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

This program element is organized into four sections: 1. Reporting Procedures, 2. Criteria for Determining Bear Behavior, 3. Management Actions, and 4. Field Guidelines

The procedures outlined in this section are intended to provide guidance only. It is recognized that each bear-human incident may involve unique circumstances for which strict adherence to the procedures outlined in this plan is not appropriate. It is important for those involved in management actions to maintain dialog throughout the response period and ensure that management actions are documented.

Reporting Procedures

Receiving Initial Reports

It is the responsibility of all NPS employees, bus drivers, and concession employees to direct people who have had an interaction with a bear to Interpretation, Law Enforcement, or Center for Resources, Science, and Learning staff. Staff should follow interviewing guidelines and fill out a BIMS form as described in Appendix G. The Communications Center should be notified if the bear-human interaction requires further action. Wildlife Management Technicians or Ranger staff will conduct further interviews and investigations.

Notification

The person receiving the initial report will notify other parties based on the following guidelines once the general type of report is determined.

- (A) General Observation
 - Route BIMS form to Wildlife Management Technicians (Appendix G).
- (B) Bear within close proximity of developed area and other serious situations
 - Inform other staff or visitor center staff if in area of VC.
 - Inform visitors or residents in the area.
 - Inform Communication Center.
 - Inform Wildlife Management Technicians
 - Route BIMs forms to District Ranger and Wildlife Management Technicians (Appendix G).
- (C) If the incident requires an immediate action, the Communication Center will inform District Ranger, Supervisory Wildlife Biologist, Wildlife Management Technicians, Chief Ranger, and the Assistant Superintendent of Resources, Science, and Learning and the Superintendent's Office.

Documentation

See Appendix G for forms and use guidelines necessary for documenting interactions, management actions, and biological information.

Criteria for Determining Management Actions

The procedures outlined in this section are intended to provide guidance only.

Definitions of acceptable and unacceptable bear behavior can be found in the glossary and are summarized in the table below. These management actions emphasize the use of the least manipulative method first. Every situation is likely to be different, and there is no one size fits all solution to complex wildlife behavior management. The bear's reaction to a particular management action must be documented.

Behavior Category	Human-Bear Interactions	Management Response
FORAGING		
Mistaken Prey	Human behaving like bear prey, or bear attacks in brush.	None
DEFENSIVE		
Intolerant	Bear leaves the area as soon as it becomes aware of people.	None
Dominance	Bear challenges intruder of its personal space by approaching, No charging or body language displays.	
Surprise	Close, unexpected encounter; bear reacts, then leaves once person is no longer considered a threat.	None
Provoked	Person intentionally approaches close or harasses bear. Bear responds then leaves immediately.	None
HABITUATED		
Curious	Bear shows inquisitiveness one time to identify a scent or object, then moves away.	None
Tolerant	Bears in areas also used by people; tolerates people nearby but ignores them and their facilities.	Monitor
Conditioned	Repeat interest in people or their facilities; if allowed to continue, likely to result in obtaining unnatural food or reoccurring approaches towards people or facilities.	Aversive Condition Relocate Remove
Rewarded	Bear has obtained unnatural foods.	Aversive Condition Relocate Remove
AGGRESSIVE		
Threat	Made repeated offensive charges or caused injury.	Destroy
Predation	Kills and/or consumes victim.	Destroy

Management Actions

1. Investigation

Any field action will be preceded by an interview with the people involved. The interview should follow questions outlined in the BIMS form and interview guidelines in Appendix G, emphasizing a detailed account of physical setting, location and actions/reactions. If the bear is still in the area, the investigator should try to identify the bear. If it appears that further management actions will be needed, the bear should be kept in view, without provoking further interactions, until the Wildlife Management Technicians arrive.

2. Response Procedures

A quick response, within 12 hours, is essential to the success of management actions. Overall effectiveness will likely increase if the initial team responding to the situation is capable of performing the full range of management options and is prepared to stay in the area for several days.

The preferred team is composed of two Wildlife Management Technicians, a third member of the resource preservation staff, or a Law Enforcement Ranger. Members of this team **must** be qualified with a shotgun. A person qualified in wildlife immobilization may also be needed. The team will be equipped to perform a full range of management actions including immobilization, marking, aversive conditioning, and a camp test (tests the bears behavior before/after aversive conditioning).

