

An underwater photograph of a stream. In the foreground, a large salmon with vibrant red and pink scales is swimming towards the right. Its mouth is slightly open, showing its teeth. The water is clear and greenish, with sunlight filtering through, creating shimmering patterns on the rocky riverbed. In the background, another salmon is visible, swimming away. The overall scene is dynamic and captures the natural behavior of the fish in their habitat.

**Alaska Sea Grant
College Program**

Year in Review

November 2007 - November 2008

Report to the
Alaska Sea Grant Advisory Committee

Alaska Sea Grant College Program Year in Review

*Paula Cullenberg, Interim Director; Dave Christie, Interim Associate Director;
Kurt Byers, Educational Services Manager; Michele Frandsen, Project Manager*

Mission

Alaska Sea Grant develops and supports research, education, and extension programs and partnerships to help sustain economic development, traditional cultural uses, and conservation of Alaska's marine, estuarine, and coastal watershed resources.

Program Highlights

The past year has been both exciting and challenging. Alaska Sea Grant has been engaged in a wide range of important issues in the state. We have increased opportunities for graduate and undergraduate students, supported a number of research and educational initiatives, invested in relevant publications and symposia, and interacted with coastal Alaska via a vibrant Marine Advisory Program extension faculty (MAP). Highlights of the year are described under our five programmatic themes.

COASTAL COMMUNITIES AND ECONOMIES

The Alaska Sea Grant Marine Advisory Program was engaged in the development of a **community cold storage** facility in Petersburg, which was completed in 2006 with operations starting in summer 2007. In its first year, the 6,000 square foot facility handled more than two million pounds of seafood and broke even financially. The facility



Sunny Rice and West Coast Sea Grant Fisheries Extension colleagues tour the Petersburg cold storage facility.



Farmed oysters from Prince William Sound.

created one full-time position and one seasonal position. Five of the community's six seafood processors use the facility.

MAP agents developed an **economic model for oyster farmers** to use in evaluating their current practices and assist new entrants into the industry. A Web site titled Resources for Shellfish Aquaculture can be found at <http://seagrant.uaf.edu/map/aquaculture/shellfish/index.html>.

A statewide meeting of educators, stakeholders, and employers coordinated by MAP focused on how to **develop strategies for inspiring more young people, especially Alaska Natives, to pursue marine science and fisheries careers**. MAP assisted in the development of UAF's new BA in fisheries beginning this semester, which is available for the first two years at any rural campus. The Alaska State Legislature also increased funding for the UAF fisheries program and rural education funding.

Alaska Sea Grant created a **fuel efficiency Web page, brochure, and poster** in July 2008, with tips for boaters on saving fuel. The materials were used as a model by Sea Grant programs in North Carolina, Georgia, Maine, and Washington. In addition, a survey on fuel efficiency was conducted in partnership with United Fishermen of Alaska.

Alaska Sea Grant published the book *Rat Control for Alaska Waterfront Facilities*, as well as posters, with a grant from the Alaska Department of Fish and Game for their rat control program. Author Terry Johnson

MARINE ADVISORY PROGRAM



Participants in an Alaska Young Fishermen's Summit.



D. MERCY

Nome MAP agent, Heidi Herter, collects blue king crab offshore Little Diomed Island for the AKCRRAB project.



T. KLINE

MAP seafood quality specialist, Chuck Crapo, and FITC researcher, Alexandra Oliveira, assess the quality of farmed oysters at FITC.

conducted **rat prevention eradication** work sessions with port operators in Juneau, Ketchikan, Unalaska, and Kodiak. Larry Jones, pest control contractor for the State of Alaska, uses the book in his training program.

SEAFOOD SCIENCE AND TECHNOLOGY

The Alaska Department of Environmental Conservation formally adopted procedures **for protecting shellfish farm products from the marine bacteria *Vibrio parahaemolyticus* (Vp)** and issued new *Vp* prevention and response regulations that apply to the entire Alaska shell-

fish aquaculture industry. MAP developed the procedures following a 2004 *Vp* outbreak.

HACCP, sanitation, quality assurance, and other seafood handling classes and workshops held statewide helped improve the overall quality of Alaska's seafood. Over a one-year period, 20 HACCP and other seafood handling workshops were held, training about 130 people.

The **Alaska Seafood Processing Leadership Institute 2008 (ASPLI)** was led by MAP faculty and staff, with funds provided by a State Training and Employment Program (STEP) grant from the Alaska Department of Labor and Workforce Development (ADOLWD) and Alaska Sea Grant program funds. ASPLI trained nine rising leaders in Alaska's seafood processing industry, representing eight seafood companies operating in eight coastal Alaska communities. This is the second ASPLI offered by ASG MAP. ADOLWD has offered STEP funds to continue the program into 2009, and recruitment is ongoing.

FISHERIES

The **Alaska Young Fishermen's Summit** was held twice in Anchorage, in January and again in December 2007. This professional development opportunity brought together 140 new and/or young fishermen from around the state with 50 established fishermen and experts in financing, marketing, safety, regulatory, and policy issues for two days of intensive lectures, panels, networking exercises, and small group discussions. Several attendees indicated they had instituted quality handling procedures aboard their vessels the following season, and several summit graduates were elected to the boards of fishermen's associations and have testified before the North Pacific Fishery Management Council and the Alaska Board of Fisheries. Both events were reported in local, regional, state, and national publications, bringing attention to the issues facing new entrants to the commercial fishing industry.

Researchers developed a multispecies age-structured **assessment model for arrowtooth flounder, Pacific cod, and walleye pollock** in the Gulf of Alaska. The model is a significant contribution toward an ecosystem-based approach to fisheries management, and comes as a direct result of needs expressed by the North Pacific Fishery Management Council.

The **Alaska King Crab Research, Rehabilitation and Biology (AKCRRAB) program**, led by Alaska Sea Grant, had its second successful year of adult collection and egg hatch in a research program aimed at determining the feasibility of raising red and blue king crab in hatcheries, as a means to restore wild king crab stocks near Kodiak and the Pribilof Islands. The NOAA Aquaculture Program provided a \$175,000 grant to Alaska Sea Grant, to hire a biologist and conduct research.

The **Alaska Fisheries Business Assistance Project** or FishBiz offered classes, training, technical assistance, and information to fishermen around the state on marketing, finance, and technical support. One Alaska Sea Grant–led direct-marketing effort, which began in 2006 for fishermen in the Kuskokwim River salmon fishery, led to the establishment of a special fishery for direct marketers with fishermen receiving an increase in ex-vessel prices for salmon.

The **North Aleutian Basin Energy Fisheries Workshop** convened in Anchorage in March 2008, sponsored by Alaska Sea Grant as well as the fishing industry, coastal communities, and oil and gas interests, among other stakeholders. The purpose of the workshop was to examine social, economic, and environmental issues related to proposed offshore energy development in the North Aleutian Basin. A proceedings book will be published in 2009.

An ongoing research project seeks to utilize local traditional ecological knowledge (**TEK**) of **whitefish species** to identify their stocks, distribution, life history, and seasonal habitat in the Yukon River Delta. A relationship has developed among the researcher, the community of Scammon Bay, and Randy Brown, U.S. Fish and Wildlife Service fisheries biologist. USFWS will likely use Bering cisco data from Scammon Bay gathered by the researcher and local Alaska Natives, to guide future USFWS fisheries biology research in the region.

ECOSYSTEMS AND HABITATS

MAP's marine mammal research efforts continued under the **Gulf Apex Predator-Prey** project (GAP), a NOAA-funded study. Research showed that the diets and distribution of Kodiak's marine mammals (sea lions, whales, and sea otters) are diverse and flexible, responding to changes in environmental conditions and local prey availability over time. GAP studies have illuminated how changes in coastal climate and commercial harvests may affect endangered marine mammals and other apex predators in Alaska waters. As a multiyear study, GAP is building the time-series data needed to explore and anticipate effects of environmental change on primary and secondary production in a coastal marine ecosystem.

