

From LAND WATER

THE FEDERAL SUBSISTENCE MANAGEMENT PROGRAM NEWSLETTER

Office of Subsistence Management • 1011 East Tudor Road • Anchorage, Alaska 99503

Summer 2012

Inside Features:

Page 2

- ▶ Letter from the Board Chairman
- ▶ Board Members

Pages 3–5

- ▶ News in Brief

Page 7

- ▶ Board Meeting Becomes Classroom

Page 11–15

- ▶ Partners Program



The Secretaries of the Interior and Agriculture are responsible for subsistence management under Title VIII of the Alaska National Interest Lands Conservation Act and established the Federal Subsistence Management Program to meet this responsibility.

The program, which emphasizes public involvement, is a multi-agency effort of the U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, Bureau of Indian Affairs, and U.S. Forest Service.

Scientists Explore Social Dimensions of Climate Change *by Alicia Davis*



Katie Moerlein

Courtney Carothers, Assistant Professor at the University of Alaska Fairbanks (far right), sits with elders in Noatak, Alaska to gain information about observations of environmental change in the region and implications for subsistence fishing activities.

Communities in Alaska are at the forefront of the impacts of climate change. Rural communities, heavily dependent on natural resources, are not only aware of the impacts of a changing climate, but they see and experience these changes in a profound way.

Residents of rural communities hold a wealth of knowledge about the environment they live in, the resources they rely upon, the social systems they are a part of, as well as how all of these interact. Knowledge about subsistence resources has been shared from generation to generation, but given the rapidity of recent changes, people now face increasingly challenging decisions about subsistence.

Local residents, managers, researchers, and Subsistence Regional Advisory

Councils across the state realize the importance and effects of climate change, especially for subsistence users and resources.

In 2011, the Fisheries Resource Monitoring Program requested in its Call for Proposals a broad range of fisheries science and social science projects that examined or discussed climate change effects on subsistence resources and users. The projects subsequently funded by the Fisheries Resource Monitoring Program range from collecting detailed data on water temperatures for specific rivers to local knowledge of subsistence fishers. Social science research that was specifically requested was intended to address several key issues such as: local observations of climate change; how climate change impacts subsistence users and their resources; and how climate change



[Continued on page 8]

Letter from the Chair



Tim Towarak

My first year as your Chairman has been personally very fulfilling. Much of the Board's work has been focused on addressing issues identified during the Secretarial review of the Federal Subsistence Management Program.

One of the most important changes recommended by the Secretary was to add to the Federal Subsistence Board two Alaskans who are knowledgeable of the subsistence way of life. Over 30 applications to fill these two seats were submitted. The Secretaries selected Anthony Christianson of Hydaburg and Charles Brower of Barrow to fill these seats. They attended their first Board meeting in Juneau in March. It was great to have their perspectives added to the Board's discussions.

In the coming year, the Board will be addressing the Memorandum of Understanding with the State of Alaska, which defines our relationship with the state regarding the management of fish and game and will launch a public review of the rural/nonrural determinations process.

Another very important process the Federal Subsistence Board undertook in 2011 with some very able staff and rural Alaskans, is the development of a Tribal consultation policy as directed by President Obama and reiterated by Secretary Salazar. The Board met on May 9, 2012 in Anchorage and adopted the Tribal consultation policy. We look forward to engaging more directly with Tribes in the Board's regulatory process.

The Regional Advisory Councils will continue to play a central role in the Board's regulatory process. The Councils provide us with a critical link to the villages and Tribes of rural Alaska. I personally rely heavily on their recommendations in my vote, as long as it fits in with the overall responsibility of the Board to meet the subsistence needs of rural Alaska and at the same time protecting and sustaining the resources for continued support of the subsistence way of life.

Public participation is key to the success of the Board's process; I encourage you to participate. Attend Regional Advisory Council or Board meetings and provide testimony, apply for Council membership, or just write a letter to the Board to voice your concerns. The Board has much more work ahead and public participation is key to the Board's success in addressing the issues in a way that meets the mandate to provide a subsistence priority for rural Alaskans.

Board Members

Tim Towarak
Chairman

Anthony Christianson
Public Member
Hydaburg

Charles Brower
Public Member
Barrow

Geoff Haskett
Regional Director
U.S. Fish and Wildlife
Service

Beth Pendleton
Regional Forester
U.S. Forest Service

Sue Masica
Regional Director
National Park Service

Bud Cribley
State Director
Bureau of Land
Management

Gene Virden
Regional Director
Bureau of Indian
Affairs

Two New Board Members Seated

In January 2012, Secretary of the Interior Ken Salazar announced the appointment of Anthony Christianson of Hydaburg and Charles Brower of Barrow to represent rural subsistence users on the Federal Subsistence Board. Secretary of Agriculture Tom Vilsack concurred with these appointments.