Response to a backcountry incident:

- 1) Initial report and interview taken by field staff.
- 2) Field staff contacts Communication Center.
- 3) Communication Center contacts Wildlife Technicians.
- 4) Meeting point arranged for team and helicopter, if available.
- 5) Team members get gear and proceed to pick up point.
- 6) Consider fixed-wing aircraft support to help search incident area.
- If possible one team member interviews victim. Consider taking victim to site if further clarification is needed.
- 8) Team goes to site and conducts preliminary search of area with aerial support if available and necessary.
- 9) If necessary, remove victim's equipment from the area.



The team will take the appropriate actions outlined under Field Guidelines section of this document and will be prepared to spend at least two days in the area.

Driving a bear away from a populated area:

- (1) Survey the area. Determine the number and age classes of bears involved.
- (2) Keep visitors out of the area and in a safe location.
- (3) If the bear(s) has not left the area, use the least disruptive techniques first. Make sure the bear has an escape route. Yelling, waving arms, or throwing rocks from a distance is generally sufficient. Give the bear time to react and proceed slowly. The objective is to remove the bear from the area and not cause a confrontation that might result in a charge.
- (4) If these techniques fail after repeated attempts, an NPS employee who has completed all necessary firearm and aversive round training may use cracker rounds or other non-lethal rounds to attempt to drive the bear away from the immediate area. Continued hazing of the bear after it leaves the area is not warranted.

An alternative team led by an individual experienced in investigating bear incidents will go to the site if a preferred team is not available. The primary objective for this team is to retrieve any abandoned equipment and complete the initial phase of the investigation. This team may take no other management actions. A qualified individual may carry a shotgun.

3. Monitoring

Controlling problems with passive, preventative actions is the first step in any management action. This option must be exhausted before more aggressive management actions are taken. Monitoring a situation requires at least one employee remain on the scene until the situation is resolved.

When monitoring a situation:

- (1) Determine the number of bears, age of bears, location of people, bear behavior, and direction of their travel.
- (2) Inform people in the affected area of the situation.
- (3) Continually patrol the area and remove easily obtainable sources of human food. Check visitor food storage for loose garbage or open garbage cans.



- (4) Control movements of people and keep them away from the bear(s). Give them a ride past the bear or get them into a visitor center or back in buses or cars.
- (5) Keep the bear in view, especially if further management action may be required.

4. Closures

Specific procedures for establishing a temporary or emergency closure are given in Appendix H.

The establishment of a closure enables the removal of people from a potentially hazardous situation such as a carcass, berry patch, or the area of a recent incident. Closures may also allow a bear a chance to move to a remote part of the park before it has a second opportunity to come in contact with people.

In the backcountry, boundaries for closures will usually be the boundaries of the backcountry unit where the incident occurred. The adjacent unit should be closed if the incident occurred on or near the unit boundary. Boundaries may also be constructed to encompass only the hazardous area and the common access points. Initial and subsequent patrols of closures are required in order to remove people from the area, to prevent entry by other visitors, and to determine if the closure is still required.

Criteria for establishing and opening closures are provided under Field Guidelines (pg. 25). The duration and type of closure is dependent on the circumstance that caused it and the effectiveness of management actions. Certain circumstances may only warrant a partial closure as long as it minimizes further bear-human interactions.

5. Patrols, Tests and Subsequent Management Actions

(1) Patrols to Clear and Enforce Closures

Rangers will conduct patrols to remove people from a newly established closure and to prevent entry into the area.

(2) Patrols to Identify Bears with Unacceptable Behavior Patterns

Patrols will be conducted in response to specific incidents. The decision to initiate a patrol will be made by the Wildlife Biologist and the Wildlife Management Technicians. They will be conducted by the Wildlife Management Technicians and can include another qualified individual.

The purpose of patrols will be to determine the behavior patterns of potential problem bears. Behavior patterns observed during a patrol will determine the appropriate management action.

The team may make decisions in the field based on information they collect and the general guidelines in this plan. Management actions should be conducted in controlled areas and with close crowd control where appropriate. Explanations of the management actions being conducted should be provided to park visitors if personnel are available. When possible, the Wildlife Management Technicians should contact the Wildlife Biologist before more extensive or aggressive management actions are taken.