Multi-agency researchers characterized the occurrence and rate of **disease and parasites among threatened Steller's eiders**, harlequin ducks, and other wintering sea ducks in Unalaska Bay. Researchers identified five viruses and fourteen genera of bacteria. Results of this study will be used by USFWS, U.S. Environmental Protection Agency, Alaska Department of Environmental Conservation, and others to find solutions to the problems posed by disease in sea ducks.



T. KLUNE

Sea otters are among prey of killer whales in the Aleutians.



V. GILL, USFWS

Northern fur seal.

Passive acoustics were used to continuously monitor killer whale visitation and feeding and predation behavior at northern fur seal rookeries at the Pribilof Island of St. Paul. The project proved that the use of passive acoustic recording is a better tool to monitor killer whale activity near fur seal rookeries than other methods, which are restricted to daylight observations.

The **Aleutian Island Marine Ecosystem Research and Information Plan** continues to work with Alaska stakeholders and the Alaska Marine Ecosystem Forum to develop a set of prioritized management-critical research needs, drawing from input received from multiple stakeholders. The plan is being created with a five-year, \$400,000 grant from the National Sea Grant College Program.



T. KLUNE

Common goldeneye.



D. PARTEE

Marla Brownlee convened school teachers at the NOAA/UAF Kasitsna Bay Lab to work on the Alaska Seas and Rivers curriculum.



K. BYERS

Review panelists ponder input on Regional Marine Research Plan.



K. BYERS

Sean Willison explains his sedge research to Brian Allee.

MARINE AND AQUATIC SCIENCE LITERACY

UAF fisheries graduate student Seanbob Kelly was chosen as a 2008 **National Sea Grant Knauss Fellow**, after a gap of nearly ten years with no Knauss Fellows from Alaska. Seanbob finishes his Washington, D.C., fellowship in December 2008. Three new Alaska Knauss Fellows will start in February 2009: students Celeste Leroux, Erin Steiner, and Mary Bozza.

Alaska Sea Grant provided **fellowships for 18 graduate students and two undergraduate students** at the University of Alaska. In most cases, the fellowships were linked to specific research projects funded by Alaska Sea Grant.

A partnership was formed with the **BP Alaska Environmental Studies Program** to establish a joint \$80,000 per year graduate and undergraduate student fellowship program that addresses BP research needs. The first fellowship went to a graduate student at UAF, Sean Willison, to conduct studies related to restoring

native sedges at decommissioned oil field sites on North Slope coastal wetlands.

Alaska Seas and Rivers curriculum development is coordinated by Alaska Sea Grant education specialist Marla Brownlee, funded by a three-year, \$600,000 grant from the Alaska Department of Education and Early Development.

The National Science Foundation in September 2008 awarded a five-year, \$2.5 million grant to a consortium of marine agencies, including Alaska Sea Grant, to establish Alaska as a **Center for Ocean**

Science Education Excellence (COSEE Alaska). Alaska Sea Grant will hire an education specialist under the grant. Primary goals of COSEE Alaska are to foster awareness of ocean issues amid a changing Alaska climate, and to link researchers with educators.

MAP hosted local presentations by scientists in Unalaska, Nome, and Cordova. In the Nome region, presentations were also available to outlying villages via videoconference. More than 1,000 local residents attended the presentations, which also offered an excellent opportunity for scientists to learn about local knowledge.

Alaska Sea Grant Education Services staff continued its award-winning efforts of publications production and marketing, media relations, scientific conferences, and public events. Improvements were made in the ability to deliver information, including creation of a shopping cart for our Web catalog and an enhanced presence on Amazon.com. Nearly 50 new publications (print and electronic) were produced. Two-hundred forty-six new and previously existing titles were distributed worldwide, totaling some 30,000 individual items. The National Sea Grant Library recorded 23,378 downloads of Alaska Sea

Grant publications. Eighteen news releases were written and distributed. Staff and faculty appeared in media stories independent of news release efforts, for a total of 117 known media placements.

ORGANIZATIONAL AND FISCAL NEWS

Personnel: Dr. Brian Allee, Alaska Sea Grant director for the past five years, departed the program May 31 to be closer to his family. SFOS Dean Denis Wiesenburg appointed MAP leader Paula Cullenberg as interim director. Dr. David Christie, director of the West Coast & Polar Undersea Research Program at SFOS, was appointed interim associate director. Members of the search committee for a new director are Paula Cullenberg, Kurt Byers, Jeff Stephan, Arliss Sturgulewski, and Gordon Kruse. The position is currently open with the first review of applicants in January, and a permanent Sea Grant director in place as early as spring 2009.

Longtime MAP seafood technology specialist, Don Kramer, retired in July 2008. A new MAP faculty member, Gary Freitag, was hired in January 2008 as the agent for Ketchikan and southern Southeast Alaska. Freitag, a many-year resident of Ketchikan, has 20 years of experience in community development, fisheries, and salmon aquaculture. The Ketchikan position is a tenure-track faculty position supported with UAF funds.

Dawn Montano joined the Fairbanks staff in October 2008, and has been working steadily to fill the many publication orders that arrive each day.

Two MAP positions are open and currently accepting applications—the Bristol Bay agent position and the marine education specialist to coordinate COSEE Alaska. Terry Johnson, tourism and recreational specialist for MAP, has transferred to Anchorage from Homer in order to better carry out his statewide role.

Advisory Committee news: Bruce Bustamante, Princess Tours, has joined the Alaska Sea Grant Advisory



Brian Allee migrates to Portland.



Gary Freitag, Alaska Sea Grant's newest Marine Advisory Program agent.

Committee at this meeting. Bruce will represent the cruise ship industry since John Shively is no longer working for Holland America. John has agreed to stay on the Advisory Committee, now representing the Resource Development Council for Alaska. Geoff Haskett is the new designee to the Advisory Committee from the U.S. Fish and Wildlife Service, and Robert Winfree has been designated as the formal representative to the Advisory Committee from the National Park Service. We are grateful to all members of the Alaska Sea Grant Advisory Committee for their continued support and time.

Funding: Alaska Sea Grant's overall budget, including the Marine Advisory Program, outside sources, and University funding, is more than \$6.5 million per year. Funding from National Sea Grant has been essentially flat for the last five years, while salaries and other expenses have risen, leading to an overall decline in our programmatic resources.

This year, Alaska Sea Grant and the Marine Advisory Program faculty were successful in garnering \$2.5 million in outside funding for a number of specific projects. Revenues from the sale of books, videos, and other education materials have increased, providing support to our unique and highly regarded publishing operations.

A significant concern for Alaska Sea Grant is the potential termination of funding for five MAP faculty positions (Nome, Unalaska, Juneau, Petersburg, and Cordova) within the next 18 months. A request to UAF for \$600,000 of additional funds to sustain these positions was not ranked highly enough to make the list of University-wide requests to the Alaska State Legislature. We have a verbal commitment from the new interim UAF chancellor Brian Rogers to add this request to next year's list and we will be asking the Advisory Committee to help us make this happen.

Strategic Planning: National Sea Grant has developed a new strategic plan and Alaska Sea Grant is revising and updating our plan to align with it. We have completed a constituent survey, received input from the Advisory Committee, staff, and faculty, and developed goals and objectives that we will review at this meeting. An implementation plan also will be written that explains in greater detail the strategies and actions we will take to carry out the plan.

Request for Proposals: Our request for proposals will open in December 2008 for pre-proposals. We will be asking for Advisory Committee input in ranking the pre-proposals during the week of February 9 in Anchorage.

