



Alaska Beluga Whale Committee

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ABWC History

Background

Four stocks of beluga whales have been identified in western Alaska: (1) Bristol Bay, (2) eastern Bering Sea, (3) eastern Chukchi Sea, and (4) Beaufort Sea. Another beluga concentration historically occurred in Kotzebue Sound. The status of this stock is unknown. Numbers are now so small now that the youth of Buckland, whose culture was once defined by beluga hunting, have never had the opportunity to harvest belugas at the traditional hunting site at Elephant Point in Eschscholtz Bay. Genetic data suggest these Kotzebue belugas likely constitute a separate stock, yet there is no current funding to pursue further genetic definition of this stock, or to learn anything else about it.

Belugas are harvested by Alaska Native subsistence hunters in approximately 40 coastal villages from Bristol Bay to the Beaufort Sea. This includes villages in the North Slope Borough, Kotzebue Sound, Norton Sound and the Yukon delta, the Kuskokwim region, and Bristol Bay. Since 1987, the estimated average annual harvest has been approximately 320 per year.

ABWC history

The ABWC formed in 1988 to promote conservation and management of beluga whales, obtain better harvest information, encourage research necessary to develop harvest guidelines (identify and enumerate stocks, investigate reproductive rates etc.) and provide a means of better communication among beluga hunters, biologists and agencies. When the ABWC was formed, there was no consistently funded research or management program for beluga whales in Alaska. Research efforts were sporadic, the status of stocks was unknown, and harvest information was poor. With its formation, the ABWC brought together representatives from beluga hunting communities in Alaska; local, state, tribal, and federal governments; and beluga researchers to discuss conservation issues, the biology of belugas, and the needs for additional information.

In those early years, ABWC members were told there was no money, belugas were not a priority, and there were no issues related to belugas. Instead of giving up, they persisted. The ABWC initiated a program to obtain reliable harvest data, determine stock identity, conduct abundance surveys, collect reproductive information and other biological samples, prepare a beluga management plan, and to fund and encourage beluga research. Coastal hunters hold a large body of traditional knowledge about belugas, including information about distribution, diet, and movements. This information is being documented and integrated with other scientific

information by the ABWC. There are no apparent “crises” involving belugas in northern and western Alaska at this time, thanks in part to these collective efforts.

Communication among scientists, beluga hunters and managing agencies is essential for successful co-management activities. ABWC meetings facilitate this communication. The ABWC has held 5 science workshops where in-depth (plain English) information about beluga research is presented to ABWC delegates and others from beluga-hunting communities. The ABWC has successfully distributed information about research and co-management activities through 11 plain-English newsletters. The newsletters were broadly distributed (more than 2,000 copies per issue) and greatly facilitated review of draft versions of the Co-management Plan. Special issues have dealt in depth with issues such as the status of Kotzebue Sound belugas and how genetics is used to study beluga stocks.

Why is a beluga research program important?

All stocks of belugas in Alaska are harvested for subsistence.

The ABWC understands that funds to implement co-management are limited and that grants under this program are very competitive now that there are no longer earmarked Congressional allocations for the different Alaska Native Organizations. However, this does not obviate the need for research to collect the basic biological information needed for managing and conserving Alaska belugas. To sustainably manage the subsistence harvest of beluga whales, it is not adequate for the ABWC to simply monitor and report harvest data. It is also essential to understand stock structure, abundance and if possible trend, reproduction and mortality, and the habitat requirements of the different stocks so threats from human activities or climate change can be evaluated. Without current population data for each stock, it is not possible to evaluate the impact of subsistence harvests and determine whether harvests are sustainable. Aerial surveys are needed at regular intervals in order to monitor the trend of each stock and to evaluate whether the harvests are within safe limits.

The ABWC was in part formed to show the IWC that management of belugas can be done locally through the ABWC and co-management with NMFS. ABWC scientists and hunter delegates participated in the two previous beluga reviews. Their contributions demonstrated that the ABWC was in fact doing a good job of studying and managing Alaska belugas and greatly reduced concerns about beluga harvests in northern and western Alaska.

The basic research needs for most Alaska marine mammal species covered by co-management agreements are being addressed by state and federal agencies. NOAA supports research on ice seals, harbor seals, bowhead whales, sealions and Cook Inlet belugas. There is no such NOAA research program for belugas in northern and western Alaska. Funding annual meetings for the ABWC, while important, does not replace the need for sound biological data about belugas. For 25 years the ABWC, with the help of its many partners, has developed and implemented a program that provides the basis for sound management. It is important to continue to conduct the research and harvest monitoring activities that make this program a success.