Mr. Anthony Christianson is a life-long resident of Southeast Alaska and currently serves as Natural Resource Director for the Hydaburg Cooperative Association, a Federally recognized tribal entity. He also serves as Mayor of the City of Hydaburg. Mr. Christianson has participated in a number of programs and studies related to fish and wildlife in Southeast Alaska.

Mr. Charles Brower is a life-long resident of Barrow, Alaska, and currently serves as Special Assistant to the Vice President of the Ukpeagvik Inupiat Corporation, the Barrow village corporation. Former positions include: Wildlife Department Director for the Native Village of Barrow and Wildlife Department Director for the North Slope Borough. Mr. Brower has served on a number of wildlife commissions including the Alaska Migratory Bird Co-Management Council, the Alaska Nanuq (polar bear) Commission, and the Eskimo Walrus Commission.

Following a review of the Federal Subsistence Management Program in 2010, the Secretaries had recommended that the Federal Subsistence Board membership be expanded to include additional public members representing rural subsistence users. The Board's membership had previously included a Chair, who is a public member, and five directors of Alaska Federal agencies.

Tribal Consultation Policy Adopted

The Federal Subsistence Board, at its May 9, 2012 meeting in Anchorage, adopted a Tribal consultation policy. The policy provides the framework for the Board's consultations with Federally recognized Tribes on Alaska National Interest Lands Conservation Act (ANILCA), Title VIII subsistence matters under the Board's authority, while maintaining the central role of the Federal Subsistence Regional Advisory Councils as advisors to the Board.

At its May 2011 meeting, the Board directed that a workgroup comprised of a small number of Federal and Tribal representatives be formed to develop Tribal and Alaska Native Claims Settlement Act (ANCSA) corporation consultation policies, with the goal of adopting final policies at the May 2012 meeting. During the past twelve months, the Board met with Regional Advisory Councils, Tribes and ANCSA corporation representatives and sought written comments on these draft policies. Based on comments received from ANCSA corporations, the Board has delayed adoption of the ANCSA corporation consultation policy until the Department of Interior finalizes its ANCSA corporation consultation policy.

The Board has directed that the Consultation Workgroup continue to work together to develop implementation guidelines for the Tribal consultation policy and the draft ANCSA corporation consultation policy. The Board will follow interim implementation guidelines until it adopts final implementation guidelines in 2013.

The Board's initiative to develop a Tribal consultation policy supports the President's directive to improve government-to-government relations. Public law requires Federal government agencies to consult with ANCSA corporations on the same basis as Tribal governments.

The Federal Subsistence Board's Tribal consultation policy, draft ANCSA corporation consultation policy, and other documents related to consultation can be found at <http://alaska.fws.gov/asm/issue.cfml>.

Native Liaison Position Filled

The Office of Subsistence Management recently hired Jack Lorrigan to fill the Native Liaison position. Jack currently resides in Sitka, Alaska where he works for the U.S. Forest Service as their subsistence biologist. Former positions include: Natural Resource Director for the Sitka Tribe of Alaska, Tribal Grants Coordinator for U.S. Environmental Protection Agency, and Special Intelligence Communicator in the U.S. Marines.

Jack grew up living a subsistence lifestyle and continues those traditions and practices today. He also has an extensive background as a commercial fisher-

(Continued from page 3)

man working on both trollers and longliners in Southeast Alaska waters.

Jack will play a central role in coordinating consultations related to the Federal Subsistence Management Program with Tribes and ANCSA Corporation. He will be starting with the Office of Subsistence Management at the end of July.

More than 100 Proposals Considered

The Federal Subsistence Board met January 2012 to consider more than 100 proposed changes to Federal subsistence hunting and trapping regulations. The changes approved by the Board include:

- A requirement that prior to selling handicrafts incorporating a brown bear claw(s), the hide or claw(s) not attached to the hide, must be sealed by an authorized Alaska Department of Fish and Game representative and a copy of the ADF&G sealing certificate accompany the handicraft when sold. Old claws may be sealed if an affidavit is signed that the claw(s) came from a brown bear that was harvested legally on Federal public lands by a Federally qualified subsistence user.
- A closure of the Red Sheep and Cane Creek drainages to non-Federally qualified subsistence users during the Aug. 10–Sept. 20 portion of the sheep season in the Arctic Village Sheep Management Area of Unit 25.
- The addition of residents of Chistochina to the customary and tradition use determination for caribou in Unit 12.
- The establishment of a Federal registration permit hunt for the Chisana Caribou Herd in Unit 12. The opportunity for this hunt is limited to residents of Chisana, Chistochina, Mentasta, Northway, Tetlin, and Tok. The superintendent of Wrangell-St. Elias National Park and Preserve will be delegated the authority to manage this hunt.

Other changes are noted in the "What's New" section of the July 1, 2012 through June 30, 2014 Federal subsistence hunting and trapping regulations book.

Books are available at vendors, Federal field offices, the Office of Subsistence Management, and on the Web at <http://alaska.fws.gov/asm/law.cfml>.

