

## Alaska and Inuvialuit Beluga Whale Committee (AIBWC) — An Initiative in “At Home Management”

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**ABSTRACT.** The Alaska and Inuvialuit Beluga Whale Committee (AIBWC) was formed in 1988 to facilitate and promote the wise conservation, management and utilization of beluga whales in Alaska and the western Canadian Arctic. The membership of the committee consists of representatives from coastal beluga whale hunting regions and communities in Alaska and the Mackenzie River Delta in Canada, U.S. federal, state and local government agencies, and others, such as researchers and technical advisors. Only representatives from beluga whale hunting communities vote on matters related to hunting, while the committee as a whole votes on other issues. Harvest monitoring programs are planned and coordinated at the spring meeting, implemented during the whaling season by hunters and others and reported upon during the fall meeting. To date, the AIBWC has 1) established beluga whale research priorities, 2) coordinated or assisted with the collection of samples for genetic, contaminant and basic biological studies, 3) provided funding for DNA studies, 4) commented on federal actions (e.g., relating to oil and gas exploration activity) with the potential to affect beluga whales, beluga habitat or beluga hunting, 5) collected the most complete harvest data ever available for Alaska, 6) produced a newsletter highlighting important marine mammal issues for coastal residents of Alaska, and 7) sponsored the attendance of committee members at meetings of the International Whaling Commission. The AIBWC recently ratified its draft Alaska beluga whale management plan, a counterpart to the existing plan for beluga whale management in the western Canadian Arctic, and has initiated discussions on a joint Inupiat-Inuvialuit plan for management of the shared Beaufort Sea beluga whale stock.

**Key words:** beluga whale, Beaufort Sea, Bering Sea, management, subsistence harvest, Inuvialuit, Inupiat

**RÉSUMÉ.** Le Alaska and Inuvialuit Beluga Whale Committee (comité sur le bélouga de l'Alaska et de l'Inuvialuit [AIBWC]) a été formé en 1988 pour faciliter et encourager une saine conservation, gestion et utilisation des bélougas en Alaska et dans l'Arctique occidental canadien. Le comité est composé de représentants des communautés et des régions côtières de chasse au bélouga en Alaska et dans le delta du Mackenzie au Canada, de représentants d'organismes gouvernementaux américains au niveau fédéral et régional ainsi qu'au niveau de l'État, et d'autres membres tels que des chercheurs et des conseillers scientifiques. Seuls les représentants des communautés de chasse au bélouga ont droit de vote sur les questions traitant de la chasse, tandis que le comité au complet vote sur les autres questions. Des programmes de surveillance des prises sont planifiés et coordonnés lors de la réunion de printemps, mis en application par les chasseurs ou d'autres individus pendant la saison de chasse à la baleine, et ils font l'objet d'un rapport à la réunion d'automne. Jusqu'à maintenant, le AIBWC a 1) établi des priorités de recherche sur le bélouga, 2) coordonné ou facilité le prélèvement d'échantillons en vue d'études génétiques, d'études sur la contamination, et d'études fondamentales de biologie, 3) subventionné des études sur l'A.D.N., 4) fourni ses commentaires sur des mesures fédérales (p. ex., en rapport avec les activités d'exploration pétrolière et gazière) pouvant affecter les bélougas, leur habitat ou la chasse dont ils font l'objet, 5) rassemblé les données les plus complètes jusqu'à présent sur les prises en Alaska, 6) publié pour les résidents des côtes alaskiennes un bulletin de nouvelles traitant surtout des grandes questions concernant les mammifères marins, et 7) subventionné la présence de membres du comité aux réunions de la Commission baleinière internationale. Le AIBWC a ratifié récemment l'ébauche de son plan de gestion du bélouga de l'Alaska, qui fait pendant au plan actuel de gestion du bélouga dans l'Arctique occidental canadien, et a entamé des pourparlers sur un plan de gestion mixte Inupiat-Inuvialuit, pour le stock baleinier commun en mer de Beaufort.