A bear's behavior may be classified as **conditioned** if it returns after two attempts to scare it off during a test. Further evidence can include an obvious interest and familiarity with unnatural food sources. If there is uncertainty, the animal should be classified as **tolerant** until more tests clarify the animal's behavior. If a Bear demonstrates **threatening** behavior, immediate actions should be taken as outlined in the Field Guidelines.

Specific Management Procedures:

1) Bears frequenting developed areas:

The incident area will be patrolled frequently by both Wildlife Management Technicians and Law enforcement Rangers, with patrols concentrated during the same time frames each day that the bear was observed. Personnel who are not qualified to take further management actions such as marking, aversive conditioning, or capture, may be used to monitor situations or on patrols. They will keep any bear in sight that exhibits the behavior of the animal involved in the incident. Their responsibility is to monitor the situation, and notify the Communication Center or the Wildlife Management Technicians so more qualified personnel can respond. Prior to and during these patrols, the area should be checked and cleared of unsecured, anthropogenic food so that any bear that enters the area will not obtain rewards. No food or garbage will be used as bait. Bears entering the area will be monitored. This procedure is useful in the identification of conditioned behavior.

2) Bears demonstrating food conditioning to backcountry camps.

Wildlife Management Technicians will set up a camp in the area where the incident occurred as soon as possible (within 12 hours of the incident). Typical behavior of a camping party will be followed; preparing meals at typical times, using standard backpacker's food, storing food in sealed plastic bags in BRFCs, etc. However, they will remain in their tent as much as possible, especially if there is a bear near the area. If possible, a third person at a vantage point will maintain radio contact with people in

the tent while watching for approaching bears. Bears entering the area will be monitored. The camp should be maintained for two to five days depending on the bear's response. If a bear, exhibiting the type of behavior described during the incident is observed, appropriate procedures will be taken, as outlined in Field Guidelines.

3) Bears that approach, threaten or follow people:

Wildlife Management Technicians will enter the area and approach bear(s) until the bears are definitely aware of the team. The team should maintain a safe distance from the bear. The team's objective is to determine if threatening behavior is present, without eliciting a normal defense or dominance-related reaction. Approaches of less than 50 meters should not be necessary in backcountry situations. Closer approaches may be necessary in the frontcountry. The team will remain in an identifiable position for ten minutes. No actions will be taken if the bear shows no reaction or it moves off. If approached by the bear the team will attempt to mark the animal. The marked bear can then be subjected to aversive conditioning trials and further management action as outlined below and in the Field Guidelines section of this document.

In frontcountry situations the team will try to scare the bear out of the area by yelling and throwing rocks. The team will also attempt to scare the bear away from any anthropogenic food sources using the same techniques. Cracker shells and rubber slugs will not be used in frontcountry settings unless the area is clear of people.

Typically, at least two attempts to scare the bear away will be made before categorizing the bear's behavior. If the bear persists in approaching, following, or remaining in the area, further action may be taken as outlined below and in the Field Guidelines.

The team cannot use bait of any kind.

6. Firearm Use for Management Actions

12 gauge shotguns with slugs will be the primary back-up weapons for any marking, capture, aversive conditioning, or destruction actions. The individual with the capture gun may also carry a large caliber pistol (.44 or larger). Only employees who have participated in a park approved firearms training session, conducted by a certified firearms instructor, which specifically covers the use of firearms in wildlife management situations (Appendix I), may participate in these operations. The Wildlife Biologist will select individuals for this training as needed.

Team members will discuss backup procedures prior to all management action. Situations will vary, but generally the first three rounds loaded into the shotgun magazine (they will be the last three fired) should be lead slugs. The last two rounds loaded, one in the magazine and one in the chamber, will depend on the type of action planned. One or both could be plastic slugs or cracker rounds for aversive conditioning, or slugs for strictly back-up situations.

7. Marking

Bears may be marked as part of approved research projects or resource management actions. At the present time only bears selected for aversive conditioning management or relocation will be marked for management purposes. The selection of the animals and how they will be marked will be made by the Supervisory Wildlife Biologist based on the Field Guidelines of this plan. Only animals with a demonstrated history of unacceptable behavior will be marked for management purposes.

