF7/792.html>
- Goldschmidt, Walter and Theodore Haas. 1946 and 1998. Possessory Rights of the Native of Southeast Alaska. Reprinted as Haa Aani Our Land, Tlingit and Haida Land Rights and Use. Sealaska Heritage Foundation, Juneau.
- Grinnell, George Bird. Reprint 1995. Alaska 1899, Essays from the Harriman Expedition. University of Washington Press, Seattle.
- Harrington, John P. 1939-40. Unpublished Notes. National Anthropological Archives. Smithsonian Institution, Washington, D.C.
- Hewes, Gordon. 1947. Aboriginal use of Fishery Resources in Northwestern North America. Unpublished Ph.D. Thesis, U. of California, Berkeley.
- Kraus, Aurel. 1956. The Tlingit Indians, Results of a Trip to the Northwest Coast of America and the Bering Straits. University of Washington Press, Seattle.
- Keithahan, Edwards L. 1963 2<sup>nd</sup> Ed. Monuments in Cedar: The Authentic Story of the Totem Pole. Seattle Superior Publishing Company.
- Langdon, Dr. Steve. 2001. Tidal Pulse Fishing: Selective Traditional Tlingit Salmon Fishing Techniques of the West Coast of the Prince of Wales Archipelago.
- Lysek, Carol Ann. Ancient Alaska Bones May Help to Prove Coast Migration Theory. Mammoth Trumpet, Vol. 12, No.4. (1997). <http://archaeology.about.com/gi/dynamic/offsite.htm?site=http://www.peak.org/csfa/mt12%2D4.html%23part5>
- Montyka, Roman. 9/6/2000. Scientist Watch Southeast Land Rising and Try to Figure out Why. Anchorage Daily News.
- Mosher, Jefferson. 1901. Salmon Investigations in the Steamer Albatross in 1900 and 1901. Bulletin of the United States Fish Commission, Vol. XXI. Government Printing Office, Washington.
- Nelson, Richard. 1983. Make Prayers to Raven, A Koyukon View of the Northern Forest. The University of Chicago Press, Chicago and London.
- Olson, R.L. 1967. Social Structure and Social life of the Tlingits in Alaska, Anthropological Records Vol. 26. University of California Press, Berkeley & Los Angeles.
- Oberg, Kalervo. 1973. The Social Economy of the Tlingit Indians. Monograph 55. The American Ethnological Society. University of Washington press, Seattle.
- Peck, Cyrus. 1986. The Tides People, Tlingit Indians of Southeast Alaska, A Narrative Account of Tlingit Culture and Values.
- Price, Robert. 1990. The Great Father In Alaska, The Case of the Tlingit and Haida Salmon Fishery. The First Street Press, Douglas, Alaska.
- Simeon, William E. and James Kari. 2002. Copper River Subsistence Evaluation 2000 7 Traditional Knowledge project, Part one. Alaska Department of Fish and Game, Division of Subsistence, Final Report No. FIS 00-040, Anchorage, Alaska.
- Swanton, John. 1909. Tlingit Myths and Texts, Bureau of Ethnology, Bulletin 39. Smithsonian Institution. Reprint – Native American Book Publishers, Brighton, Michigan.

Suggested Citation: Mason, Rachel and Judith Ramos. 2004. Traditional Ecological Knowledge of Tlingit People concerning the Sockeye Salmon Fishery of the Dry Bay Area, A Cooperative Agreement Between Department of the Interior National Park Service and the Yakutat Tlingit Tribe, Final Report (FIS) Project 01-091, Yakutat, Alaska.