Effective Date for the May 2007 Nonrural Determinations Extended

On March 1, 2012, the Federal Subsistence Board published a final rule to extend the effective date for its May 2007 nonrural determinations. At its January 2012 meeting, the Board committed to conduct a public review of the current rural/nonrural determination process and findings. In the coming months, the Board will begin its public review. The effective date for the May 2007 nonrural determinations is extended until the public review is complete or for up to five years.

Board Jointly Reviews Petition for Extraterritorial Jurisdiction with Southeast Council

The Federal Subsistence Board met jointly with the Southeast Alaska Subsistence Regional Advisory Council on March 21–23 to review a petition, submitted by Kootznoowoo, Inc., to exert extraterritorial jurisdiction to non-Federal marine waters adjacent to Admiralty Island. The Board and Council were presented an analysis of the petition and heard testimony regarding it. The Southeast Alaska Subsistence Regional Advisory Council met on the evening of March 22 to develop its recommendation on the petition, which was presented to the Board the following day. The Federal Subsistence Board provided its recommendation to the Secretaries of Agriculture and the Interior, who will make the final decision regarding the petition.

This meeting marked several firsts for the Board: It was the first time the Board has met jointly with a Subsistence Regional Advisory Council; the first time the Board met outside Anchorage; and the first time the Board met since the appointment of two new members representing rural Alaska subsistence users.

NEWS IN BRIEF



USFS / Steve Kessler

The Federal Subsistence Board met jointly in Juneau with the Southeast Alaska Subsistence Regional Advisory Council to consider a petition to exert extraterritorial jurisdiction. This was the first Board meeting for the two new members representing rural subsistence users.

Upcoming Meetings

Regional Advisory Council Meetings

August

- 14..... North Slope — *Barrow*
- 22..... Northwest Arctic — *Kotzebue*

September

- 25-26..... Kodiak/Aleutians — *Sand Point*
- 26-28..... Southeast — *Sitka*

October

- 3-4..... Seward Peninsula — *Nome*
- 10-11..... Yukon-Kuskokwim Delta — *Bethel*
- 10-11..... Western Interior — *Holy Cross*
- 15-16..... Southcentral — *Anchorage*
- 16-17..... Eastern Interior — *Fairbanks*
- 24-25..... Bristol Bay — *Dillingham*

Federal Subsistence Board Meeting

January 22-24, 2013 — *Anchorage*

Meetings are subject to change. Please confirm before you go by calling 1-800-478-1456.

Fisheries Resource Monitoring Plan Adopted, Key Information Needs Addressed

The Federal Subsistence Board adopted a Fisheries Resource Monitoring Plan for 2012 consisting of \$1.6 million in funding for 25 projects that provide key information needed to manage and conserve subsistence fisheries resources. No new projects were funded in the Southeastern Alaska Region because available funds from the U.S. Forest Service were only sufficient to continue operating ongoing projects in that region.

The suite of new projects funded in 2012 reflects a growing need for information on whitefish species and to better understand the effects of climate change on subsistence users and resources. Nine projects focus on whitefish species, and three of these also look at climate change effects. Five of the nine whitefish projects will be conducted on sheefish to assess populations in the Selawik and Kobuk Rivers in the Northern Alaska Region, the Alatna River in the Yukon Region, and Highpower Creek in the Kuskokwim Region, as well as to develop a genetic baseline for populations in the Yukon and Kuskokwim Rivers. The remaining four whitefish projects will be conducted on other species to determine the effects of climate change on North Slope, Upper Kuskokwim River, and Lake Clark whitefish populations, as well as to identify Bering cisco spawning areas in the Yukon River. The effects of climate change on fishing patterns and uses will also be addressed by two salmon projects.

Local involvement is one of the priorities of the Fisheries Resource Monitoring Program. Project proposals are evaluated, in part, based on the level of community involvement in the project. At a minimum, investigators must consult with local communities to ensure that local knowledge and concerns are considered in the development of the investigation plan. Since 2000, 52 locally based Alaska Native organizations, have participated in the program. In 2012, 28 percent of program funds were awarded to Alaska Native organizations.

Sitka Student Wins Subsistence Student Art Contest

Kaycee Lanza, 8, of Sitka won the Federal Subsistence Management Program's subsistence student art contest. As the grand prize winner, Kaycee's work appears on the cover of the 2012–2014 Federal Subsistence Hunting and Trapping Regulations book. Kaycee also received art supplies.

Students from several Alaska communities entered the contest. The artwork was judged by the chairs of the Federal Subsistence Regional Advisory Councils and Federal Subsistence Board members during the January 17–20 Board meeting in Anchorage. The student art will be used in regulation books, brochures and other publications produced by the Office of Subsistence Management.