Radio collaring, and ear tagging are the preferred methods for marking and require approval by the Supervisory Wildlife Biologist. Other techniques, such as pit tagging, dye, paint or streamer marking may be approved on a case-by-case basis by the Wildlife Biologist. The individual marking the bear may carry an additional sidearm (.44 Cal minimum) for protection. Team members will also provide shotgun back up. Marking attempts will be terminated if the bear's behavior indicates a high potential for a charge or injury to the bear. Bear capture will follow the protocols outlined in Appendix J.

Any bear that must be handled will have a numbered tag placed in each ear. Management actions involving translocation or aversive conditioning require radio collaring for monitoring bear movements, and the effectiveness of aversive conditioning.

8. Immobilization

(1) General Authorizations for Capture Equipment and Immobilizing Drugs.

The use of capture equipment and immobilizing drugs will be restricted to employees with specialized training and experience in animal restraint techniques and equipment, and who have been specifically assigned to bear immobilizing actions (Appendix I). Decisions concerning the individuals receiving this authorization and training will be made by the Supervisory Wildlife Biologist.

(2) Capture and Care.

Bears will be captured or immobilized (Appendix J) only for approved research or resource management actions. At present, management-related immobilization is limited to marking or radio collaring bears for aversive conditioning tests, translocations, removal, or destruction. The decision to capture a bear, and the method of capture will be made by the Assistant Superintendent of Resources, Science, and Learning and the Wildlife Biologist. The Superintendent is informed in all cases. However, immobilization for removal or eventual destruction requires the approval of the Superintendent.

Bears may be captured by use of drug injecting dart, or culvert or barrel type trap. The dart technique is preferred because it is the most discriminating method. Traps may be used when circumstances indicate a high probability of capturing a specific animal that has an established behavioral pattern. Darting attempts will be terminated when there is a high potential for injury to the animal. Repeated attempts and different strategies will be tried before the immobilization option is completely abandoned, especially for bears which must be destroyed if capture attempts fail. In most cases, dart capture operations will be conducted from the air with the use of a helicopter and support fixed-wing aircraft. In rare circumstances a dart capture may be initiated from the ground. In these cases, aerial support will be provided to monitor bear movements and actions. Ground based darting attempts will be terminated when the bear behavior indicates there is a high potential for a charge.

It is the responsibility of the person leading the capture operation to ensure that all participants are aware of the exact plan of action and their responsibilities for the capture attempt.

Personnel who have been trained on trap use will make all trap sets. Traps will be placed at the edge of developed areas and explicitly signed to warn visitors of them. When possible, traps will be baited with food found naturally in the area. Traps will be set in the evening, when fewer visitors are in the area, and will be locked closed again in the morning. Any trap set will be accompanied by extra patrols by the Wildlife Management Technicians to inform people of the problem in the area and to check food and garbage.

Animals held in traps will be moved to a site away from public use areas. Visits to a captive animal will be restricted to employees specifically designated by the Wildlife Biologist as caretakers for the animal. Bears will not be held longer than 24 hours unless extraordinary circumstances, effecting the translocation or release occur. The Wildlife Biologist and the Wildlife Management Technicians are responsible for the care of animals in these situations. Bears in traps requiring immobilization will be drugged with a blow gun dart or a jab stick/syringe system. Only employees absolutely necessary to this operation will be present. General health and plane of anesthesia of immobilized animals will be monitored. Bears should be kept cool and eyes covered. Whenever practical, one person will stay with the bear during the entire drugging, handling, and translocation process in order to provide continuity in monitoring response to drugs and provide care to the animal. When possible, biological and drug reaction data will be collected from all animals using a standardized field data form (Appendix B). When possible, the bear will be monitored until it has recovered from a safe vantage point.

The immobilizing agent currently selected for bear management purposes is Telazol, a non-narcotic, non-barbiturate, injectable anesthetic agent. Telazol is a rapid-acting combination of tiletamine and zolazepam. Telazol is mixed with sterile water to form a 250mg/ml solution (Appendix J).