Alaska Sea Grant Conferences and Workshops

FEBRUARY 2007–JANUARY 2008

Year	Month	Title	Faculty/Sponsor	Location	Attendees
2007	2	AMSEA Vessel Safety Drills Certification	Baker	Cordova	23
2007	2	Marine Safety Refresher Course	Baker	Cordova	8
2007	2	Sanitation	Kramer	Anchorage	
2007	2	Quality Assurance/Quality Control	Kramer	Anchorage	7
2007	2	Better Process Control School	Kramer	Anchorage	9
2007	2	HACCP	Kramer	Anchorage	
2007	2	Marine Mammal Training - OTC	Wynne	Anchorage	12
2007	2	Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative	AYK-SSI	Anchorage	298
2007	3	Smoked Seafood Workshop	Brown, Rice	Indian	
2007	3	International Smoked Seafood Conference	Brown, Rice, Kramer/AFDF, ASG, ASMI, CA SG, PCCRC	Anchorage	103
2007	3	HACCP	Kramer, Baker	Cordova	11
2007	3	Oysters A to Z	RaLonde	Kodiak	24
2007	3	King Crab Enhancement Workshop	RaLonde	Seward	33
2007	3	PSP Technician Training	RaLonde	Kodiak	4
2007	3	Oysters A to Z	RaLonde	Kodiak	24
2007	3	Business of Tourism/Birding in Y-K	Reeve	Bethel	
2007	3	Business Issues/Creating a Rural Tour Operation	Reeve, Johnson	Bethel	8
2007	4	Marine Habitat Mapping Technology Workshop for Alaska	NPRB	Anchorage	89
2007	4	UAF Home Canning Workshop	Baker	Cordova	9
2007	4	Marine Safety Drills certification course	AMSEA	Cordova	21
2007	4	Bristol Bay Offshore Exploration Planning	Brown	Dillingham	
2007	4	HACCP	Kramer	Anchorage	
2007	5	HACCP	Kramer	Wrangell	
2007	5	HACCP	Kramer	Petersburg	8
2007	5	HACCP	Kramer	Bethel	
2007	5	Responding to Whale Entanglements: Workshop for Commercial Fishermen	Rice	Petersburg	17
2007	5	Salmon Quality Handling	Rice	Wrangell	6
2007	5	Salmon Quality Handling	Rice	Petersburg	9
2007	5	Marine Mammal Training - AMMOP	Wynne	Anchorage	16
2007	5	Marine Mammal Training - OTC	Wynne	Anchorage	13
2007	6	Marine/Aquatic Science Education Workshop for Teachers	Brownlee	Kasitsna Bay	
2007	6	Just in Time	Crapo, Herter	Teller	18
2007	6	HACCP	Crapo, Herter	Teller	4
2007	6	Direct Marketing for Fishermen in Cook Inlet	Haight, Fisk	Kenai	4
2007	6	Direct Marketing for Fishermen in Cook Inlet (evening)	Haight, Fisk	Kenai	7
2007	6	Direct Marketing for Fishermen in Cook Inlet	Haight, Fisk	Homer	8
2007	6	Fish ID Class - Groundfish - OTC	Kramer	Anchorage	12
2007	6	Quality Assurance Project Planning	RaLonde	Anchorage	18
2007	6	Transition: Looking Both Ways High School Marine Science Camp	RaLonde	Juneau	22
2007	6	Marine Mammal Training - OTC	Wynne	Anchorage	15
2007	7	Resource Management for Fisheries (CPRB high school)	Baker	Cordova	14
2007	7	Marine Mammal Training - OTC	Wynne	Anchorage	18

Conferences and Workshops (continued)

Year	Month	Title	Faculty/Sponsor	Location	Attendees
2007	8	Camp Qungaayux (safety, survival, PSP sampling, anatomy)	Brewer	Unalaska	62
2007	8	COASST Stranded Seabird Workshop	Brewer/COASST	Unalaska	7
2007	8	Ocean Explorers (8-12 year olds)	Herter	Nome	
2007	8	Gillnet Mending Workshop	Herter/Kawerak	Nome	
2007	8	Field Biology for High School Students	Herter/NACTEC	Nome	
2007	8	Sanitation	Kramer, Brewer	Unalaska	4
2007	8	HACCP	Kramer, Brewer	Unalaska	5
2007	8	Marine Mammal Training - OTC	Wynne	Anchorage	12
2007	9	Ecosystem-Based Management Implementation within Fisheries	Baker	San Francisco	44
2007	9	FOAMI talk at Museum of Aleutians - EMAP Research Project	Brewer	Unalaska	81
2007	9	Discover Scuba Diving Course	Brewer	Unalaska	5
2007	9	HACCP	Kramer	Anchorage	17
2007	9	Sanitation	Kramer	Anchorage	7
2007	9	Intertidal Aquaculture in Alaska	RaLonde	Seattle WA	120
2007	9	West Coast Sea Grant Program Bivalve Aquaculture and the Environment	RaLonde	Seattle WA	220
2007	10	Sitka Seafood Marketing Workshops	Haight, Fong, Rice	Sitka	11
2007	10	Nome Seafood Business and Marketing Workshops	Haight, Herter	Nome	7
2007	10	Emergency Preparedness	Herter/AMSEA	Nome	3
2007	10	Survival Suit Demonstration/School	Herter/AMSEA	Nome	50
2007	10	Survival Suit Demonstration/Lake	Herter/AMSEA	Nome	20
2007	10	Emergency Preparedness	Herter/AMSEA	Savoonga	
2007	11	Financial Statements & Recordkeeping for Fishing Operations	Haight, Baker	Cordova	13
2007	11	IPY Seminar - Sea Ice Monitoring	Haight/UAF	Nome	106
2007	11	FISH EXPO - Charterboat Conference	Johnson	Seattle	
2007	11	Financial Management for Alaska Shellfish Farmers	RaLonde, Haight	Anchorage	
2007	11	HUD Business Workshops	Reeve/AVCP	Y-K	90
2007	11	Rural Development 300 - Class	Steiner	Anchorage	
2007	12	Alaska Young Fishermen's Summit II	Baker, Rice	Anchorage	71
2007	12	Discover Scuba Diving Course	Brewer	Unalaska	
2007	12	Intro to Direct Marketing	Haight	Anchorage	8
2007		AMSEA Marine Safety and Survival	Brewer	Unalaska	62
2007		Intertidal Ecology Monitoring	Brewer	Unalaska	12
2007		High School Advanced Dissections	Brewer	Unalaska	8
2007		Intertidal Ecology Workshop	Brewer	Akutan	8
2007		Sea Week Explorations	Brewer	Unalaska	12
2007		Water Quality Lectures	RaLonde		
2008	1	IPY Seminar - Subsistence and Art (Amber Lincoln)	Herter/UAF	Nome	
2008	1	IPY Seminar - Storms (David Atkinson)	Herter/UAF	Nome	
2008	1	Writing Your Own Business Plan Workshops (HUD, Y-K Cultural Center, KUC, AVCP)	Reeve	Bethel	12
2008	1	Anchorage Audubon presentation	Reeve, Wiese	Anchorage	
2008	1	Rural Development 300 - Class (Global Environmental Issues)	Steiner	Anchorage	
2008	1	Oasis Earth - Service High School Seminar	Steiner	Anchorage	100

Alaska Sea Grant Publications and Media Placement

FEBRUARY 2007–JANUARY 2008

TECHNICAL REPORTS

- Smoker, W.W., and R. RaLonde. 2007. Final Report: Improved effectiveness of hatchery salmon smolt production. Grant G00001895, Report FCSRS001, Cooperative State Research Services, United States Department of Agriculture.
- Thayer, G., P. Cullenberg, and D. Garza. 2007. Synthesis of Education Programs, Scholarships, Loan and Internship Opportunities Available to Assist in Increasing the Number of Minorities Working in Fisheries and Marine Sciences. NOAA Technical Memorandum NOS NCCOS 53. March 2007.