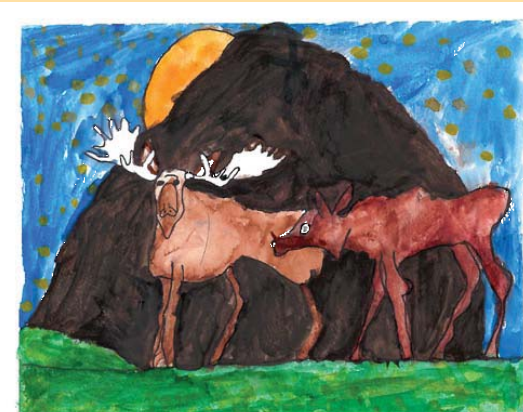
The next student art contest will be announced in October of 2012. Judging of entries will take place at the January 2013 Federal Subsistence Board meeting in Anchorage. ■

SUBSISTENCE

Management Regulations for the

HARVEST OF WILDLIFE

on Federal Public Lands in Alaska



Kaycee Lanza, 8, Sitka, 2012 Student Art Contest winner.

Effective July 1, 2012–June 30, 2014

Subsistence management regulations are available online at
<http://alaska.fws.gov/asm/index.cfm>

Federal Subsistence Board Meeting Becomes Classroom for University of Alaska Southeast Students *by Jack Lorrigan*

Five students from the University of Alaska Southeast made the trip to Anchorage to see firsthand the Federal Subsistence Board in action. It was a great time to be indoors in Anchorage during the week of January 17, 2012; with temperatures consistently below zero, the warm meeting room was a welcome shelter from the cold. The trip was the brainchild of Jan Straley, a professor at the University of Alaska Southeast; Terry Suminski, Tongass National Forest subsistence program leader; and Jack Lorrigan, US Forest Service subsistence biologist for the Sitka and Hoonah Ranger Districts, with the goal of showing students the breadth of participation in the process and variety of information that is considered by the Federal Subsistence Board before making regulatory decisions.

The trip was funded by a National Institute of Food and Agriculture grant from the USDA, which provides grants to universities that are 20% or more Native Hawaiian or Native Alaskan, for programs that bring people together to learn traditional ways. In the spirit of the grant, five students from the University of Alaska Southeast were afforded the opportunity to attend the Federal Subsistence Board meeting to watch policy making in action. The students attending the Federal Subsistence Board meeting were from Aleknagek, Kwethluk, Sitka, and Yakutat.

Although the pace of a regulatory meeting can be a bit slow for a young student, the information considered and the discussions that take place can be very enlightening. During the meeting, the students heard staff present analyses of proposals to change subsistence hunting and trapping regulations, including biological, historical, and cultural information; public, Tribal, and State comments; and Board deliberations. They paid close attention to deliberation on proposals from their respective areas. They also listened to discussions regarding the rural status of Saxman.

In addition to seeing a regulatory body in action, the students saw a variety of careers represented



Students from the University of Alaska Southeast are introduced by Jack Lorrigan (left) and Jan Straley (second from the left) at the January 2012 Board meeting in Anchorage.

USFWS / Andrea Medeiros

“I am very glad I was able to attend these meetings. It was a great learning experience and now I have the opportunity to educate other youth about the challenges we will one day have to face.”

at the meeting, including anthropology, fish and wildlife biology, law, and administration. There are relatively few Alaska natives in the Federal subsistence management system, hopefully this gave these rural students a chance to observe and possibly consider employment in the natural resource disciplines in the Federal subsistence

management system.

The effectiveness of the Federal Subsistence Management Program depends on those with firsthand knowledge of subsistence resources and uses participating in the process. Providing the opportunity for rural students to see the career options that exist within natural resource management could encourage more students to pursue natural resource management careers, which would benefit the Federal Subsistence Management Program and those who depend on subsistence resources.

Following the meeting, each student wrote an essay about their experience. Tiana Bactad of Aleknagek wrote, “I am very glad I was able to attend these meetings. It was a great learning experience and now I have the opportunity to educate other youth about the challenges we will one day have to face.” ■

(Continued from page 1)

may be shaping future resource use decisions. Western science clearly has a role to play in analyzing climate change and its impact on local resources, but local residents, with long traditions of knowing, living in, and using their environment, have a great deal to add to scientific assessments.

In 2011, the Fisheries Resource Monitoring Program funded three climate change research projects in rural Alaska that are contributing valuable data on the social dimensions of climate change.

Understanding Climate Change in Bering Strait Communities through Tomcod Fisheries

People in Bering Strait communities fish for tomcod as a winter subsistence activity and shore-ice levels are critical to their success. However, not much is documented about the importance, the extent, and the value of the tomcod fishery for local residents. Researcher Julie Raymond-Yakoubian from Kawerak, Inc. is exploring changes in river and shore ice characteristics as well as local knowledge about the tomcod fishery, including its importance as a subsistence food.

The project is being conducted in five Bering Strait region communities: Shishmaref, Wales, Brevig

Mission, Teller, and Stebbins. These communities are located near the Bering Land Bridge National Preserve or the Yukon Delta National Wildlife Refuge.

