necessary for living, working, and recreating in bear country. It will also emphasize the importance of minimizing bear-human conflicts within the Park. The Wildlife Management Technicians are responsible for arranging and presenting these training sessions. It is the responsibility of supervisors to ensure time is provided for their employees to attend.

It is the responsibility of each employee to be alert for situations such as broken garbage storage equipment, poor food storage, bears around developed areas, and other problems that could lead to bear-human conflicts. These problems must be reported immediately to a Wildlife Management Technician either directly or through the Comm. Center. Employees who have infrequent contacts with the public will be instructed at minimum to direct visitors to the Alpenglow, bulletin boards, Visitor Centers, or Ranger Activities and Interpretive staff when questioned about bears. It is also the responsibility of all employees to place people who have been involved in a bear encounter and/or incident (see the glossary for definitions) in contact with the Wildlife Management Technicians.

### NPS, and Contracted Employees with Visitor Contact Duties

The Interpretive, Dispatch, Ranger, and Concession staff that frequently engage in visitor contact will receive additional training on reporting procedures for bear-human interactions, interpreting the park's bear-human conflict policies and programs to visitors, and basic bear biology and behavior. The Chief Ranger, Chief of Interpretation, and Chief of Concessions will ensure that this training is incorporated into annual employee orientation and training sessions. The Wildlife Management Technicians will conduct these sessions.

### NPS Employees Responding to Bear-Human Incidents

Wildlife Management Technicians responsible for responding to bear-human incidents will receive intensive training in reporting and interview procedures, incident scene investigation, incident response scenarios and procedures, temporary and emergency wildlife closure procedures, firearms handling, and use of deterrent and aversive conditioning devices. The Wildlife Biologist and/or returning Wildlife Management Technicians will provide this training.

### **Researchers and Contractors**

All researchers and contractors working in DENA will be required to obtain training in bearhuman conflict avoidance and information necessary for living and working in bear country. Training sessions will be tailored to the experience level of the group and their potential exposure to bears. The Wildlife Management Technicians will present these sessions. The Park liaison to each of these groups will ensure that the necessary training is arranged. Researchers must sign written bear safety precautions and guidelines when their research permit is issued (Appendix P).

# **Concession Employees**

All concession employees will be provided with information about living, working and recreating in bear country. Informational meetings will be held at various times to cover the



information presented in the Alpenglow. These meetings will also include requests for employee reports concerning bear interactions and situations throughout the park that could result in bear-human conflicts. The Park will emphasize that individual actions, such as proper use of food storage and garbage disposal systems, can make a difference in preventing conflicts with bears.

The Alpenglow article and a memo summarizing the topics covered in these meetings will be posted at the employees' cafeteria, Visitor Transportation System (VTS) bus office and other concessions that desire to participate. The Wildlife Management Technicians will arrange and conduct these meetings.

### **Bus Drivers**

Annual bus driver training will cover the driver's responsibility to minimize bear-human conflicts. Drivers will be instructed to use the Alpenglow article as the basis for any bear information given to the public. Any bear related closures should also be included in their initial message to the public. Bus drivers will be reminded that visitors are not allowed to leave a bus within ½ mile of a bear. Drivers should direct people involved in an interaction with a bear(s) to the Wildlife Management Technicians, Law enforcement Rangers, or NPS staff at the Visitor Center. The Visitor Transportation System Coordinator will arrange these training sessions that are conducted by the Wildlife Management Technicians.

### Documentation

All training sessions will be documented and reported in the Annual Wildlife Management Report in order to monitor the time invested, number of people and groups receiving training, and effectiveness of the training.

# **REMOVAL OF UNNATURAL FOOD SOURCES**

### Regulations

# **NPS Food Handling Regulations**

Title 36 of the Code of Federal Regulations (CFR) 2.10(d) is the primary regulation authorizing the Superintendent to specify food-handling requirements within DENA (Appendix D).

### State Regulations and Their Interpretation

Upon receipt of a complaint concerning a problem bear, Alaska department of Fish and Game (ADF&G) generally requires the food and garbage of the residence, camp, or business be completely bear proof before any action is taken (Appendix D). In areas with a history of bear problems, an inspection of food and garbage handling of area residents can be conducted by an ADF&G representative if a complaint is received from a neighbor. The State's definition of "bear proof" is based on the proven effectiveness or ineffectiveness of



the system and not specific construction guidelines. If a bear is obtaining food or garbage, the current system is not "bear proof" and must be modified.