PROCEEDINGS, SYMPOSIA

- Brewer, R. 2007. Community-Based Coastal Observing in Alaska: Aleutian Life Forum 2006. Alaska Sea Grant, University of Alaska, AK-SG-07-03, Fairbanks
- Cullenberg, P., ed. 2007. Alaska's Fishing Communities: Harvesting the Future. Conference Proceedings. Alaska Sea Grant, University of Alaska Fairbanks, AK-SG-07-02, Fairbanks.
- Heifetz, J., J. DiCosimo, A.J. Gharrett, M.S. Love, V.M. O'Connell, and R.D. Stanley, eds. 2007. Biology, Assessment, and Management of North Pacific Rockfishes. Alaska Sea Grant, University of Alaska Fairbanks, AK-SG-07-01, Fairbanks.

BROCHURES, FACT SHEETS

- Alaska King Crab Research, Rehabilitation and Biology Program Agenda April 07.
- Alaska King Crab Research, Rehabilitation and Biology Program Financial Status Aug. 07. Fact sheet.
- Alaska King Crab Research, Rehabilitation and Biology Program Milestones April 07. Fact sheet.
- Alaska Seas and Rivers Curriculum Feb. 08. Fact sheet.
- Alaska Seas and Rivers Project Update Nov. 07. Fact sheet.
- Aleutian Islands Research Plan Dec. 07. Fact sheet.
- Aleutian Islands Research Plan Jan. 08. Fact sheet.
- Aquaculture, Alaska Style: NOAA Aquaculture Program May 07. Fact sheet.
- FY 2007 Budget Cut Scenario Mar. 07. Fact sheet.
- International Smoked Seafood Conference Brochure Mar. 07
- Unifying the Vision Feb. 07. Fact sheet.

PEER-REVIEWED JOURNAL ARTICLES, BOOK CHAPTERS

- Chantarachoti, J, A.C.M. Oliveira, B.H. Himelbloom, C.A. Crapo, and D.G. McLachlan. 2006. Portable electronic nose for detection of spoiling Alaska pink salmon (*Oncorhynchus gorbuscha*). Journal of Food and Science 71(5):S414-S421(1).

Chantarachoti, J., A.C.M. Oliveira, B.H. Himelbloom, C.A. Crapo, and D.G. McLachlan. 2007. Alaska pink salmon (*Oncorhynchus gorbuscha*) spoilage and ethanol incidence in the canned product. Journal of Agricultural and Food Chemistry 55(7):2517-2525.

Geiger, H.J., I. Wang, P. Malecha, K. Hebert, W.W. Smoker, and A.J. Gharrett. 2007. What Causes Variability in Pink Salmon Family Size? Transactions of the American Fisheries Society 136:1688-1698.

Hamilton, J., and B. Konar. 2007. Implications of substrate complexity and kelp variability for south-central Alaskan nearshore fish communities. Fisheries Bulletin 105:189-196.

Moore, S.E., K. Wynne, J. Clement, and J.M. Grebmeier. 2007. Gray whale occurrence and forage southeast of Kodiak Island, Alaska. Marine Mammal Science 23(2):419-428

Park, W., D.C. Douglas, and T.C. Shirley. 2007. North to Alaska: Evidence for conveyor belt transport of Dungeness crab larvae along the west coast of the United States and Canada. Limnol. Oceanogr. 52(1):248-256.

Tojo, N., G.H. Kruse, and F.C. Funk. 2007. Migration dynamics of Pacific herring (*Clupea pallasii*) and response to spring environmental variability in the southeastern Bering Sea. Deep-Sea Research II 54:2832-2848.

Wang, I.A., S.E. Gilk, W.W. Smoker, and A.J. Gharrett. 2007. Outbreeding effect on embryo development in hybrids of allopatric pink salmon (*Oncorhynchus gorbuscha*) populations, a potential consequence of stock translocation. Aquaculture 72:S152-S160.

Witteveen, B.H., K.M. Wynne, and T.J. Quinn II. 2007. A feeding aggregation of humpback whales (*Megaptera novaeangliae*) near Kodiak Island, Alaska: Historical and current abundance estimation. Alaska Fisheries Research Bulletin 12(2):187-196.

VIDEOS, CDS, DVDS

- Alaska Sea Grant. 2007. A Lift to Louisiana. Alaska Sea Grant. M-73. 3:30 min.
- Alaska Sea Grant. 2007. Financial Statements and Business Calculations for Commercial Fishermen & Alaska Fish Business Plan. Alaska Sea Grant, University of Alaska Fairbanks, MAB-58. (CD)
- Mercy, D. 2007. Flooding Control: Knowledge and Tools to Prevent Sinking. AMSEA and Alaska Sea Grant Marine Advisory Program. MAPV-64. 14 min.

HANDBOOKS, MANUALS, GUIDES

- Baker, T. 2007. Tips for Direct Marketers: Preparing for the Onboard Inspection, Alaska Sea Grant College Program, University of Alaska Fairbanks, Fairbanks, ASG-45. 6 pp.

Publications and Media (continued)

- Haight, G., A. Crow, and H. Geier. 2007. Developing Cooperatives for the Alaska Seafood Industry. Alaska Sea Grant, University of Alaska Fairbanks, MAB-61, Fairbanks.
- Johnson, T. 2007. Fishermen's Direct Marketing Manual, 4th edn. Alaska Sea Grant Marine Advisory Program, University of Alaska Fairbanks, MAB-53, Fairbanks.
- Kolbe, E., and D. Kramer. 2007. Planning for seafood freezing. Alaska Sea Grant College Program, University of Alaska Fairbanks, MAB-60, Fairbanks.
- Stevenson, D.E., J.W. Orr, G.R. Hoff, and J.D. McEachran. 2007. Field Guide to Sharks, Skates, and Ratfish of Alaska. Alaska Sea Grant, University of Alaska Fairbanks, SG-ED-57, Fairbanks.
- Wynne, K. 2007. Guide to Marine Mammals of Alaska, 3rd edn. Alaska Sea Grant College Program, MAB-44, Fairbanks.

ELECTRONIC PUBLICATIONS

- Alaska Seas and Rivers Curriculum, Grades K-5, http://seagrant.uaf.edu/marine-ed/curriculum/index.php?option=com_frontpage&Itemid=108.
- RaLonde, R. 2007. (ed.). Proceedings of Financial Management for Alaskan shellfish farmers: Planning Tools for Success. CD of workshop presentations and supplemental management tools. Alaska Sea Grant and CSREES Risk Management Program, Washington State University. http://www.wsg.washington.edu/research/geoduck/streaming_video.html.

THESES, DISSERTATIONS

- Holzinger, A. 2007. An econometric analysis of global salmon market prices and their implications for the Alaska wild salmon industry. Master's thesis, University of Alaska Fairbanks, SGT-07-01.
- Huang, J. 2007. Quality characterization and process design of salmon oil production for nutraceutical market. Master's thesis, University of Alaska Fairbanks, SGT-07-03.
- Morey, A. 2007. Fish bacterial flora identification via rapid cellular fatty acid analysis. Master's thesis, University of Alaska Fairbanks, SGT-07-05.
- Ormseth, O.A. 2007. Reproductive potential of Pacific cod (*Gadus macrocephalus*) in Alaska. Ph.D. dissertation, University of Alaska Fairbanks, SGT-07-07.
- Park, W. 2007. Advection and retention of larval Dungeness crab *Cancer magister* in Glacier Bay and adjacent areas. Ph.D. dissertation, University of Alaska Fairbanks, SGT-07-02.
- Raudonis, R. 2007. Bacteria associated with paralytic shellfish toxin-producing strains of *Anabaena circinalis*. Master's thesis, University of Alaska Fairbanks, SGT-07-06.
- Tojo, N. 2006. Environmental cues for Pacific herring (*Clupea pallasii*) spawning in northern Bristol Bay. Master's thesis, University of Alaska Fairbanks, SGT-06-02.