**Mots clés:** bélouga, mer de Beaufort, mer de Béring, gestion, prise de subsistance, Inuvialuit, Inupiat

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In January 1988, the Inupiat of the North Slope of Alaska and the Inuvialuit of the western Canadian Arctic signed an international agreement for the management of polar bears in the Beaufort Sea. The agreement was unique in that it was initiated and carried through to completion by the hunter groups. After completing this agreement, the Inuvialuit Game Council (IGC) and the North Slope Borough (NSB) Fish and Game Management Committee considered a similar agreement for a second important transboundary resource, the beluga whale (*Delphinapterus leucas*). However, unlike the polar bear, the baseline data for beluga whales had many areas where additional information was required for management. In particular, a coordinated effort to obtain biological and harvest information was much needed as a first step. In response to this need, an international committee, which included representatives of the hunting community, was formed.

The goals of the Alaska and Inuvialuit Beluga Whale Committee (AIBWC) are to facilitate and promote the wise conservation, management and utilization of beluga whales in Alaska and the western Canadian Arctic. The committee

concerns itself with beluga whales of the Bering Sea population, believed to number 25 000 – 30 000 (Burns and Seaman, 1985). After leaving their Bering Sea wintering area in early spring, these whales are thought to separate into four groups, often referred to as provisional management stocks (Frost and Lowry, 1990). During summer, these provisional stocks are found in Norton Sound, Bristol Bay, the eastern Chukchi Sea near Kotzebue Sound and Point Lay and in Canadian waters of the eastern Beaufort Sea and Amundsen Gulf. In addition, an unknown portion of the Bering Sea population summers along the Siberian coast (Burns and Seaman, 1985). The Cook Inlet population, separate from the Bering Sea population and also within the mandate of the AIBWC, is a relict group that occurs south of the Alaska Peninsula (Sergeant and Brodie, 1969).

Hunters from many villages along the coast of Alaska harvest beluga whales from the above stocks during summer when the whales aggregate in coastal areas and during spring and fall migrations (Lowry *et al.*, 1989). Inuvialuit harvest beluga whales from the Beaufort Sea stock during summer (Strong, 1990), when a portion of the stock concentrates in the warm

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waters of the Mackenzie River estuary. To date, the harvests have been self-limited to the number of animals required to cover the basic subsistence needs of hunters and their families.

STRUCTURE OF THE AIBWC

Since it was first formed, the Alaska and Inuvialuit Beluga Whale Committee has met five times. Meetings have been held in Fairbanks, Alaska, although in the future they may be held in other parts of Alaska or in the western Canadian Arctic. Meetings are held once or twice each year, usually before and after the whaling season. The five-member executive board of the committee consists of people from a cross section of villages and government. Operating by-laws for the AIBWC were drafted in 1988 and ratified on 7 November 1989.

The AIBWC has hunters, government scientists, researchers and technical advisors as full voting members. During early meetings, the group discussed at length the perceived advantages and disadvantages of being a commission of beluga hunters, with government scientists attending as technical

advisors, or a committee that included both groups as full members. Clearly, a commission would have more latitude to make strong statements about hunting-related matters and to serve as an advocacy group for hunters of the beluga whale. However, a committee with broader representation could demonstrate that beluga whale conservation was of fundamental importance to all members, hunter and scientist alike. While the decision-making process would be more complex, the deliberations and recommendations of such a committee would represent full consideration of a variety of opinions and carry the strength of consensus rather than the perceived bias of advocacy. The group voted unanimously to include all participants as full members.