Businesses and other public operations must be inspected and obtain permits from the Alaska Division of Environmental Health as required by 18 AAC Chapter 60 (Appendix D). This regulation requires garbage to be handled in a manner that is not attracting or accessible to animals. Heavy, securely covered containers are required in areas where bear problems have occurred. This regulation provides only limited guidelines for defining what is bear proof. However, if problems occur, the storage practice must be changed or the permit can be revoked and fines levied.

### **NPS and Concessions Operations**

### Food and Garbage Handling by Visitors

The bear proof food lockers located in all campgrounds, along with other methods described in 36 CFR 2.10(d), are approved food storage methods. Campground users must store all unattended food in bear proof food lockers or hard sided vehicles.

All backcountry users will store food in BRFCs when overnight hiking in all backcountry units except 22 and 23, where their use is impractical. More details can be found in Appendix F.

### NPS and Concessions Waste Disposal Facilities and Procedures

All National Park Service and concession outdoor waste disposal systems must be bear proof. The concessionaire's contract requires the use of bear proof food and garbage handling procedures. The Concession Division staff will ensure compliance with this contract and ensure that the concessionaire provides, uses, and maintains bear proof systemsat the food court, employee cafeteria, and employee residential area. The concessionaire is required to instruct employees to keep dumpsters and recycle containers covered and fastened closed at all times except when garbage and recyclable waste are actually being placed in the containers. There can be no garbage or recyclable waste stacked by the containers at any time. Excess garbage and recyclable waste must be securely bagged and stored inside a closed, hard-sided building until space in the containers is available.

All contract reviewers will ensure bear-proof food storage, preparation, and garbage handling requirements are included in any contracts and that these requirements are followed by the contractor.

All trash containers which are not bear proof, whether located at employee residences, offices, food services, stores, or other facilities will be kept indoors. Ranger staff and Wildlife Management Technicians will enforce waste disposal regulations.

The Chief of Maintenance will ensure that DENA's waste disposal systems are bear-proof and maintained. From 15 May - 15 September, refuse containers in visitor use areas will be



checked daily, and emptied when half full or sooner if there is a strong odor present. Plastic liners will be used in all garbage cans and containers will be cleaned as needed. Containers at C-Camp and the permanent housing area will be checked and emptied in the same manner three times per week. Employees collecting garbage will report any repairs that are necessary to maintain containers in a bear proof condition. It is the responsibility of the Buildings and Utilities Supervisor to see that these situations are immediately corrected. The Buildings and Utilities Supervisor will ensure that all garbage collection vehicles in which garbage is stored overnight will be bear proof or parked inside.

In Talkeetna, the Ranger staff will maintain bear resistant garbage receptacles, and acquire new ones when necessary, at the Mountaineering Contact Station and NPS housing area. The local contractor, Talkeetna Refuse, collects trash.

All remote seasonal work camps will maintain wildlife resistant food and garbage storage facilities. The camp-lead is responsible for acquiring, maintaining, and insuring the use of these storage facilities. The Wildlife Management Technicians will insure the camp manager has the appropriate resources and understand the importance of using them correctly. The Wildlife Biologist will also provide an electric fence for remote work camps when requested or if and when the bear situation warrants it.

The park's waste transfer area, east of Highway #3 at milepost 234, will be maintained in a bear proof manner. The chain link fence surrounding the compound will be maintained in a condition that prevents entry by bears. The main entrance gate will be fastened shut at all times, and the doors on the transfer chute will be closed. The Buildings and Utilities Supervisor will maintain these systems in good working order, immediately repairing any damage or malfunctions. It is the responsibility of anyone using the storage area to report needed repairs to the Buildings and Utilities Supervisor and collect any garbage not in a bear proof container, in the area.

All campgrounds, picnic areas, park roads, residence areas, backcountry units, or other areas of visitor concentrations will be maintained in a litter-free condition. It is the responsibility of the Chief of Maintenance to provide regular litter patrols of frontcountry areas. It is the responsibility of the Chief of Ranger Activities to ensure backcountry areas remain free of litter. It is expected that all DENA employees will contribute to maintaining a litter free environment. The Eielson caretaker will regularly patrol near the Visitor Center, picking up litter in areas frequented by visitors. Cooking grease in cabins and campgrounds will be disposed of in the nearest bear proof garbage cans with plastic liners.

The kennels manager will ensure that dog food is not left outside unattended. Likewise, pet owners in the NPS housing area will not leave food outside for their pets.

### Enforcement

The prevention, identification and correction of improper food and garbage handling procedures are a major part of Ranger Activities Division and Wildlife Management Technician's patrols. Campgrounds will be patrolled each evening to inform visitors of proper food and garbage handling procedures. Unattended food or garbage will be disposed of or impounded and appropriate warnings or citations issued. Unattended food may be placed in the in the campground's food storage locker and a warning left at the campsite informing the visitor why it was removed and where to recover it.