- Triebenbach, S.P. 2007. Compensatory growth following winter food deprivation in hatchery produced coho and chinook salmon smolts. Master's thesis, University of Alaska Fairbanks, SGT-07-04.

NEWSLETTERS, PERIODICALS

- Brewer, R. 2007. Monitoring Changes in Alaska's Coastline. *Alaska Seas & Coasts* 3:1-12.
- Haight, G., and S. Rice. (eds.). 2007. The Fish Entrepreneur, Vol. 1, Fall 2007. Alaska Sea Grant Marine Advisory Program, University of Alaska Fairbanks, M-77, Fairbanks.
- Johnson, T. 2007. Charter Log Newsletter, No. 48, Winter 2007. Alaska Sea Grant, University of Alaska Fairbanks, M-59, Fairbanks.
- Johnson, T. 2007. Charter Log Newsletter. No. 49, Spring 2007. Alaska Sea Grant, University of Alaska Fairbanks, M-71, Fairbanks.
- Johnson, T. 2007. Charter Log Newsletter. No. 50, Fall 2007. Alaska Sea Grant, University of Alaska Fairbanks, M-86, Fairbanks.
- RaLonde, R. 2007. Financial management for shellfish farmers. Alaskan Shellfish Growers Association Newsletter, Spring 2007.
- Sorum, A. 2007. Clean boating. *Alaska Seas & Coasts* 4:1-12.

PROGRAM REPORTS

- Alaska Sea Grant College Program Annual Report, February 1, 2006-January 31, 2007.
- Alaska Sea Grant College Program Final Report NA 16RG2321 February 1, 2002-January 31, 2006, Alaska Sea Grant Omnibus 2002-2006.
- Cullenberg, P., T. Baker, and S. Rice, S. 2007. Alaska's Fisheries Extension Education (FEE) Activities: 2004-2007. Report to National Sea Grant, Silver Springs, Maryland.

DIRECTORY

- Alaska Sea Grant. 2008. 2007 Bookstore Catalog. Alaska Sea Grant, University of Alaska Fairbanks, AK-ADMIN-61, Fairbanks.

**POSTERS, CONFERENCE PAPERS/
POWERPOINTS, WORKSHOP SUMMARIES,
TOPICAL WEBSITES, OTHER**

- Alaska King Crab Research, Rehabilitation and Biology Program (AKCRRAB) Web pages. http://seagrant.uaf.edu/research/projects/initiatives/king_crab/general/.
- Alaska King Crab Research, Rehabilitation and Biology Program Poster May 07

Publications and Media (continued)

- Alaska Marine Research Poster Mar. 07
- Alaska Sea Grant 101 PowerPoint Aug. 07
- Alaska Sea Grant, University of Alaska Fairbanks. 2007. 2008 Alaska Coastal Calendar. Alaska Sea Grant, University of Alaska Fairbanks, SG-ED-58, Fairbanks.
- Alaska Tide Book Company and Alaska Sea Grant College Program. 2007. 2008 Tide Tables: Western Alaska. Alaska Tide Book Company and Alaska Sea Grant College Program, M-74, Fairbanks.
- Alaska Tide Book Company and Alaska Sea Grant College Program. 2007. 2008 Tide Tables: Southcentral Alaska. Alaska Tide Book Company and Alaska Sea Grant College Program, M-75, Fairbanks.
- Alaska Tide Book Company and Alaska Sea Grant College Program. 2007. 2008 Tide Tables: Southeastern Alaska. Alaska Tide Book Company and Alaska Sea Grant College Program, M-76, Fairbanks.
- Baker, T., 2007. Alaska's Local Advisory Committee System: Enshrined Public Activism in Resource Management Since 195. Poster, American Fisheries Society annual meeting, September 9, 2007, San Francisco, CA.
- Baker, T. 2007. Defining Your Community's Goals for Fish/Fishing/Seafood: Models for Community Organizations. In: P. Cullenberg (ed.), Alaska's Fishing Communities: Harvesting the Future: Conference Proceedings. Alaska Sea Grant College Program, University of Alaska Fairbanks, AK-SG-07-02, Fairbanks.
- Baker, T. 2007. Preparing for the On-board ADEC Inspection. In: The Fish Entrepreneur: Newsletter for Alaska Direct Marketers and Small Seafood Processors, Vol. 1, Alaska Sea Grant Marine Advisory Program, 2 pp.
- Baker, T. 2007. Working with a Custom-Processor. In: Johnson, T. (ed.), Fishermen's Direct Marketing Manual, 4th edn. Washington Sea Grant/Alaska Sea Grant WSG-AS 03-03/MAB-53. 3 pp.
- Herter, H. 2007. *Oshoro Maru* IPY research cruise in 2007: Heidi Herter's journal entries, July 23-30, 2007. Web pages. <http://seagrant.uaf.edu/marine-ed/news/ipy-cruise-2007.html>.
- International Smoked Seafood Conference: Program and Abstracts. Booklet. March 2007.
- Jewett, S., R. Brewer, H. Chenelot, R. Clark, D. Dasher, S. Harper, and M. Hoberg. 2008. Scuba techniques for the Alaska Monitoring and Assessment Program (AKMAP) of the Aleutian Islands, Alaska. In: American Academy of Underwater Sciences 2008 Proceedings.
- Kelly, S. 2008. Seanbob's Weblog: A weblog from an Alaskan Knauss Fellow in Washington. <http://seanbob1.wordpress.com/>.
- Marine Debris in Alaska Workshop Program Feb. 07
- Marine Habitat Mapping Technology Workshop for Alaska: Program and Abstracts. Booklet. April 2007
- Oliveira, A.C.M., B. Himelbloom, C.A. Crapo, C. Vorholt, and R. RaLonde. 2007. Quality of Alaskan maricultured oysters (*Crassostrea gigas*): A one-year survey. Food Chemistry and Toxicology.
- RaLonde, R. 2007. Increasing performance from broodstock to harvest. In: Proceedings of the workshop Financial Management for Alaskan Shellfish Farmers, November 1-2, 2007, Anchorage, Alaska. CD and on MAP Web site.
- RaLonde R. 2007. Intertidal shellfish aquaculture in Alaska. In: Proceedings to the Northwest Workshop of Shellfish Aquaculture and the Environment. Washington Sea Grant. Website video stream presentation.
- RaLonde, R. 2007. Ocean conditions and water temperature monitoring. In: Proceedings of the workshop Financial Management for Alaskan Shellfish Farmers, November 1-2, 2007, Anchorage, Alaska. CD and on MAP Web site.
- RaLonde, R.L. 2007. The Western Regional Aquaculture Consortium: An Introspective View of Extension in the Western States. In: Proceedings of the National Aquaculture Extension Conference, Cincinnati, Ohio.
- Wakefield Poster Mar. 07

MEDIA PLACEMENTS*

- 18 news releases were distributed.
- 117 media placements about ASG/MAP people and activities occurred.
- 11 Octopus Ink articles were written.
- 66 Octopus Ink media placements were made.
- 2 photo media placements were made.

Highlights

- King Crab Research, Rehabilitation and Biology Program—5 releases, 28 placements.
- North Aleutian Basin Energy and Fisheries—3 releases, 12 placements
- Young Fishermen's Summit—1 release, 13 placements.
- Fuel Efficiency Initiative—1 release, 5 placements

ASG News Releases Produced and Placements, February 2007-January 2008

Alaskans regroup in battle against marine debris 23 January 2008

- Anchorage Daily News 1/27
- Dutch Harbor Fisherman 1/31
- Arctic Sounder 2/1

Dialogue sought on North Aleutian Basin oil and gas development 23 January 2008

- East Aleutian Borough (web site) 1/23
- Area M Fishery (web site) 1/23
- SitNews.com 1/23
- SeafoodNews.com 1/25
- FishUpdate.com 1/25
- Arctic Sounder 1/25
- Dutch Harbor Fisherman 1/31
- Dutch Harbor Fisherman 2/1
- Alaska Journal of Commerce 2/3
- KDLG-FM Dillingham 2/18

*These are known media placements. Many others may have occurred that were not trackable.