Membership of the committee includes representatives of hunting regions and communities in Alaska (NSB, Northwest Alaska Native Association [NANA], Kawerak [Norton Sound], Calista Corp [AVCP], Bristol Bay Native Association [BBNA], Cook Inlet Region Inc. [CIRI]) and the Mackenzie Delta region of Canada (Inuvialuit Settlement Region [ISR], Fig. 1), representatives of the Fisheries Joint Management Committee

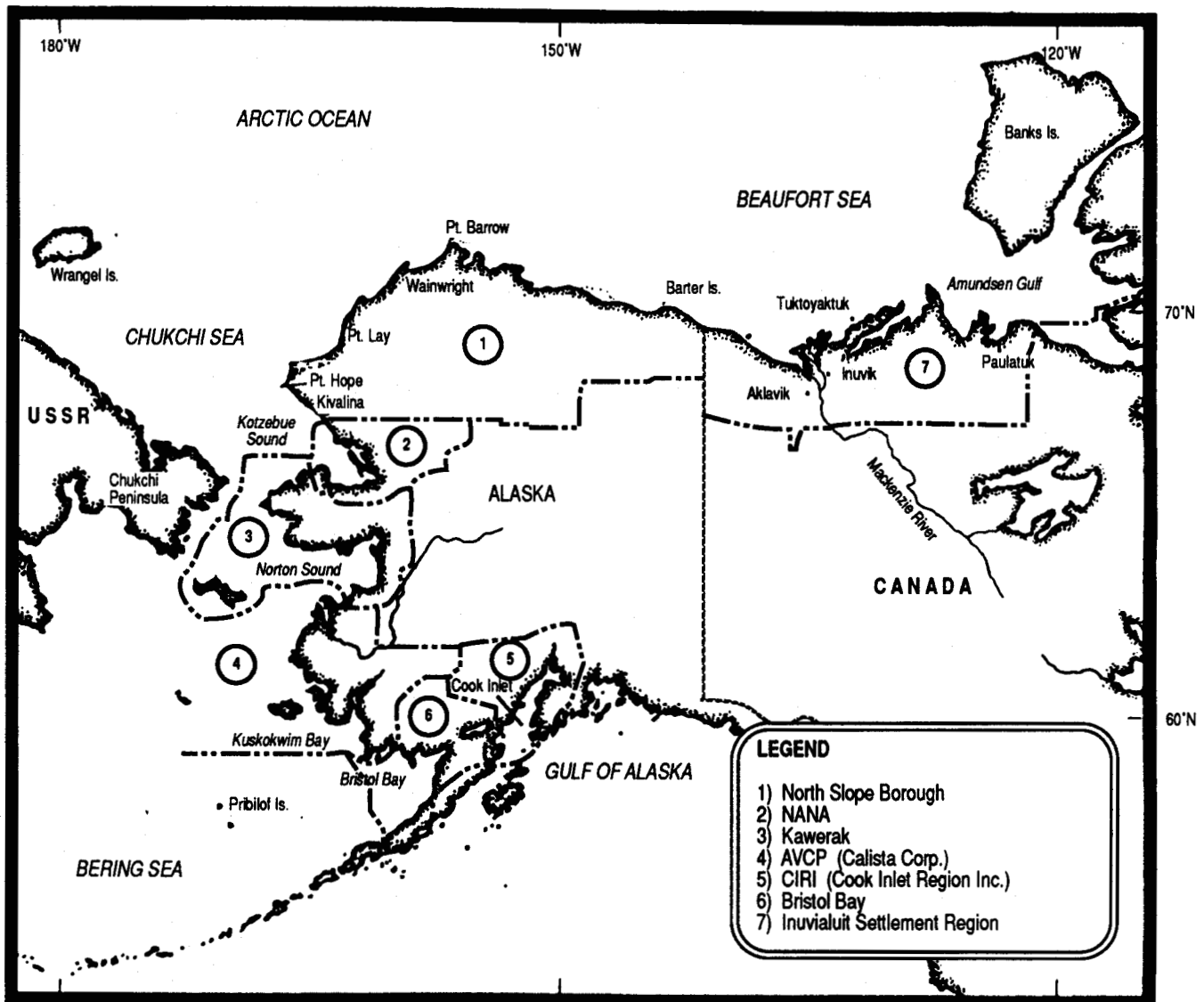


FIG. 1. Beluga hunting regions in Alaska and Canada with hunter representation on AIBWC.

