

## 8. Education

*Synopsis: The primary goals of current Kodiak bear educational efforts are to reduce negative bear-human interactions and to increase appreciation for and understanding of bears and their habitat. The Citizens Advisory Committee (CAC) examined a number of ways to enhance the current effort by establishing educational programs that provide accurate information resulting in continued conservation and management of Kodiak bears.. The key to any educational program is a cooperative effort and commitment by all concerned to provide science-based, accurate information in order to cultivate a well-informed public. Those who live, work, and recreate on the Kodiak archipelago need clear and useful information about bears in order to build understanding of bear behaviors and to minimize negative bear-human interactions. The CAC makes recommendations on the development and dissemination of educational and public-outreach materials. These recommendations relate to the following subjects: general user education, hunter education, off-road vehicle user education, angler education, U.S. Coast Guard education, economic incentives and land management, village and rural residents, and funding for education efforts.*

The CAC believes that the widespread dissemination of accurate, fact-based information concerning Kodiak bears is essential for maintaining high-quality bear habitat and for managing bears on the Kodiak archipelago. Further, understanding of proper bear-human relationships, based on facts, must be fostered to prevent false impressions or beliefs that could eventually jeopardize this unique bear population. In the past, erroneous information concerning a variety of issues—including population status, environmental threats, hunting, and ranching—has led to misunderstanding and conflict. In such situations, both humans and bears have been negatively affected. Education and public outreach are critical. The key to any educational program is a cooperative effort and commitment by all concerned to provide science-based, accurate information in order to cultivate a well-informed public. Those who live, work, and recreate on the Kodiak archipelago need clear and useful information about bears in order to build understanding of bear behaviors and to minimize negative bear-human interactions. In addition, with understanding and preparation, people can avoid bear encounters and respond wisely when they do occur.

### 8.1 Bear-Education on the Kodiak Archipelago

Until approximately the mid-1980s, most bear education in Alaska was provided by law enforcement personnel and was almost exclusively concerned with the dangers presented by bears. Although promoted as bear-safety programs, often times educational efforts were intended to scare people into appropriate behavior around bears. In fact, these programs did indeed frighten people, who then often viewed *all* bears as dangerous and threatening. Perhaps this effort was counter-productive because it may have led to increased numbers of bears killed in defense of life or property (DLP). Since the mid-1980s, education efforts have become more

inclusive—with bear safety being only one facet of a larger educational package that includes biology, management, and natural history (all of which foster understanding of bears) as well as discussions of negative bear-human interactions. A focal point of the early educational presentations was the concept that bears are dangerous because they are unpredictable. In reality, bears are intelligent and learn quickly from a variety of situations, and many behaviors are predictable and avoidable (for example, if food or garbage are left unprotected, bears will eat them).

The primary goals of current Kodiak bear educational efforts are to reduce negative bear-human interactions and to increase appreciation for and understanding of bears and their habitat. The CAC examined a number of ways to enhance the current educational effort by establishing an educational program that provides accurate information resulting in the continued conservation and management of Kodiak bears.

## **8.2 Providing Bear-Education**

Several agencies and organizations provide education about bears. Biologists from the Alaska Department of Fish & Game (ADF&G) in Kodiak and from the Kodiak National Wildlife Refuge (KNWR) respond to requests for information or presentations from schools, the U.S. Coast Guard (USCG) base, and various organizations. Appearances on television or radio and providing information or articles to local news media are also ways in which state and federal wildlife staff disseminate information.

Providing bear education to school students is considered to be one of the most effective means of educating the public in general. Children learn about how managing garbage can prevent problems with bears, for example, and they take that information home and share it with the rest of the family. Educational materials, however, need to be adapted to the needs and other programs of various age groups.

Furthermore, although educational efforts have generally been successful within Kodiak city, those efforts need to be expanded to the villages on the archipelago and made relevant to village culture and circumstances.

### **8.2.1 Kenai Peninsula Bear-Education Materials**

As a direct result of the 2001 brown-bear planning efforts on the Kenai Peninsula, an educational kit on brown-bear conservation was developed by the Alaska Audubon Society bear biologists, Kenai Peninsula Borough School District curriculum specialist and teachers, and ADF&G staff. Appropriate and effective materials were gathered and integrated into the kit, it was field-tested, and it is currently in use. ADF&G's Project WILD staff and facilitators developed and facilitated training sessions for teachers on the Kenai Peninsula. These facilitators have the experience and training to effectively educate teachers about the use of these materials in the classroom and in the context of field trips.

Kits are maintained by the school district with ADF&G providing replacement parts as needed over time. Each time a teacher uses a kit in his or her classroom, the teacher is required to complete an evaluation form, which is gathered by the school district. Yearly, these evaluations

will be reviewed by Audubon, the school district, and ADF&G. After three years of implementation, the Kenai Peninsula brown-bear educational kits will be reviewed for effectiveness and use. Recommendations for change will be implemented at that time, as needed.