Local residents in each of the five communities have been trained to collect data such as past and present harvests, local names, and traditional harvest and preservation methods. The researcher is uncovering vital information for managers, while building long-term relationships in the communities of the region. The information collected will shed light on the role this fishery has in subsistence users' lives, and, therefore, will benefit future management efforts. Household harvest surveys have been completed and indicate overall increases in nonsalmon fish harvests in all but one of the research communities. The current phase of research is ongoing and is documenting local knowledge about nonsalmon fisheries resources, including knowledge about the effects of climate change on these resources.

Ms. Raymond-Yakoubian and her team have been analyzing the data and have presented preliminary results within and outside of Alaska. Ms. Raymond-Yakoubian has recently organized a workshop at Kawerak's Regional Conference focused on an exchange



Julie Raymond-Yakoubian

Brevig Mission residents at a community meeting for the Local Ecological Knowledge of Non-Salmon project.



Courtney Carothers

June 2010, graduate student Katie Moerlein from the University of Alaska Fairbanks (far right) hangs whitefish with families from Noatak, Alaska at Sisualik, a traditional location for summer fishing and hunting. Families catch whitefish using gillnets set along the coast, cut and dry them, and use the dried fish as a nutritious food source throughout the rest of the year.

of traditional knowledge between local experts from participating communities, youth delegates to the conference, and the public. She has also presented papers at several professional conferences and co-presented a paper at the Alaska Anthropology Association meeting with one of the local assistants from Teller.

This project will continue through the spring of 2013.

Climate Change in the Northwest Arctic and Seward Peninsula

On the Seward Peninsula and in the Northwest Arctic, people are increasingly aware of the impacts of climate change on their communities. Dr. Courtney Carothers and graduate student researcher, Ms. Katie Moerlein, have been collecting local knowledge data on visible climate and biological changes such as melting sea ice, weather patterns, and changing fishery abundance in the communities of Noatak, Selawik and Shungnak. These communities are in or near the Selawik National Wildlife Refuge, Noatak National Preserve, Gates of the Arctic National Park and Preserve, or Kobuk Valley National Park. Additionally, people are providing insight into how they are adapting to some of these recent changes. Local experts and

community research assistants are helping to collect information, often in the Inupiaq language.

The project is in its second year, and local experts in each community have already identified specific changes in climate and in subsistence fisheries unique to their own communities. Community residents in Noatak have noted that fall weather patterns now add new challenges to salmon processing. For example, one resident noted they were unable to make the traditional food quaq (fermented, frozen fish) because the warm weather caused spoilage. In Selawik, traditional fishing locales are harder to access because of thinner winter ice and earlier spring break-up. People have also pointed out that available fish species are changing. These are just a few changes observed by residents. Additionally, the researchers are exploring how climate change fits into a number of other socio-environmental factors affecting subsistence.

In 2012, Dr. Carothers and Ms. Moerlein published an article on their findings in the journal *Ecology & Society* titled: *Total Environment of Change: Impacts of Climate Change and Social Transitions on Subsistence Fisheries in Northwest Alaska*. Additionally, Dr. Carothers and Ms. Moerlein have presented their preliminary findings at a number of conferences

and seminars including the Alaska Marine Science Symposium, the Department of Anthropology Colloquium at the University of Alaska, Fairbanks (UAF), the UAF Climate Change Seminar, and the Alaska Society for Applied Anthropology.

The project will continue through the spring of 2013.

Climate Change and Impacts on Subsistence Fisheries in the Yukon River Drainage, Alaska

People of Yukon River communities also are keenly aware of the impact of climate change on their subsistence resources. Residents of the communities of Allakaket, Fort Yukon, Grayling, Koyukuk, Northway, and Nulato are contributing to this three-year research project. These communities are in or near the Federal public lands of Nowitna, Innoko, Koyukuk, Kanuti, Yukon Flats, and Tetlin National Wildlife Refuges; and Gates of the Arctic National Park. Mr. David Anderson at Research North and Ms. Caroline Brown at the Alaska Department of Fish and Game are heading up this project, which will inform management about the impacts of climate change on subsistence users, landscapes, the environment, and fish and wildlife.

The research team is learning how climate change issues are directly affecting subsistence fisheries. Residents of the region have reported that a number of issues directly affect subsistence fisheries, including: drying wetlands, changing weather patterns, and changing ice conditions. The researchers are investigating how local residents perceive the effects of environmental change on fish, fish habitats, and fishing activities. The researchers have hired local assistants to help carry out the interviews and collect data. Over 25 knowledgeable subsistence experts have been interviewed so far about their observations of climate change.

Interesting common themes have arisen in all six study communities, including an average of 7–10 day earlier break-up in the spring and 7–10 day later freeze-up in the fall. Residents of all of the study communities have also noted shrinking or vanishing tundra ponds and generally dryer landscapes. The researchers are exploring further common themes as they analyze more of their data.