9. Hazing and Aversive Conditioning of Bears

Hazing and aversive conditioning are the primary management actions directed towards bears that display tolerant, conditioned, or rewarded behavior. These techniques range from yelling and waving arms to the use of plastic slugs, cracker shells, or capsicum spray. All use of hazing and aversive conditioning techniques on a bear require complete documentation.

General Procedure:

- Assess the situation. Does it warrant action or will it resolve itself acceptably given time and monitoring? How many bears are there? What is their species and age class? Define your objective. Have as many facts as possible before initiating aversive conditioning.
- b) Remove spectators from the area before initiating any actions. Provide interpretation if possible. Always provide the bear an escape route.
- c) Apply techniques in a progressive manner, use the minimum tool that will safely accomplish your objective. In general, yelling, loud noises, and rock throwing, should precede uses of cracker rounds or Capsicum-based sprays. If these techniques fail, rubber or plastic bullets may be used.

The success of cracker rounds, rubber or plastic slugs, beanbag rounds, and capsicum-based sprays may vary with individual bears. The Wildlife Biologist must clear all operations involving these techniques. Only properly trained individuals can use these techniques.

Aversive Tool	Effective Range
Pepper Spray	1 to 5 yards
12 ga Bean Bag	5 to 20 yards
12 ga Fiocchi Rubber Baton	15 to 30 yards
12 ga BD-100 Rubber Slug	20 to 30 yards
12 ga Cracker Shell	Explodes at about 80 yards
Shock Collar	Variable up to 300 yards
Electric Tent	Animal must contact the tent

- d) Mark the bear (i.e. paint gun) for positive identification for future management actions.
- e) Interpret reasons for actions to any visitors who view the events.
- f) An electrified tent (E-tent) is a tent covered with electric fence wire. This experimental aversive conditioning tool could be deployed in either the backcountry or the frontcountry when tents are the attractant.
- g) Aversive conditioning must be conducted several times, often over several days. If these attempts fail, management actions may be escalated. In frontcountry situations, managers will consider accelerating the response and bears may be marked and relocated immediately.
- h) Based on the specific incident, the bear may be captured, released on site and aversively conditioned at the capture location.

Limitations and Guidelines for use of Cracker Shells:

- Cracker Shells are not always effective. Bears quickly learn to ignore them after repeated use.
- Their use is limited to open areas.
- Cracker shells traveled 80 yards.
- Be aware of the threat of fire if used in dry forest or brush.
- Place explosive between you and the bear. An explosion behind the animal may scare it towards you.
- Remember there is the potential to injure or kill a bear if they are hit with cracker rounds.

Limitations and Guidelines for use of rubber or plastic bullets:

- There is the potential to injure or kill a bear with a misplaced shot at distances of 35 meters or less for plastic slugs, 10 meters for bean bags. Slug placement in the rump or shoulder area will minimize potential for injury.
- Accuracy and effectiveness diminishes beyond distances of 45 meters for slugs, 30 meters for beanbags.

10. Translocations

Within the Park.

A decision to translocate a bear generally may be warranted if:

- (1) In frontcountry situations, a bear displays rewarded behavior, capture and release on-site has not worked or;
- (2) In backcountry situations, at least three sessions of aversive conditioning have failed to alter a bear's demonstrated, unacceptable behavior or keep it from the area or;
- (3) A bear has possibly been involved in a non-defensive or anthropogenic food related injury or fatality but identification of the animal or behavior is uncertain.

Please note, these are only guidelines. It is recognized that each situation may involve unique circumstances for which strict adherence to the procedures outlined above is not appropriate. It is, therefore, important for those involved in translocating bears to ensure that all management actions are well documented. The decision to translocate an animal will be made by the Superintendent in consultation with the Assistant Superintendent of Resources, Science, and Learning, the Supervisory Wildlife Biologist, the Wildlife Biologist, and the Wildlife Management Technicians.

The Supervisory Wildlife Biologist will be responsible for selecting a release site in the Park or Preserve. Site selection will be based on maximum distance from capture site, areas of human use, acceptable habitat, location of previous translocations, and transport limitations. Family groups of spring cubs or yearlings will be translocated as a unit. Other age classes may be separated. Translocated animals will be radio collared and monitored to determine survival and movements. A helicopter will generally be required to meet translocation criteria. Two translocation attempts will be made before considering destruction.

Outside of the Park.