### **8.3 Recommendations for Education**

Many of the following recommendations are proposed in the chapters on specific subjects and issues (e.g., habitat, harvest, bear-human interactions). They are presented again here under categories related to the users targeted and are cross-referenced, if appropriate, to the chapter in which background information is provided.

#### **8.3.1 User Education—General**

- Develop an intergovernmental working group composed of representatives from wildlife management agencies (ADF&G, USFWS), public safety agencies (Alaska State Troopers, local and military police departments), local governments (city, village, and borough), the Kodiak Fish & Game Advisory Committee, and Alaska State Parks. The working group should meet at least once each spring to review current policies to reduce bear-human encounters and to coordinate efforts for the upcoming year (see chapter 6, “Bear-Human Interactions”).
- Develop a bear education kit, similar to that developed on the Kenai Peninsula (see section 8.2.1), for Kodiak archipelago communities. It would include locally relevant materials that either already exist or need to be developed. A group of educators and biologists, similar to the one working on the Kenai kit, would work together to finalize and field test the Kodiak kit. Upon completion of the kit, ADF&G Project WILD staff and facilitators would develop and facilitate training sessions for teachers in each Kodiak archipelago community.
- Ensure a level of cooperative state and federal law enforcement deemed essential to achieve compliance with conservation laws and regulations; preventive education should be the first priority in this regard (see section 4.6).
- Establish lines of communication among agencies with various areas of responsibility. (Appendix J provides an example of how bear reports on the Kodiak road system are handled.) (See chapter 6, “Bear-Human Interactions.”)
- Strongly encourage education of outdoor recreationists about bear behavior, impacts to bear habitat, bear-human interactions (e.g., resulting from improperly handled food and trash), field safety practices, and use of bear-resistant containers and electric fences, etc.
- To minimize bear problems, educate people about handling personal property, including chicken pens, fish-drying sheds, food-storage areas, and pet food (see section 6.3.2).
- Ensure that visitors are made aware of the efforts to keep bears away from human food and garbage; individual responsibilities of visitors should be outlined and disseminated so that they recognize their role in preventing problems (see section 6.3.2).

**8.3.2 User Education—Hunters**

- Urge ADF&G, USFWS, and other appropriate groups to develop informational and educational materials to help minimize bear-human conflicts and thereby improve hunter image. These materials should be developed for multimedia use and include the following subjects (see section 4.1):
  - trip planning and physical conditioning
  - meat handling and storage skills
  - bear behavior and safety
  - a safety-in-bear-country video for wide distribution and use
- Encourage guide/outfitters and transporters to make bear-safety educational materials available to all hunters (see chapter 4, “Harvest Issues”).
- Encourage ADF&G to continue to track the number of bears killed by deer, elk, and goat hunters to minimize such bear mortality. ADF&G should make a serious effort to mitigate this problem through education of big-game hunters on how to avoid dangerous situations involving bears (see section 4.5.1 and chapter 7, “Research and Monitoring”).
- Require a mandatory hunter-safety course, which should include bear-safety instruction, before going afield to hunt in GMU 8 (see chapter 4, “Harvest Issues”).
- Encourage ADF&G to develop other educational tools (e.g., videos using local people) to educate hunters about hunting in bear country (see chapter 4, “Harvest Issues”).
- Submit an article (written by Hank Pennington) about hunting on Kodiak to a sporting magazine (see chapter 4, “Harvest Issues”).
- Require mandatory hunter education, which should include bear-safety instruction, before going afield in GMU 8 (see chapter 8, “Education”).
- Encourage hunters to quickly remove kill meat to a safe distance from the kill site (see also chapter 8, “Education”).
- Using the ADF&G Web site and brochures, educate hunters about terrain issues (see also chapter 8, “Education”).

**8.3.3 User Education—Off-Road Vehicles**

- Create an educational program to encourage responsible use of off-road vehicles (ORVs) to minimize negative impacts on bear habitat (see chapter 3, “Kodiak Bear Habitat”).

**8.3.4 User Education—Anglers**

- Develop an educational program for anglers in cooperation with professional organizations, agencies, and sportsmen’s groups to include information about proper food and fish storage and cleaning of fish (see section 4.5.3).

- Include bear biology, behavior, and safety information in KNWR salmon camp curriculum.

### **8.3.5 User Education—U.S. Coast Guard**

- Continue education cooperation between ADF&G and the USCG annually, or more often as required, to alert air crews to their wildlife-conservation responsibilities and to promote good relations within the community (see also sections 4.6 and 6.7).
- Urge ADF&G and USFWS to work with the USCG to identify those areas and seasons in which bears and hunters are particularly vulnerable to harassment by overflying and to encourage reinforcing USCG policy minimizing low overflight in these areas (see also sections 4.6 and 6.7).

