

Aleutian Life Forum

Dan Gilson

August 10-13, 2006

Quote of the Conference

“The nice thing about standardized protocols is that there are so many to choose from.” –
A 2006 Aleutian Life Conference Participant

Overview

The theme for the 2nd Annual Aleutian Life Forum is to take steps in establishing a community based coastal monitoring program to observe long-term changes in the Aleutian Islands ecosystem. The intention is to bring together representatives from coastal monitoring organizations along with representatives from Aleutian communities to determine a way to monitor our coasts that is scientifically valid, logistically inexpensive, low-tech, and small time investments. The hope is to encourage environmental stewardship in the short-term, while attempting to understand the long-term changes in our coastal ecosystem. By observing what organisms are present and how they change over time, we can develop better understanding of the impacts of environmental changes.

The conference was developed by the Marine Advisory Program (MAP) and the conference chair is Reid Brewer, the Alaska Sea Grant Marine Advisory Program (ASGMAP) Agent in Unalaska. MAP is a university-based, statewide, outreach and technical assistance program designed to help Alaskans wisely develop, use, conserve, and enjoy Alaska's marine and coastal resources. It provides informal marine education, offer technical assistance to coastal communities related to economic development, conducts research, and serves as a link between the University of Alaska and Alaska Sea Grant. In a state as big as Alaska that is so dependent on the health of marine resources, it's critical that people can readily get information and technical assistance. As a result, MAP agents and specialists live and work in the communities they serve.

The conference was also scheduled toward the end of the Qawalangin Tribe's culture camp to promote cultural integration and have the opportunity to observe Native culture, taste Native foods, and learn about the cultural ties of the people to the coastlines.

Related Individual Presenters

Sue Mauger, Cook Inlet Keeper: She gave a presentation on the CI Keeper's efforts to study non-point source pollution impacts in wild salmon streams on the Kenai Peninsula. Cook Inletkeeper trains citizens to monitor water quality at many sites in the Cook Inlet watershed. The Citizens' Environmental Monitoring Program (CEMP) training follows guidelines outlined in a training manual, a field procedure checklist and a quality assurance project plan (QAPP) developed by Inletkeeper and approved by the US

Environmental Protection Agency and ADEC. Both the Technical Advisory Committee and Citizens Advisory Panel provide input to the Citizens' Environmental Monitoring Program. The data collected is entered into a relational database and compared to federal and state water quality standards.

Dawn Osborn, Univ. of California Santa Cruz: She created an intertidal monitoring program for rocky shores. High school students and volunteer groups learned how to identify species and collect scientific data that will be archived and used by future generations. The program is called Long-term Monitoring Program and Experiential Training for Students (LiMPETS). It is a collaborative effort among the 5 west coast National Marine Sanctuaries: Olympic Coast in Washington, Cordell Bank, Gulf of the Farallones and Monterey Bay along the northern central California coast and Channel Islands in southern California. Independent student monitoring efforts in several sanctuaries prompted the idea of creating an integrated coast-wide program, utilizing similar protocols and a centralized location for data. She operates with a grant from the National Marine Sanctuary Program. Currently, she is contractor for the Monterey Bay National Marine Sanctuary working on the LiMPETS project.

Carl Schoch, North Pacific Research Board (NPRB): The NPRB recommends research relating to fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean, with emphasis on cooperative research designed to address fishery management or marine ecosystem information needs. His current research as an oceanographer includes modeling biological community patterns on diverse shore types, measuring the temporal and spatial patterns of kelp beds to changes in physical habitat, and understanding the role of fine scale circulation and near shore wave dynamics. He finds that diversity increases with latitude; there is a much higher diversity of species in Washington, but drops off in southern California. His presentation was fairly technical and emphasized that his data is scientifically and statistically rigorous.

Bree Murphy, Center for Alaskan Coastal Studies: CACS is a nonprofit organization with a mission of fostering interactions with natural surroundings and generating knowledge of the marine and coastal ecosystems of Kachemak Bay through research and education programs. Much of the monitoring they do is visual monitoring for marine species, monitoring beaches for tidal plant debris and intertidal areas for intertidal species. Much of their data is recorded observations rather than more extensive beach intersects.

Sue Saupe, CIRCAC: She presented the shorezone mapping project that CIRCAC generated with funding assistance from PWSRCAC. The project has been a longer term project. The project maps out shorezones, providing photos, video, and diagrams of shore zones along the coast of Alaska. Extensive mapping has been done to Prince William Sound and Cook Inlet. She said it has multiple uses from oil spill response and recreation.