*Publications and Media (continued)***Alaska Sea Grant Marine Advisory Program and UAF Northwest Campus host IPY speaker series in Nome 08 January 2008**

o placements recorded

Fishermen collect Alaska red king crab for science 06 December 2007

SeafoodNews.com 12/6
 SitNews.com 12/6
 FishUpdate.com 12/7
 Aquanet.com 12/15
 FarNorth Science.com 12/17
 Alaska Report 12/17
 Lobster Blog 12/19

Alaska Young Fishermen's Summit II 03 December 2007

FishFactor: Laine Welch column in Anchorage Daily News 10/20
 Pacific Fishing 11/1
 Dutch Harbor Fisherman 11/29
 Kenai Peninsula Clarion 11/29
 Kodiak Daily Mirror 12/6
 FishUpdate.com 12/4
 Homer News 12/7
 Homer Tribune 12/5
 Kodiak Daily Mirror 12/6
 KMXT-Kodiak 12/11
 FishUpdate.com 12/12
 Alaska Journal of Commerce 12/30
 Alaska Journal of Commerce 12/30 (two stories in same issue)

Applications open for Alaska Seafood Processing Leadership Institute 2008 06 November 2007

KMXT-Kodiak 10/29
 UA Corporate Programs fact sheet (Summer 2007)
 KTUU-TV Alaska Statewide News, Anchorage 11/05
 Dutch Harbor Fisherman 11/26
 Kenai Peninsula Clarion 11/29

Stakeholders talk energy and fishing in North Aleutian Basin 05 November 2007

Sitnews.com 11/5
 Intrafish.com 11/6
 FishUpdate.com 11/6
 Dutch Harbor Fisherman 11/26
 NOAA E-currents Newsletter (Fall 2007)

UAF, Bodø University create forum for dialogue between North Aleutian stakeholders on fisheries and offshore energy development 09 October 2007

FishUpdate.com 10/10
 Intrafish.com 10/11
 Aleutians East Borough newsletter, "The Pipeline" 10/10
 Tundra Drums 10/22
 Cordova Times 10/26
 Bristol Bay Times 10/26
 Bristol Bay Times 10/26 (two stories in same issue)
 Tundra Drums 11/1

NOAA Fisheries boosts funding for Alaska king crab research 28 September 2007

o placements recorded

Great white sharks in Alaska waters, who knew? 28 September 2007

o placements recorded

Alaska wall calendar more than pretty pictures, it's educational 29 June 2007

o placements recorded

UAF fisheries graduate student chosen as National Sea Grant Knauss Fellow 26 June 2007

KTOO-FM Juneau 6/28
 Fairbanks News-Miner 7/1

Blue king crabs hatch in Alaska research program to rebuild wild stocks 31 May 2007

IntraFish.com 5/31
 SiteNews.com 5/31
 Fish Farmer online 6/1
 Seafood.com 6/1
 Alaska Journal of Commerce 6/3
 NOAA OAR NSG News 6/4
 Deadliest Catch Blog 6/5
 Capital City Weekly June 07
 Fish Farmer International June 07
 Lobster Fact Blog June 07

Teaching children to stay alive when they become lost outdoors 27 March 2007

Arctic Sounder 4/4

Bering Strait region gets first Marine Advisory Program agent 13 March 2007

o placements recorded

Red king crab eggs hatch in Alaska research program 8 March 2007

Homer News Commercial Fishing Edition March 2007
 Deadliest Catch Blog 3/16
 FishUpdate.com 3/9
 Alaska Journal of Commerce 3/18
 Seward Log 3/29
 Dutch Harbor Fisherman 3/22

Alaska Sea Grant announces new publications and videos 7 February 2007

o placements recorded

Publications and Media (continued)

Crab research program prepares for egg hatch 2 February 2007

KTVA-Anchorage 2/7
IntraFish 2/7
SitNews 2/7
FishUpdate 2/7
Fish Factor Radio, Laine Welch 2/8
Seward Phoenix Log 2/8
KMXT-Kodiak News 2/11
KMXT-Kodiak 2/12
APRN Alaska News Nightly 2/12
KTUU-TV Alaska Statewide News, Anchorage 2/14
Alaska Journal of Commerce 2/18

MAP agent, researcher, or media-initiated

Allee, Brian, King Crab Research and Rehabilitation Program,
Laine Welch's Fish Radio, 3/12/07

Baker, Torie, Slime Line T-shirts, Laine Welch's Fish Radio 9/18/07;
Laine Welch's Fish Radio newspaper column, Anchorage Daily
News, 9/22/07

Brewer, Reid, Photo published on front page of the Money
section of the Anchorage Daily News, 19 August 2007, Beaufort
oil rigs parked in Dutch returning home

Brewer, Reid, Photos of oil exploratory ships in Dutch Harbor
published on Shell website [http://media.alaskacoalition.org/
Shell/index.html](http://media.alaskacoalition.org/Shell/index.html), 20 October 2007

Brewer, Reid, Divers find new species in Aleutians, Dutch Harbor
Fisherman, (SFOS news release) 11/8/07

Brewer, Reid, Mercury in Alaska fish: Something else to worry
about, Cordova Times 1/17/08, Tundra Drums 1/17/08, Bristol
Bay Times 1/17/08, Dutch Harbor Fisherman 1/17/08,

ComFish 2007, Kodiak Daily Mirror, 2/22/07

Cullenberg, Paula, Alaska Marine Conservation Alliance Renews
Support for Young Fishermen's Summit: Check Presented for
December Summit in Anchorage, Seafood.com 10/9/07

Cullenberg, Paula, Rural students wanted for fishery, Laine
Welch's Fish Radio 7/26/07; Laine Welch's Fish Radio newspaper
column, Anchorage Daily News, 7/28/07

Dochtermann, Ludger, No king crab in Kodiak after 25 years,
editorial, Alaska Report.com 11/19/07

Gadid Conference. Pacific Fishing, February 2007

Guide to Alaska Marine Mammals, right whale graphic, Bering
drilling could hurt right whales, Anchorage Daily News, 8/14/07

Herter, Heidi, IPY research cruise, Nome Nugget, 8/9/07

Herter, Heidi, Students learn scientific process at Salmon Lake
field biology course, Nome Nugget, 8/10/07

Herter, Heidi. Real Science: NACTEC students apply biology
concepts to familiar animals, plants, UAF Northwest Campus
newsletter, 8/7/07

Johnson, Terry, Feeding eagles federal violation, Homer News,
1/10/08

Johnson, Terry, Marine Advisory Program agent in Homer is
writing a training manual to help marine facilities prevent the
spread of rats, KBBI-Homer, 12/21/07

Johnson, Terry, New state regulation seeks to curtail rodent
population, Dutch Harbor Fisherman 1/17/08, Anchorage Daily
News 1/28/08, JP McHale Pest management, Inc. 2/1/08

KMXT-Kodiak, Kodiak crabber optimistic about rehab program,
(Ludger Dochtermann) 12/4/07

Kodiak Daily Mirror. Where's the crab? Group works to form
enhancement program to restore crab stocks in Kodiak Island
waters, , 12/5/07

Leroux, Celeste, Alutiiq Pride Shellfish Hatchery hosts open
house, Seward Phoenix Log, 3/29/07

Newman, Kelly, Sound study explores orca behavior. Juneau
Empire 2/6/07, Anchorage Daily News 2/5/07, Far North Science
2/13/07

RaLonde, Ray, Mussel Safety, Laine Welch's Fish Radio, 9/21/07

Schneider, Doug, Marine Advisory Agent Crashes Shellfish
Hurdles, Aquanet.com 12/17/07 (reprinted from Web feature
written for UAF Marketing and Communications in 2005