(FJMC) and Inuvialuit Game Council (IGC), U.S. federal (National Marine Fisheries Service [NMFS]) and state (Alaska Department of Fish and Game [ADF&G]) government agencies, Canada's Department of Fisheries and Oceans (DFO; as observers) and others, such as researchers and technical advisors.

Fundamental to the structure of the committee is this strong representation by beluga whale hunters. They have substantial local knowledge of beluga whale movements and biology, a considerable investment in the resource and much to gain from the sound management of beluga whale stocks. All AIBWC discussions and decisions about management actions (e.g., collection of harvest information or biological samples) involve hunter representatives, and in the many villages and communities harvest data and samples are acquired by or through the resource users themselves. In other words, the AIBWC is built on involvement in management from the roots up. In total, from both Alaska and Canada the hunters make up well over half the committee. Only representatives from beluga whale hunting communities vote on matters relating to hunting.

Government scientists, researchers and technical advisors make up the balance of the committee. They provide technical support for the conduct of programs and activities of the AIBWC and oversee a number of functions, including consultation with hunters, government and others; collation, analysis, interpretation and reporting of data collected on behalf of the AIBWC; raising funds for the operation and activities of the AIBWC; attending international meetings, etc. In a similar way, this component of the committee is also from the roots up, as the members are largely from the local and regional offices. However, government representation on the AIBWC does ensure that upper levels of government are aware of committee activities through their own members.

Funding to hold AIBWC meetings has to date been provided by the Bureau of Indian Affairs (BIA, for Alaskan hunters to attend), the NSB (for hunters from northern Alaska and NSB staff to attend) and the FJMC and IGC (for Canadian delegates to attend). The attendance of AIBWC government members is supported by the various government agencies. An increased funding base in recent years, primarily from BIA, and significant contributions of staff time by the NSB and ADF&G, have allowed the committee to expand the number and type of activities that are conducted and supported. These include increased consultation with the beluga whale hunters in Alaskan villages regarding the Alaskan Beluga Management Plan, publication of a newsletter, attendance at international meetings, support of new harvest monitoring programs and support of population assessment work.

#### WHAT DOES THE AIBWC DO?

The committee has been involved in a number of programs and activities, including harvest monitoring, biological sampling and research, preparation of management plans, commenting on development activities that could affect beluga whales, beluga habitat or beluga hunting, ensuring community consultation and involvement in the International Whaling Commission (IWC) process. We expect this list will grow and evolve over time, as issues are resolved and new ones appear, as more data are collected and questions are answered or raised, and as management plans and agreements are completed.

There has been a relatively extensive beluga whale harvest monitoring program under way in the Mackenzie Delta/Beaufort

Sea region of Canada for over a decade, currently funded by FJMC. Through the NSB, a similar program was initiated in northern Alaska in 1987, shortly before the formation of the AIBWC. Informal harvest monitoring was conducted in other regions of Alaska by ADF&G. Through recent additional funding described above, the AIBWC coordinated the collection of harvest information from areas in Alaska not already covered within the NSB program.

The AIBWC provides an ongoing forum for coordination of these and other beluga programs in Alaska and the western Canadian Arctic and for sharing of data, results and ideas to ensure that the results collected from the same stock are meaningful and comparable. Workshop sessions about harvest monitoring and sampling programs have been held at the regular AIBWC meetings. Data recording sheets are standardized and sampling protocols are explained to ensure that the monitoring efforts in both western Canada and Alaska are coordinated.

The AIBWC has established beluga whale research priorities and to date has 1) coordinated or assisted with the collection of samples for genetic, contaminant and basic biological studies, 2) provided funding for DNA studies, and 3) supported beluga whale surveys. Some of the programs would not have come about, at least not within the time frame that has been achieved, without the forum and assistance of the AIBWC.