Mr. Anderson and Ms. Brown collaborated with Dr. Carothers to present joint results at the UAF Climate Change Seminar in November 2011.

This project will continue through the spring of 2012. ■



Dave Andersen

Koyukuk elder Benedict Jones surveys areas of recent bank erosion along the Yukon River caused by melting permafrost.

Partners Program Works With Youth to Build Community-Based Conservation in Subsistence Fisheries Management

by Palma Ingles, Andrea Medeiros, and Eva Patton



USFWS / Palma Ingles

High school students visiting a fish wheel operated by the Native Village of Eyak on the Copper River.

The Partners for Fisheries Monitoring Program is a competitive grant program funded by the U.S. Fish and Wildlife Service, Office of Subsistence Management. The program was created to build rural community members' involvement in subsistence fisheries research and management, which is primarily accomplished through local youth education and training. The Partners Program grants provide up to four years of funding for the employment of fisheries anthropologists, biologists, and educators, who will be responsible for development and implementation of the Partner organization's program.

Each employee in a Partners Program position lives in the community where the Partner organization is based, giving them an opportunity to become part of the community, and to be known as a resource for information on subsistence fisheries. It is a requirement of the program that there be a Fisheries Research Monitoring Program project in the local area in which the organization can participate.

The Current Partners

Native Village of Eyak

Native Village of Eyak (NVE) works with communities in the Prince William Sound and Copper River Delta areas. The Partners' fishery biologist is Keith van den Broek, who is also the director of the Department of Environment and Natural Resources. He is currently working on a Copper River Chinook salmon mark-recapture project funded by the Fisheries Resource Monitoring Program. The study uses fish wheels below Wood Canyon to capture Chinook salmon for marking with radio-frequency identification (RFID) tags, which are injected under the skin and are about the size of a grain of rice. Two fish wheels further up the river at Baird Canyon are used to recapture the Chinook salmon, which are then scanned for tags to estimate in-river abundance. Keith is also working on a project to test the feasibility of using equipment installed at remote sites to detect RFID-tagged Chinook salmon in tributaries of the Copper River. NVE sponsors interns on a seasonal basis to participate in various projects in which NVE is involved.



USFWS / Palma Ingles

Native Village of Eyak technicians tagging Chinook salmon on the Copper River to estimate numbers of Chinook salmon returning to spawn.



USFWS / Palma Ingles

Glen Lindsey and Mike Thalhauser boating to the George River weir. Glen started as a college intern with Kuskokwim Native Association, then was hired as technician to run the George River weir. This summer Glen is working for the Alaska Department of Fish and Game as a technician.

Kuskokwim Native Association

There are two full time fisheries biologists, who are partially funded through the Partners Program with additional funding from Kuskokwim Native Association (KNA). Mike Thalhauser is the head of KNA's Department of Fisheries and the lead Partners' biologist. LaDonn Robbins is a fisheries biologist within the Department of Fisheries. The KNA Partners biologists work on fisheries monitoring projects, including the George River Weir, the Tatlawiksuk River Weir, post-season subsistence fishery harvest household surveys, and a project to estimate the abundance of sockeye salmon. They seasonally hire a fisheries educator to work with students in the summer. They have college interns and seasonal technicians at fisheries projects in which KNA is involved. High school students are given the opportunity to participate in summer camps at various fisheries monitoring project locations.

Orutsararmiut Native Council

Orutsararmiut Native Council (ONC) has one subsistence fisheries specialist position funded by the Partners for Fisheries Monitoring Program. Eva Patton, who worked for ONC in the Partners Program

position, recently left to take a position with the Office of Subsistence Management as a subsistence regional advisory council coordinator.

While with ONC, Eva worked on in-season and post-season subsistence harvest surveys. She also managed a team of local fisheries technicians who trained families at their fish camps to collect age, sex, and length data from harvested Chinook and salmon tissue samples for genetic analysis for Fisheries Resource Monitoring Projects.

Eva provided college internship opportunities for local students to work on various cooperative fisheries research and monitoring projects with both the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service. She worked with the Yukon-Kuskokwim Delta National Wildlife Refuge for many years on a field-ecology-based science camp for local high school students that is sponsored by the U.S. Fish and Wildlife Service. Eva also worked with the Kuskokwim River Salmon Management Working Group to provide fisheries information to local subsistence fishers and facilitate local feedback in the subsistence management process. ONC is currently looking to fill the Partner's position vacated by Eva.

Tanana Chiefs Conference

The Tanana Chiefs Conference (TCC) works with Interior Alaska communities and has one Partners fisheries biologist, Alyssa Frothingham. Alyssa works with various fisheries research projects including managing the weir in Henshaw Creek, which is a salmon spawning tributary of the Koyukuk River. Alyssa is responsible for writing research reports and doing community outreach presenting the results of the fisheries research in the area. She hires people from local communities to work as seasonal technicians. With funding from the Partners Program, college interns are hired every summer to work at the Henshaw Creek weir. Alyssa works with Kanuti National Wildlife Refuge personnel to run a one-week science camp for high school students. The science camp provides opportunities for students from the local area to work with elders from the villages to learn traditional skills and learn about the science of monitoring fisheries.