Steiner, Rick, Lacking studies, state still disputes polar bear
'doom', Anchorage Daily News 1/27/08; Arizona Daily Star
2/3/08

Steiner, Rick, S.F. Bay oil spill illuminates flaws in response plans,
Sacramento Bee, 11/16/07

Steiner, Rick, Study shows Kivalina's relocation choice safe, Alaska
Journal of Commerce, 7/8/07

Stephan, Jeff, Experts to present on crab program Tuesday,
Kodiak Daily Mirror and KMXT-Kodiak, 10/29/07

Welch, Laine, Fishing's "year in review" for 2007, Most promising
fish story: The Alaska king crab enhancement project, which
aims to revitalize stocks at Kodiak and St. Paul, Fish Factor
radio program, 12/29/07, Anchorage Daily News, 1/2/08

Octopus Ink

Brewer, Reid. 2007 "Octopus Ink" columns written for the
following newspapers: Dutch Harbor Fisherman, Bristol Bay
Times, Cordova Times, The Tundra Drums (YK delta), The
Fisherman's News, and Alaska Fish Notes.

16 August 2007. Ribbon Seal in Unalaska

23 August 2007. COASST training engages local birders and
beachwalkers

13 September 2007. Four rare beaked whales wash up in Atka

20 September 2007. Humpback whale stranding in Unalaska Bay

18 January 2008. Mercury in Alaska's Fish

18 February 2008. Unalaska NOSB team rides again

27 March 2008. The future of research in the Aleutian Islands

27 March 2008. *Selendang Ayu* NRDA seeking input from local
stakeholders

24 April 2008. Demystifying science: wintering diet of Steller Sea
Lions

28 May 2008. Unalaska cleanup volunteers plunge to new low

19 June 2008. Food and Water Security issues for a changing
climate in Alaska

Alaska Sea Grant Awards and Honors

FEBRUARY 2007–JANUARY 2008

PUBLICATIONS

Gold Award, 2008 Alaska Coastal Calendar, 2008 Association for Communication Excellence competition, 4 color popular publication category

First Place, Field Guide to Sharks, Skates, and Ratfish of Alaska, 2008 National Association of Government Communicators, soft/hardcover, over 50 p. book category

First Place, Clean Boating, *Alaska Seas & Coasts* vol. 4, 2008 Alaska Professional Communicators, manuals and handbooks category

Silver Award, 2008 Tide Tables cover, 2008 Association for Communication Excellence competition, Graphic design category

Silver Award, Field Guide to Sharks, Skates, and Ratfish of Alaska, 2008 Association for Communication Excellence competition, 4 color popular publication category

Third Place, 2008 Alaska Coastal Calendar, 2008 National Association of Government Communicators competition, calendar category

MARINE ADVISORY PROGRAM

2007 Pacific Region Superior Outreach Award, Alaska Sea Grant Marine Advisory Program Alaska Fishing Business Assistance Program, project team member, West Coast Sea Grant Extension Program Leaders

2008 Macy Award from the Institute of Food Technologists, Minnesota Section, to recognize outstanding food technology transfer, Don Kramer.

Elizabeth Stier Humanitarian Achievement Award, for outreach work in Alaska, from the Institute of Food Technologists. Don Kramer

IFT Fellow, the highest distinction that IFT members can achieve based on leadership and service. Don Kramer

Alaska Sea Grant Collaborative Partnerships

FEBRUARY 2007–JANUARY 2008

FEDERAL PARTNERS

Centers for Disease Control, National Institute for Occupational Safety and Health
Consortium for Oceanographic Research and Education (CORE)
Department of Agriculture, Cooperative State Research, Education
Department of Agriculture, Trade Adjustment Assistance Program
Department of Commerce, North Pacific Research Board
Department of Commerce, Pacific States Marine Fisheries Commission
Department of Education
Department of the Interior, Fish and Wildlife Service
Department of the Interior, Geological Survey
Department of the Interior, Minerals Management Service
Department of the Interior, National Park Service
Environmental Protection Agency
Exxon Valdez Trustee Council
Food and Drug Administration
National Museum of Natural History, Smithsonian Institution, Arctic Studies Center
National Oceanographic Partnership Program, Alaska Ocean Observing System
National Science Foundation, Alaska Native Science Commission
National Science Foundation, Arctic Research Commission of the United States
NOAA Alaska Fisheries Science Center
NOAA Alaska Regional Marine Research Program
NOAA Coastal Ocean Program Environmental Entrepreneurship Program for Minority Serving Institutions
NOAA Fisheries
NOAA Kachemak Bay National Estuarine Research Reserve
NOAA National Ocean Service
NOAA National Tsunami Hazard Mitigation Program
NOAA North Pacific Fishery Management Council
NOAA Northeast Fisheries Science Center
NOAA West Coast and Alaska Tsunami Warning Center

REGIONAL PARTNERS

Arctic Yukon Kuskokwim Sustainable Salmon Initiative
Barrow Arctic Science Consortium
Native American Fish and Wildlife Society
Qawalangin Tribe of Unalaska
Southeast Alaska Inter-Tribal Fish and Wildlife Commission
Southern Southeast Regional Aquaculture Association
Southwest Alaska Municipal Conference
The Alaska Sea Otter and Steller Sea Lion Commission
Tlingit and Haida Indian Tribes of Alaska
Western Regional Aquaculture Center

LOCAL AND STATE PARTNERS

Alaska Coastal Management Program, Division of Alaska Coastal Zone Management
Alaska Commercial Fisheries Entry Commission
Alaska Commercial Fishing and Agriculture Bank
Alaska Cooperative Extension Service
Alaska Department of Commerce, Community and Economic Development

Alaska Department of Education and Early Development
Alaska Department of Environmental Conservation
Alaska Department of Fish and Game
Alaska Department of Labor, Business Partnerships, Alaska Seafood Processing Leadership Institute
Alaska Department of Natural Resources
Alaska Department of Transportation
Alaska Division of Emergency Services
Alaska Division of Homeland Security and Emergency Management
Alaska Fisheries Revitalization Strategy
Alaska Office of Boating Safety
Alaska Seafood Marketing Institute
Aleutians East Borough
Alutiiq Museum
Alutiiq Pride Shellfish Hatchery
Anchorage Economic Development Council
Anchorage International Airport
Anchorage School District
Bristol Bay Borough
City of Craig
City of Dillingham
City of Fairbanks
City of Unalaska
Cordova High School
Dillingham Planning Commission
Fairbanks North Star Borough School District
Juneau School District
Kodiak Advisory Committee
Kodiak Chamber of Commerce
Lower Kuskokwim School District
Matanuska-Susitna Borough School District
Museum of the Aleutians
Nelson Lagoon Village
North Slope Borough
Port of Valdez
Pratt Museum
Prince of Wales Island Citizen's Advisory Council
Prince William Sound Science Center
The Imaginarium Science Discovery Center
Unalaska City School District
Unalaska Parks, Culture and Recreation Center
Village of Quinhagak

NGO PARTNERS

Alaska SeaLife Center
Alaska Center for the Environment
Alaska Community Action on Toxics
Alaska Conservation Foundation
Alaska Conservation Solutions
Alaska Fisheries Development Foundation
Alaska Fishing Industry Relief Mission
Alaska Forum for Environmental Responsibility
Alaska Groundfish Data Bank
Alaska Association of Harbormasters and Port Administrators
Alaska Marine Conservation Council
Alaska Marine Safety Education Association
Alaska Geographic Association
Alaska Natural Resource and Outdoor Education Association
Alaska Oceans Network

Partnerships (continued)