### **8.3.6 Economic Incentives and Land Management**

- Establish an education plan and explore economic incentives aimed at encouraging public and private landowners to consider the effects on bears of motorized access and to continue land-management programs that are consistent with wildlife conservation (see chapter 3, “Kodiak Bear Habitat”).
- Encourage private landowners (e.g., via the use of conservation easements, economic incentives, and education) to consider bear habitat when making land-management decisions (see chapter 3, “Kodiak Bear Habitat”).

### **8.3.7 Villages and Rural Residents**

- Identify appropriate elders and leaders to work with village public safety officers (VPSOs) to help educate residents about conservation laws, rules, and regulations (see section 4.6).
- Encourage village residents, VPSOs, and appropriate agencies to work together to develop information and education materials and strategies to reduce bear-human conflicts in the villages (see section 6.2).
- Encourage state troopers and USFWS to provide information to rural residents about the laws, rights, and duties regarding killing bears in defense of life or property (DLP) (see section 6.2).
- Through a co-management agreement with the state, use village committees and VPSOs to take responsibility for working on DLP issues in villages, including solid-waste management issues; this should include a significant educational component (e.g., schools, videos, and employing elders) (see section 6.2).

### **8.3.8 Outreach**

- Ensure a level of cooperative state and federal law enforcement deemed essential to achieve compliance with conservation laws, rules, and regulations; preventive education should be the first priority in this regard (also see section 4.6.1).

- Place educational materials in places (or with people) where they can be readily accessed (Web site, airport, magazines, tourism offices, USCG base, villages, guide/outfitters, public libraries, schools, museums, ferries, tribal council offices, Fish & Wildlife Protection officers, Alaska State Park offices and state parks staff, public radio, and television) (see chapter 4, “Harvest Issues”).
- To foster cooperation, the Alaska Department of Public Safety, Division of Fish and Wildlife Protection, and USFWS conduct annual outreach programs, explaining regulations and enforcement issues (including DLPs) in communities throughout the Kodiak archipelago (see section 4.6).
- Provide public information on actions planned by the intergovernmental working group and encourage public input and questions on those actions (see chapter 6, “Bear-Human Interactions”).
- Make available public information in a variety of media, including print, radio, public television, and personal appearances; attempt to meet the special needs of various cultures and ethnic groups (see section 6.3.2).
- Make the public outreach program ongoing, with emphasis on bear behavior and suggestions on how to minimize negative bear-human interactions (see Appendix K) (comparisons of bear behavior around food and garbage to dog behavior in similar situations can be helpful in improving understanding) (see section 6.3.2).
- Advertise laws and regulations relating to leaving food or garbage in a manner that attracts wildlife (see chapter 6, “Bear-Human Interactions”).
- Encourage agencies to disclose management actions such as moving dumpsters, citing individuals for littering, aversive conditioning of bears, and lethal actions against problem bears (all actions relating to bear-human interactions are matters of public record) (see chapter 6, “Bear-Human Interactions”).
- Encourage the public to report to authorities observations of bears near human habitations (these observations can help to track the activities of individual bears and allow managers to alert school principals and residents of areas in which to be especially cautious; observations should not be advertised to the general public, however, to avoid encouraging people seeking out bears) (see section 6.3.2).
- Locate on-site bear safety reminders on dumpsters (e.g., “Be Bear Aware”) and at collections sites (i.e., public landfill; see section 6.3.2).
- Work with service providers to make available to all visitors educational materials emphasizing bear safety, realistic expectations for bear viewing (including cost of access), Kodiak bear life history, and proper wildlife management. These materials should include ADF&G and KNWR bear-safety brochures and all materials specific to bear viewing (see section 6.6).
- Disseminate bear-viewing guidelines for the public and private sector that reflect safety while viewing bears from the ground or by walking, and procedures to alert bears to human presence. These guidelines should stress low-impact bear viewing by all users in all locations and should be similar to those of the North American Nature Photographers Association (see Appendix H and section 6.6).

- Investigate road-accessible wildlife- and bear-education opportunities that would minimize negative bear-human conflicts (a suggested area is along Buskin Lake near the golf course). The area could include interpretive signs dealing with wildlife management, habitat, track identification, realistic bear-viewing opportunities, and safety. Small spotting scopes, such as those at Fort Abercrombie, could be installed so that visitors can get a close-up view of habitat areas for bears, goats, ducks, eagle, etc. Other areas suggested for bear education/interpretive signing/viewing possibility on the road system are Buskin River State Recreation Site and Fort Abercrombie State Historical Park (see section 6.6).

### **8.3.9 Funding**

- Seek funding for islandwide education and regulation of bear-viewing businesses through, but not limited to, the following (see section 6.6):
  - reasonable permit fees
  - sale of Kodiak Wildlife Viewing stamps
  - Wildlife Restoration funds
  - Land and Water Conservation Act Fund
- Recommend the statewide sale of Wildlife Stamps (similar to Duck Stamps or Colorado Wildlife stamps) to both Alaska residents and nonresidents. Sales should be broad-based and aimed at nonconsumptive users of wildlife rather than at commercial operators.