Bristol Bay Native Association

Bristol Bay Native Association (BBNA) has worked on various Fisheries Resource Monitoring Program projects. In the last few years, the Partners



TCC / Samuel Comstock

Jonathan Henzie at work at the Henshaw Creek weir. Jonathan started as a high school intern with TCC six years ago and is now the crew leader at the weir.

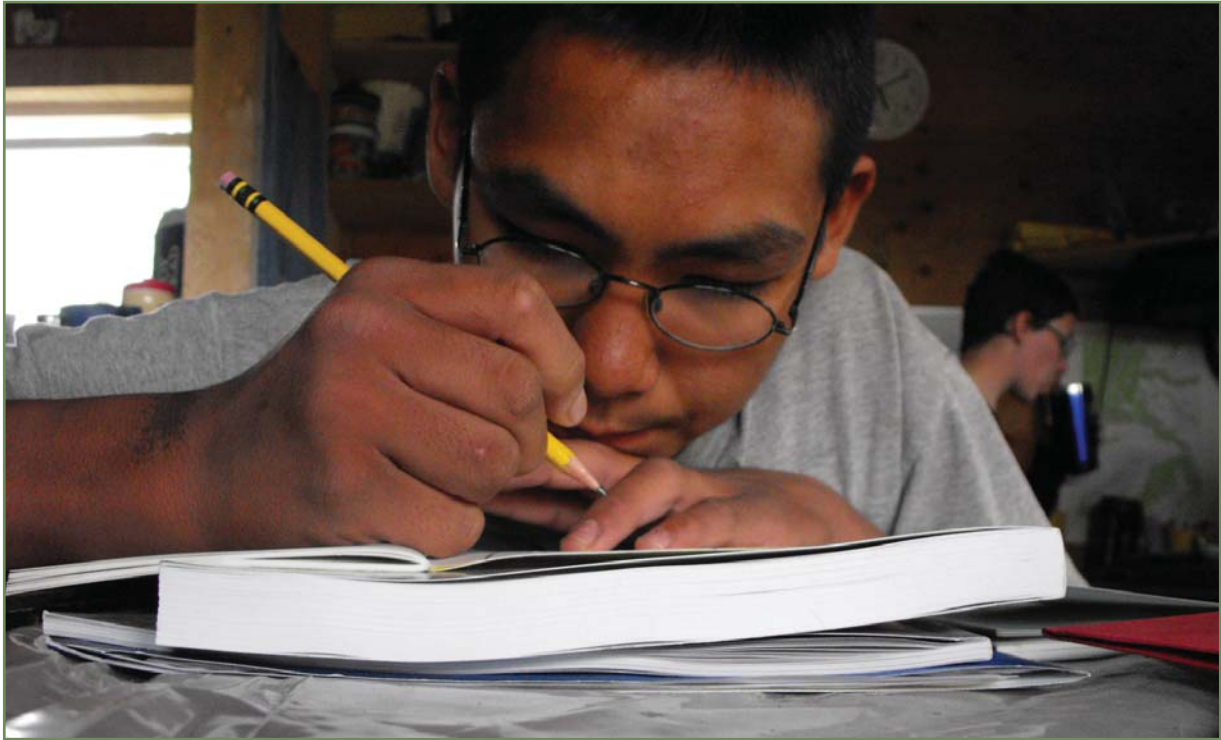


USFWS / Palma Ingles

Pamela Edwards, intern coordinator for BBNA, in front of Chinook salmon drying racks near Non Dalton, on Lake Iliamna.

biologist and interns have worked on projects focusing on salmon escapement in Lake Clark and Togiak. They also have worked on projects focused on climate change. BBNA hires interns to work directly on projects it is involved with and helps hire local interns to work on other fisheries monitoring projects in the Bristol Bay area. In the past, BBNA has had a Fisheries Educator who worked with the local school district. The Partner position at BBNA is currently vacant and they are in the process of hiring either a fisheries anthropologist or fisheries biologist.

Students Learn About Careers in Natural Resource Management Through Partners Program Internships



KNA

Brad Gusty, hard at work studying during a high school internship with Kuskokwim Native Association. Brad was a high school intern for 3 years. Before his senior year, he was hired as a technician by Kuskokwim Native Association to work at the Kalskag fish wheel because he was such a hard worker and had extensive knowledge of fish wheels through his subsistence activities. He is now interested in pursuing a career as a fisheries and wildlife law enforcement officer.

The number and variety of jobs in rural Alaska are limited, which makes it difficult for students to find a summer job and limits their exposure to career choices. The Partners Program helps students discover career opportunities they might not otherwise be exposed to by offering them the opportunity to work on fisheries projects in their area.