Alaska Oceans Program
 Alaska Science Consortium
 Alaska Small Business Development Center
 Alaska Underwater Science Foundation
 Alaska Wildlife Alliance
 Aldo Leopold Wilderness Research Institute
 Bristol Bay Native Association
 Bristol Bay Native Corporation
 Bristol Bay Science and Research Institute
 Center for Alaskan Coastal Studies
 Center for Marine Conservation
 Chenega Corporation
 Coastal Observation and Seabird Survey Team
 Cook InletKeeper
 Discovery Southeast
 Ecotrust
 Greenpeace USA Inc.
 Gulf of Alaska Coastal Communities Coalition
 Marine Conservation Alliance Foundation
 Native American Bank
 The Nature Conservancy
 North Gulf Oceanic Society
 Ocean Advocates
 Oceana
 OceansAlaska
 Oceans Blue Program
 Pacific Environment
 Prince William Sound Keeper
 Pribilof Island Collaborative
 Shipping Safety Partnership
 Southeast Alaska Rainforest Wild

INTERNATIONAL PARTNERS

Bedford Institute of Oceanography (Canada)
 Bermuda Biological Station for Research, (Bermuda)
 Bodø University (Norway)
 Commander Islands Nature Protection Association (Russia)
 Danish Institute for Fisheries Research (Denmark)
 Ecole des Mines de Paris, Centre de Geostatistic (France)
 Fisheries and Oceans Canada
 Food and Agriculture Organization (United Nations)
 French Research Institute for Exploitation of the Sea
 International Bering Sea Forum (U.S.)
 International Bird Rescue and Research Center (U.S.)
 International Pacific Halibut Commission (U.S.)
 International Union for the Conservation of Nature and Natural Resources (Switzerland)
 Kamchatka Institute of Ecology and Natural Resource Management (Russia)
 Marine Research Institute (Norway)
 North Pacific Groundfish Observer Program (Russia)
 North Pacific Marine Science Organization (U.S.)
 Northwest Atlantic Fisheries Centre (Canada)
 Pacific Biological Station (Canada)
 Pacific Fisheries Research Center (Russia)
 Pacific Salmon Commission
 Petroleum Environmental Network (China)
 Queen's University (Canada)
 Russian Academy of Sciences, Zoological Institute (Russia)

Sakhalin Environment Watch (Russia)
 Simon Fraser University (Canada)
 University of British Columbia Marine Mammal Research Unit (Canada)
 University of Cape Town (S. Africa)
 World Wildlife Fund (U.S.)

INDUSTRY/BUSINESS PARTNERS

Al-Lou's Fish
 Alaska Aqua Farms
 Alaska Charter Association
 Alaska Crab Coalition
 Alaska Driggers Association
 Alaska Independent Tenderman's Association
 Alaska Oil & Gas Association
 Alaska Shellfish Growers Association
 Alaska Tide Book Company
 Aleut Corporation
 Aleutian Pribilof Island Association
 Aleutian Pribilof Island Community Development Association
 Alutiiq Pride Shellfish Hatchery
 Amazon booksellers
 At-sea Processors Association
 Barnes and Noble booksellers
 Bering Sea Fishermen's Association
 Boat U.S.
 BP
 Bristol Bay Economic Development Corporation
 Calendar Club, L.L.C.
 Calista Corporation
 Central Bering Sea Fishermen's Association
 Coastal Villages Region Fund (Western Alaska CDQ)
 Cook Inlet Aquaculture Association
 Cook Inlet Books
 Cook Inlet Salmon Branding
 Cordova District Fishermen United
 Dancing Salmon Fisheries
 Digital Observer, Inc.
 Douglas Island Pink and Chum Inc.
 EDAW Inc.
 Englund Marine Supply Fish Expo Inc.
 Enviro-Pak Smoking Ovens
 Favco Seafood
 Fleet Refrigeration
 Graystar Pacific Seafood Ltd.
 Great Alaskan Seafood Company
 Hearthside Books
 Hydroacoustic Technology, Inc.
 Iceberg Seafood Company
 Icycle Seafoods Inc.
 Indian Valley Meats
 Jellet Biotech Ltd.
 Joma Wild Seafoods
 Joycraft Marine Safety Equipment
 Kachemak Shellfish Mariculture Association
 Kenai Fjords Tours
 Kenai River Professional Guide Association
 Kenai River Sportfishing Association
 Kodiak ComFish Alaska

Partnerships (continued)

Kodiak Fish Company
Kruzof Fisheries LLC
Laine Welch, Alaska Fisheries Report
LGL Limited
Made in Alaska
McDowell Group
Mikunda, Cottrell & Co.
National Food Products Association
New Bedford Seafood Consulting
New England Trawl Systems
Nor'westerly Food Technology Services
North Pacific Processors Inc.
Northern Economics Inc.
Norton Sound Economic Development Corporation
Ocean Beauty Seafoods Inc.
Olga-Moser Bay Seafood Producers Alliance
Orca Book and Sound
Organizational Learning Tools Inc.
Pacific Seafood Processors Association
Pacific Star Seafoods
Peter Pan Seafoods Inc.
Petersburg Vessel Owners Association
Polaris Strategic Consulting (M. Matthews)
Prince of Wales Island Community Holding Corporation
Prince William Sound Aquaculture Corporation
PURAC America Inc.
Ray Troll, Trollart.com
Resource Analysts International
Resource Decision Support (M. Merritt)
Resourcecon, Inc.
Roseann Dunham Bookkeeping
Royal Dutch Shell Oil Co.
Sea Crest Seafood Market Developers
SeaFisk Consulting
Seafood HACCP Alliance
Silver Lining Seafood
Sitka Sound Seafoods
Solomon Gulch Hatchery
Sound Metrics Corp.
Southeast Alaska Seiners Association
Taku Smokeries
TDX Corporation
Title Wave Books
Trident Seafoods
Trillium Technology Solutions, LLC
Unalaska Native Fisherman Association
UniSea Inc.
United Catcher Boats
United Fishermen of Alaska
United Fishermen's Marketing Association
Wells Fargo Bank
West Marine
Wild Salmon Direct
Wizard Works
Wrangell Insurance Center
Yukon Delta Fisheries Development Association
Yukon River Drainage Fisheries Association

ACADEMIC INSTITUTION PARTNERS

Alaska Pacific University
Alaska Vocational Technical Education Center
California State University
Clatsop Community College

Cornell University School of Ornithology
CyberLynx
Educational Training Co.
Hatfield Marine Science Center
Indiana State University
Interior Distance Education of Alaska
Kenai Peninsula College
Monterey Bay Aquarium
Northwestern Alaska Career and Technical Center
Oregon Coast Aquarium
Oregon State University
Pacific Fisheries Technologists
Prince William Sound Community College
Raven Correspondence School
Scripps Institution of Oceanography
Seattle Aquarium
Seattle Community College
Sheldon Jackson College
Texas A&M University
University of Alaska
University of Alaska Anchorage
University of Alaska Fairbanks
University of Alaska Southeast
University of California
University of Hawaii
University of Minnesota, Center for Farm Financial Management
University of Puget Sound
University of Rhode Island
University of Washington
University of Wisconsin
Utah State University
Virginia Institute of Marine Science
Washington State University Extension
Western Washington University
Woods Hole Oceanographic Institution

SEA GRANT PROGRAM PARTNERS

California Sea Grant
Hawaii Sea Grant
Oregon Sea Grant
Rhode Island Sea Grant
Texas A&M Sea Grant
Washington Sea Grant
Virginia Sea Grant

OTHER PARTNERS

American Academy of Underwater Sciences
American Fisheries Society
Arctic Ocean Diversity (ArcOD) Census of Marine Life
Ecological Society of America
National Association of Government Communicators
National Fish and Wildlife Foundation
Organization of Wildlife Planners
Petersburg Marine Mammal Center
Pollock Conservation Cooperative Research Center
State of Louisiana

Cover: Sockeye salmon in Power Creek near Cordova, Alaska. Photo by Thomas Kline.