Rangers are responsible for correcting emergency sanitation problems such as overflowing garbage cans or litter. Rangers will be alert for malfunctioning or poorly maintained bear proof facilities such as garbage can tops that are ajar, storage lockers left open, or dirty garbage cans that are the source of odors.

National Park Service and concession residence areas will be patrolled by Law Enforcement Rangers daily to ensure that food or garbage is not left out on porches or picnic areas. All concession garbage facilities will be checked once during the day and once after 11 p.m. to ensure that dumpster lids are closed and fastened and no garbage or litter is accumulating around the disposal areas. Rangers should be alert for improper disposal of kitchen wastewater and oils around the hotel and employee residence area. East District Ranger staff and the Wildlife Management Technicians will conduct foot patrols of the VC and Science and Learning Center, train station, and Riley Creek area.

The park's waste transfer facility, east of Highway #3 at mile post 234, will be patrolled weekly, to insure that the gate is locked and doors on the garbage transfer chute are closed.

Any non-compliance will be documented and appropriate warnings or citations will be issued. Violations involving the concession operation will be reported to the Concession Specialist for immediate correction. Non-compliance with NPS operations will be routed through the Assistant Superintendent of Resources, Science, and Learning to the responsible division or supervisor for immediate correction.

### **Mining Operations**

Mining Permits for claims within DENA require that all garbage and refuse be removed from the claim area or burned daily. The Wonder Lake Rangers and the Wildlife Management Technicians, under current CFR regulations, will enforce the policy of bear proof food storage and garbage handling. State regulations are used in the area of the New Park and Preserve. These regulations, however, must be enforced by the State because the NPS has only proprietary jurisdiction over New Park and Preserve lands.

Storage of food and garbage on claims must be in securely covered steel or heavy wood containers, an elevated cache or inside a closed, hard-sided building. Enforcement of State and Federal regulations will ensure proper food and garbage handling practices on claims. State assistance with enforcement will be requested, if appropriate.

Unpatented mining claims within DENA will be inspected opportunistically during the summer for food and garbage handling practices. Improperly stored, or unattended food and garbage will be removed and disposed of by Wildlife Management Technicians or Wonder Lake Rangers.



### **Business License Holders, Special Use Permits, and Concession Contracts**

State regulations require bear proof handling of food and garbage by these user groups. All garbage generated by these users must be removed from DENA. The Concession Specialist, District Rangers and Wildlife Management Technicians will work to change unacceptable practices through education, warnings and enforcement of appropriate regulations.

#### Private Land within New Park and Preserve or Close Neighbors

National Park Service does not have jurisdiction over food and garbage handling practices outside the boundaries of the Park. Efforts to create safe environments for both bears and humans in neighboring communities will be pursued through cooperative arrangements with groups like the Denali Foundation, which runs the Bear Essentials program. Wildlife Management Technicians will offer advise to local businesses and residents regarding food and garbage handling practices whenever possible.

Providing education and requesting assistance from State officials are the only methods of assuring compliance on private lands. Rangers and Wildlife Management Technicians will check for problems on these properties to the extent they are permitted access. State officers will be contacted if necessary improvements in food and garbage handling cannot be made through friendly agreements and education. If necessary the Wildlife Biologist and Chief Ranger will contact the Department of Environmental Conservation to determine if local businesses are in possession of appropriate permits under and/or is in compliance with Alaska Sate Regulations 18 AAC 60. The text of this State Statue is available at (http://www.state.ak.us/local/akpages/ENV.CONSERV/title18/title18.htm#60) or in appendix D. **18 AAC 60.010** states "(a) A person may not store accumulated solid waste in a manner that causes (1) a litter violation under 18 AAC 64.015, (2) the attraction or access of domestic animals, wildlife, or disease vectors".

#### **Subsistence Users**

The sanitation conditions around subsistence users' cabins and camps in DENA are controlled by the CFR and State regulations discussed previously (Appendix D). All contacts with these users will emphasize the need for bear proof storage of food and garbage. Whenever possible, Rangers will check cabins and camps for conditions that may attract bears.

Permit stipulations, outlining approved methods of bear proof handling of food and garbage and its removal, will be used to manage the activities of subsistence users. Notification of the intent to enforce regulations will be maintained in public places such as the Denali Park Post Office and mailed to more inaccessible individuals and communities. The Wildlife Biologist, Wildlife Management Technicians, and Subsistence Specialist are responsible for the distribution of this information.

### MANAGEMENT ACTIONS: RESPONSE TO BEAR-HUMAN INTERACTIONS