Students typically work on projects to monitor fish runs using mark-recapture, counting tower, and weir techniques. In the process, students learn about the collection of fisheries data, data analysis, and application of data to fisheries management. Wildlife specialists and social scientists have also been brought in to project sites to expose interns to other disciplines in natural resource management. The goal is to spark the interest of the students and ignite a desire to seek a college education in biological or social sciences and pursue jobs in resource management in the region they are from or in other areas of Alaska.

Students are paid a stipend and live in tents or other housing at the project site, which enables them to save the money they earn. The Partners Program sponsors interns at the high school through college levels. Some student interns have been hired in subsequent summers to fill technician positions offered through the Partners Program, which pay more and have more responsibility, such as supervision of new interns.

The number of internships available at the Partner organization depends on the amount of funding that is set aside for internships under the Partners Program grant. In some cases, the Partner organization contributes money towards internships. With combined resources, the Partners Program has sponsored more than 250 high school and college interns since its inception in 2001.

These internships have "spawned" many successful graduates of the program who have gone on to pursue higher degrees and work in their communities or elsewhere in Alaska on State and Federal fisheries research and monitoring programs, management, or in tribal leadership.

A few of these inspired interns are...

Kay Larson-Blair, who was a BBNA college intern from Dillingham, is now completing a masters in fisheries at the University of Alaska Fairbanks, and working for the U.S. Fish and Wildlife Service, Office of Subsistence Management.

Shelly Cotton, who was a BBNA college intern from Dillingham, is now working on completing her masters in anthropology at the University of Alaska Fairbanks.

Alissa Joseph, who was an ONC college intern from Bethel, is now a permanent employee with the Alaska Department of Fish and Game, Board Support for the State Fish and Game Advisory Committees.

Aaron Moses, who was an Association of Village Council Presidents (no longer a Partner) college intern from Toksook Bay, is now finishing his senior year at the University of Alaska Fairbanks, pursuing an B.S. in fisheries with a minor in anthropology.

Lisa Kangas, who was a TCC college intern from Ruby, graduated with a fisheries degree from the University of Alaska Fairbanks, was the lead fisheries biologist for Tanana Chiefs Conference, and is now working as an environmental consultant.

Glen Lindsey, who was a KNA college intern from Bethel, advanced to become a KNA fisheries technician and is now working for the Alaska Department of Fish and Game.

Dr. Palma Ingles is an anthropologist and the coordinator of the Partners Program, within the Office of Subsistence Management, and may be reached by email at palma_ingles@fws.gov or by phone at 907-786-3870.

The next call for Partners for Fisheries Monitoring Program grant proposals is scheduled to be issued in 2015.



USFWS / Palma Ingles

Iyana Dull with Eva Patton at a fish camp on the Kuskokwim River. Iyana began with ONC several years ago as a seasonal ONC fisheries technician working on cooperative fisheries monitoring projects with Alaska Department of Fish and Game and U.S. Fish and Wildlife Service.

He began his fisheries career on the Bethel Test Fishery, which is a central tool for salmon management on the Kuskokwim River. Iyana has had an opportunity to also work at several weir projects on Kuskokwim River tributaries. Iyana has worked as a technician on the ONC inseason subsistence fisheries program providing outreach and information to local area fishing families and surveying subsistence fishers on their observations of the salmon run strength, timing, and catch rates. Iyana then began a college fisheries internship with ONC and was most excited by his work at the U.S. Fish and Wildlife Service, Conservation Genetics Lab. Iyana plans to complete a math degree through the University of Alaska Fairbanks and study more fisheries genetics. ■



FEDERAL SUBSISTENCE BOARD
Office of Subsistence
Management
1011 East Tudor Road, MS-121
Anchorage, Alaska 99503

From LAND WATER

THE FEDERAL SUBSISTENCE MANAGEMENT PROGRAM NEWSLETTER

To receive a free subscription to this newsletter,
send us your information by mail, fax or e-mail.

Name: _____

Street/P.O. Box: _____

City: _____

State/Zip: _____

Office of Subsistence Management

1011 East Tudor Road, Mail Stop 121/ Anchorage, Alaska 99503

Phone: (907) 786-3888 or 1-800- 478-1456

Fax: (907) 786-3898

E-mail: subsistence@fws.gov

From Land and Water can also be found on the Web at:

<http://alaska.fws.gov/asm/news.cfml>

FROM LAND AND WATER is published by
the U.S. Fish and Wildlife Service, Office of
Subsistence Management.

Regional Director: Geoffrey L. Haskett

Assistant Regional Director: Peter J. Probasco

Editor/Writer: Andrea Medeiros

Design: Penny Panlener

Layout: Andrea Medeiros

Contributing Editors: Helen Armstrong, Alicia
Davis, David Jenkins, Palma Ingles, Pippa Kenner,
Eva Patton, Kathy O'Reilly-Doyle