The ABWC is concerned that if these research efforts cease, it will quickly fall behind in proactively identifying issues, avoiding crises, and doing the things necessary to conserve belugas. For example, up-to-date harvest information provided at ABCW meetings without current abundance estimates will hinder realistic evaluation of harvest sustainability. The climate in northern Alaska is changing rapidly, particularly the extent and duration of sea ice

cover. This may substantially impact the suitability of some areas as belugas habitat. Activities such as oil and gas exploration and commercial shipping are occurring at an accelerating pace in beluga habitat, belugas and humans eat the same commercially valuable salmon, and human caused noise is being introduced into beluga habitat with unknown consequences. In order to evaluate potential impacts of such activities it is necessary to have better information about habitat use, feeding, migration routes and overwintering areas. It is essential to have a basic research program in place. This information is not only necessary for domestic management under the Marine Mammal Protection Act, but to address international scrutiny by the IWC. The IWC and the North Atlantic Marine Mammal Commission will be conducting an international Beluga and Narwhal Status Review in spring 2017, and the ABWC - and NOAA - must be prepared to present current information on status and trends of Alaskan stocks, harvest, and conservation threats. Each year, NOAA must report beluga harvest information to the IWC. It obtains this information from the ABWC.

Cook Inlet belugas were listed as endangered under the Endangered Species Act in 2008. There was no proactive research and management program in place to ameliorate the situation there. Hunters and agencies communicated poorly if at all and little was known about the biology of Cook Inlet belugas. The ABWC has worked hard to avoid such a situation for other Alaska beluga stocks. It wants to keep belugas healthy to avoid getting into a situation where it is necessary to recover stocks from depletion. We need research and current information to keep up and make informed decisions.

One of the reasons the ABWC functions so well is that members cooperate in both management and research. Hunters suggest research projects, discuss methods, participate in research, and participate in interpretation of the results. The ABWC strongly believes that the beluga cooperative research model we and our agency partners have engaged in since 1988 is not only cost-effective but produces results that are scientifically valid AND locally accepted. It promotes communication and cooperation, and facilitates the collaborative setting of priorities that address agency needs and local concerns. Because our members are involved in the design, conduct and interpretation of the studies, the results and conclusions become “ours” not “theirs.” This is a formula for success.

Capacity Building

Reviewers of previous year’s proposals have identified capacity building as an important component of co-management-funded work. The ABWC agrees. ABWC delegates have repeatedly requested funding for hunter tagger training and hunter tagging as important for capacity building and for the importance of information satellite telemetry provides, however this proposal component was completely eliminated from the 2015-16 proposal. The hunter tagger training that has been conducted occurred in Bristol Bay during capture efforts funded by other entities. ABWC was able to partner with them at very little cost. An additional benefit to bringing hunters from other regions to Bristol Bay is the exchange of information about belugas, including the similarities and differences in hunting, butchering, preparing, and storing, as well as beluga behavior, diet, and movements that benefit the hunters and the biologists and the overall knowledge about belugas. As a result of tagger training in Bristol Bay, an ABWC hunter-tagger tagged the first ever Eastern Bering Sea belugas near Cape Nome and these tags provided the only hard data on the movements, migration, overwintering areas, and degree of overlap with the Bristol Bay stock in winter. These belugas were tagged at no cost for the hunter-taggers time,

equipment, fuel or supplies. This hunter-tagger is anxious to assist in teaching other hunters from his region to tag and attaching more tags himself, but there is no funding to support this.

Conducting aerial surveys has not been identified as research in which ABWC delegates want to participate. It is not attractive to most professional career biologists, and is becoming less so as new technology-intensive methods become available. It is not surprising that hunters accustomed to being outside and on the water do not want to spend 1-2 weeks of 8-10 hour days surveying mostly empty water. Furthermore, surveys often take place during commercial fishing season and people are busy with fishing and other seasonal activities.

Reviewers of previous proposals have also commented on the senior status of ABWC member-scientists who are mostly senior (and/or retired) biologists. One of the primary reasons for this is their ability to contribute their time and expertise at little or no cost to the ABWC, to mobilize funds from other research involvements, and to facilitate collaborative, money-saving projects. They also work well collaboratively with local people and have a long history of doing so. Many ABWC scientists and hunter delegates have been part of the ABWC for more than 20 years. Collectively the group recognizes the need to bring in young people – both scientists and hunters – but this is not as simple as it seems. Young staff – and young delegates or research participants – require predictable funding, someone to pay their salaries, and some assurance that there will be work for them in years to come. One of the most promising young ABWC scientists (ABWC helped to fund her PhD research) is now working for a consulting company in Canada because there were no jobs for her to conduct beluga research in Alaska. Each year, some of our younger ABWC delegates cannot attend meetings because they can't get away from their jobs. Budgets are always tight and there are few funds available to bring more students or young people to meetings.

The ABWC has a history of supporting (samples and field opportunities as well as funding) students conducting beluga research. In 1989 when the use of genetics to investigate stock structure was a new field, the ABWC used leftover per diem money to fund a student to conduct the first beluga genetics study. In 1992, the ABWC began funding a young post-doctoral student to conduct a beluga genetics study based at the NMFS Southwest Fisheries Science Center. That study became one of the ABWC's most successful research programs, with broad participation by beluga hunters throughout Alaska, and that student is now a senior researcher still involved in ABWC. The ABWC has helped to support graduate students conducting research to investigate beluga diet, traditional knowledge, and habitat use.