Julia Parrish, COASST – Alaska: She presented this Comprehensive Monitoring Program for Coastal Ecosystem Health and Change. This project, which was developed as a beached bird monitoring program in Washington and Oregon, seeks to develop a

comprehensive set of biological indicators of coastal marine ecosystem health and change, where data is collected by local citizens in coastal communities across Alaska. She is developing a concept for an Alaskan adaptation of COASST. Starting with the set of communities most likely to need to know about coastal marine resources she proposes to begin beached bird training sessions of community members and partner organization personnel during the 2006 summer season. At present, COASST is already establishing potential partnerships with groups located in Homer, Unalaska, and the Pribilof Islands.

Dave Aplin, World Wildlife Fund: WWF is partnering with six Alaskan villages to help students and adults develop tools and skills to evaluate, understand, and manage local conservation issues. The Coastal Communities for Science (CCS) program is funded by the National Science Foundation and connects native villages with scientists who collaborate on research projects of interest to both. Education and outreach activities - including radio and video production workshops, community meetings, and classroom activities - help disseminate research project results to local and regional audiences. WWF is managing all aspects of the project from identifying program candidates to matching them with scientists to conducting technical trainings and community meetings.

Desirae Roehl, IGAP coordinator for the Agdaadux Tribe: IGAP is the Indian Environmental General Assistance Program (IGAP). The goal of the program is to assist tribes in developing the capacity to manage their own environmental protection programs and to develop and implement solid and hazardous waste programs in accordance with individual tribal needs and applicable federal laws and regulations. The intent is to build tribal capacity to administer regulatory programs currently handled by the EPA. Ms. Roehl was one of the few tribal participants in the conference who was soliciting information on general monitoring programs.

Amee Howard, Sitka Tribe of Alaska: She gave a presentation on her efforts to develop an intertidal monitoring program for the tribe in Sitka. She has four sites where she does transects in the intertidal and collects other data for long term use.

Doug Dasher, ADEC: He gave a presentation on the Environmental Monitoring and Assessment Program (EMAP) for the State of Alaska. EMAP is a research program to develop the tools necessary to monitor and assess the status and trends of national ecological resources. Its goal is to develop the scientific understanding for translating environmental monitoring data from multiple spatial and temporal scales into assessments of current ecological conditions and forecasts of future risks to Alaska's natural resources. EMAP includes intertidal surveys and are also assessing randomly selected inland lakes as well.

I gave the last presentation on PWSRCAC's efforts to study invasive species and provide outreach to other Alaskan communities on the potential for invasive introductions. I explained PWSRCAC's ballast water concerns for Port Valdez and explained the invasive species work we have co-sponsored with the U.S. Fish and Wildlife Service to the Smithsonian Environmental Research Center (SERC) since 1996. I referenced a 2004 SERC report that found that several coastal areas in Alaska are conducive to Green Crab

larval development based on temperature and salinity limitations. PWSRCAC is working on an outreach effort to have students and/or community members monitor for invasive species within their communities in some of those areas.

Overall Observations

This was a smaller conference with about thirty total participants. It was recognized that attendance by the Aleutian communities was not as strong as anticipated, especially during the work sessions. Two work sessions were scheduled for the conference in order to have open discussion about how to develop a program to monitor our coasts that is scientifically valid, logistically inexpensive, low-tech, and small time investments.

There was a lot of discussion on the challenges of developing a statewide monitoring system. There are many protocols and opinions on what type of data to collect. There was agreement that temperature and salinity measurements were some of the basic to collect in terms of climate change, but there was a lot of other data to collect. It was stressed that for native communities to participate, environmental programs have to come within the community and home-grown, not from outside. Some other challenges that were identified were: getting people involved in their communities; logistics; funding; organized capacity within organizations; finding meaning in monitoring; clearinghouse for data; building a level of awareness; how to keep a monitoring program sustained; and different physical (environmental) parameters within each community's environment to collect standardized data. It was recognized and agreed upon by participants that there is a general lack of interest in science and natural environment related issues in communities.

I got the impression that PWSRCAC should maybe be doing more than just setting out traps looking for invasive species. The fact that Alaska is on the front line of climate change, we should be collecting more data than we are with the green crab monitoring program. While "presence/absence" information is still data collection, perhaps we should have students collecting temperatures, salinity and dissolved oxygen levels and doing more statistically and scientifically "valid" monitoring like intertidal transects. On a side note, one marine ecologist from Juneau thought the green crab was getting a 'bad rap' – that she believes they won't turn up in Alaska. Is this a debatable issue?