AIBWC has taken the lead role in preparing a management plan for beluga whales in Alaskan waters and for taking this plan to the villages and hunters in Alaska. Like other AIBWC activities, drafting of the plan was shared by a cross section of committee members. The plan is similar in objectives, scope and content to the Beaufort Sea Beluga Management Plan (FJMC, 1991) prepared for beluga whales in Canadian waters. The two plans were prepared independently, but with feedback between planning groups. The Alaskan plan has been accepted by the AIBWC and is currently being presented to the hunters in Alaska for ratification by each hunting village.

The Canadian plan for Beaufort Sea beluga whales was finalized and signed in 1991 (FJMC, 1991). The plan provides a framework and guidelines for the long-term management of beluga whales in the Beaufort/Mackenzie area of Canada. It was prepared by the FJMC, with assistance and support of local beluga whale hunters and DFO.

These plans lay the groundwork for an international agreement among user groups in Canada and Alaska. Hunters from Diomedea, Kivalina, Point Hope, Point Barrow and Kaktovik in northern Alaska and hunters from Aklavik, Inuvik, Tuktoyaktuk and Paulatuk in western Canada are believed to harvest from the same stock — the eastern Beaufort Sea stock. Discussions about a joint Inupiat-Inuvialuit management agreement for this shared stock were initiated in 1991, in a manner similar to the polar bear agreement mentioned earlier. It is planned that the international agreement will include directives regarding sharing of information and data, coordination of harvest and research activities and establishing a safe upper limit for the combined harvests from Alaska and Canada. We expect that preparation of this agreement will be one of the most important tasks ahead for the committee in the near future.

Beluga whales migrate through, and summer in, areas where oil and gas exploration and production activities are under way or are planned, where commercial fisheries may take place in the future, where contaminants may enter environments and food chains and where hydroelectric projects may be developed in the future. The AIBWC has discussed and formally commented

on federal actions relating to oil and gas exploration activity in Alaska. These comments provided background information on beluga whale biology, important habitats and the utilization of beluga whales by subsistence hunters for managers and regulatory agencies to use in the issuance of permits and licenses. In other more specific cases, the AIBWC has provided a firm opinion concerning an issue or development.

The AIBWC recently joined the Arctic Marine Resources Commission (AMRC) to deal with oil and gas issues along the north and northwestern coasts of Alaska. This organization was incorporated in February 1991, with representatives from the Alaska Eskimo Whaling Commission, Bering and Chukchi Sea fishermen's associations and the Alaska Eskimo Walrus Commission.

As the IWC has indicated a growing interest in the management of small cetaceans and thus beluga whales, the AIBWC will have an increasingly important role at the international level. It is the AIBWC's intent to demonstrate effective and responsible "at home management" of the beluga whale resource. The AIBWC sponsors one member to attend the IWC meetings each year. In addition, in 1991 a scientist member of AIBWC attended the IWC scientific subcommittee meetings for discussions on beluga whales.

#### CONCLUSION

The committee is young, being only three years old. It has been successful in this short time, however, in elevating awareness about beluga whales and the conservation issues that surround this resource, both nationally and internationally. The committee facilitated production of a management plan for Alaskan beluga whales, which otherwise could not have been attempted. In the coming years, the AIBWC will coordinate preparation of an international agreement among user groups for a shared stock of beluga whales. Harvest monitoring and sampling programs are now under way and coordinated among western Canada and Alaska. With these programs in place to address basic information requirements, the committee can now recommend, sponsor and support other types of research programs. Important questions that face AIBWC and managers in Alaska and Canada relate to defining the management units

and the number of beluga whales in each and increasing our understanding of the effects of industrial activity on survival and reproduction of beluga whale stocks. It is also important that Siberian beluga whale stocks be included in AIBWC discussions and that Russian hunters and scientists become a part of the process.

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