U.S. Fish & Wildlife Service

Minimizing Polar Bear and Human Interactions

at Barter Island, Alaska

Polar bears walking near the airstrip at Barter Island, Alaska

BACKGROUND

Barter Island, Alaska is home to both the Native village of Kaktovik and large numbers of polar bears that aggregate there during fall months to rest and feed prior to freeze up. A relatively unique situation exists in that unused remains of bowhead whales taken by Alaska Native subsistence hunters are available to polar bears that come to shore. The remains are deposited in a "bone pile" located a few kilometers from the village, which is accessible by vehicle for bear viewing. The availability of bowhead whale remains to polar bears has ecological implications to a species that is being affected by climate change, as well as management implications due to the potential for increasing conflicts among polar bears and humans living in close proximity.

MONITORING STUDIES

In 2002, the Marine Mammals Management Office, with support from the Arctic National Wildlife Refuge, Minerals Management Service, Alaska Nanuuq Commission, and village residents, began ground-based observations to monitor the number, age, sex, and activity patterns of polar bears in the Barter Island area. Results confirmed that relatively large numbers of polar bears of all age-sex classes (adults, sub-adults, family groups) occur at Barter Island during the fall open water period. Bears were relatively inactive during day and fed mostly at night. Interestingly, a small number of brown bears also used the feeding site and provided a unique opportunity to record interactions between the two species, as well as with humans. This information is becoming increasingly important as a small bear-viewing industry develops at Barter Island.

MINIMIZING BEAR-HUMAN CONFLICTS

Active local involvement is a critical component in minimizing bear-human interactions. During the course of monitoring studies the U.S. Fish and Wildlife Service (FWS) worked together with the Native Village of Kaktovik, City of Kaktovik, North Slope Borough, Harold Kavelook School, and individual residents to share information about polar bears and their management, as well as to increase awareness and communication among residents and visitors regarding polar bear-human safety. This was accomplished by: 1) conducting an annual "Polar Bear Open House" during which both local polar bear observations from residents as well as monitoring study results were discussed; 2) participation at city and tribal council meetings to respond to community concerns; 3) airing of public service announcements when studies were underway; 4) conducting classroom visits at the local school; and, 5) working with a local artist, students, and residents to create polar bear safety posters, brochures, and signs.

Local residents historically have minimized bear-human conflicts by sending out verbal alerts (via phone or CB radio announcements) whenever a bear is in town, and for a number of years Kaktovik also received help from the North Slope Borough to conduct a polar bear patrol program; however funding has been insufficient in recent years to adequately maintain a program. In 2006, the Native Village of Kaktovik (NVK) received a tribal wildlife grant from FWS to develop a bear-human safety plan, in response to a growing concern for public safety. The proposed plan consists of three primary components: 1) establishment of patrols to deter bears from the village; 2) minimizing attractants in and around the village; and 3) development of educational materials. A local "polar bear committee" has been formed and is developing additional measures to minimize bear-human conflicts, as called for in the management plan.

CONSERVATION BENEFIT

Results from monitoring studies are being prepared for publication and used to assist in environmental planning, such as oil and gas related activities. In 2008 and 2009, village residents participated in biological monitoring. FWS hopes to continue involving local residents in biological monitoring in future years.

An important benefit that has resulted from this project is the cooperative work that is occurring between FWS and Kaktovik residents to reduce bear-human conflicts over the long term. Implementation of the bear-management plan in Kaktovik will serve as a good template for other communities seeking to avoid bear-human conflicts, and serve polar bear conservation well into the future.

(Above) A hungry sub-adult polar bear feeding on bowhead whale remains. (Left) Kaktovik school children getting involved in a polar bear safety poster coloring contest.

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