In most cases, efforts will be made to give a bear, designated for destruction, to a zoo or other approved public use or research facility before it is destroyed. Any facility obtaining a bear from Denali National Park must meet National Zoological Society accreditation standards, be a non-profit institution, have a USDA exhibitor's permit, and, in the case of grizzly bears, hold a permit from the U.S. Fish and Wildlife Service to display grizzlies. See Appendix M for procedures on placing a bear in a zoo or sending bear parts to research facilities.

11. Destruction

On lands within the boundaries of Denali National Park and Preserve, a bear can be killed if it presents a critical and immediate threat to human safety and after all other means of deterrence have been exhausted.

The decision to destroy a bear may be made if it meets the following criteria:

- (1) Attempts of aversive conditioning and translocations have failed. The bear has been translocated twice and has returned, the previous unacceptable behavior pattern still exists, and another home (zoo, research facility etc.) for the bear cannot be found. Or,
- (2) Repeated capture attempts of an animal designated for translocation has been unsuccessful. Or,
- (3) An animal is positively responsible for an injury or fatality resulting from a non-defensive or unprovoked attack. Or,
- (4) An animal has sustained a seemingly fatal, human-caused injury (gunshot, broken bones due to vehicle collision, etc.). And,
- (5) Wildlife Managers, with consensus from the Superintendent, determine that it is in the best interest of the bear(s) and the natural systems involved to forego translocation efforts and another home (zoo, research facility etc.) for the bear cannot be found.

A committee, comprised of the Superintendent, Wildlife Biologist, Assistant Superintendent of Resources, Science, and Learning, Chief Ranger, and individuals invited to the committee by a designated member, will review the records of bears which are candidates for destruction and discuss management alternatives. The committee will ensure the fulfillment of all actions specified in this plan. The Wildlife Biologist will present the committee's recommendations to the Superintendent in writing. If the committee recommends destruction, the Superintendent will be advised verbally as soon as possible, followed by a written recommendation. Except in emergency situations involving a critical and immediate hazard to human safety, the final decision to destroy a bear will be made by the Superintendent.

The destruction of a bear is contingent upon a positive identification of the bear. Sows with cubs will be destroyed if they meet the above criteria. The Wildlife Biologist will decide if spring cubs accompanying the sow will remain in the wild if they cannot be placed in a public zoo or other facility.

Destruction and disposal procedures.

- (1) When possible, bears identified for destruction will be chemically immobilized and shot in the head with a 12-gauge slug or large caliber pistol to ensure a quick death. A bear will only be shot while free roaming in cases where its presence is an immediate threat to human safety.
- (2) Except in emergency situations, bears will not be destroyed within sight of visitors.
- (3) All identifying tags and radio transmitters will be removed and returned to the Wildlife Management Technicians.
- (4) Parts from bears killed may be used for research or interpretive programs in accordance with the appropriate guidelines covering natural history collections. Parts will not be retained by any interest for personal purposes or monetary gain. Collection and guidelines are available in Appendix R.
- (5) When these outlets are unavailable, destroyed bears will be returned to the ecosystem in locations far enough from roads, trails, and developed areas to minimize human interaction with scavengers or buried in the fenced garbage holding area along Highway 3. Disposal locations will be approved by the Wildlife Biologist. Necessary area closures will be established where carcasses have been left in the backcountry until the carcass is consumed.
- (6) Alaska Department of Fish and Game will be notified of any destruction in the park additions or preserve. A Defense of Life and Property form will be completed. The skull and hide will be collected (Appendix K) for sealing purposes and will be turned over to the state unless prior disposal arrangements have been made.

Injury or Fatality

This section outlines response to any bear-human interaction that results in human injury or death. All persons involved must recognize the high media profile of such an occurrence and conduct themselves and the transfer of information accordingly.

If a bear attack is reported to you:

- 1. Immediately begin a comprehensive log.
- 2. Maintain direct contact with the individual reporting the incident and obtain:

Name Phone number Location Location of incident Time of incident Number of people involved Number of people injured Extent of injuries and property damage All people accounted for? Y/N Number of bears involved Last known location of bears Distinguishing characteristics of bear(s)

3. Immediately contact the following:

Communications Center: (907) 683-9555 The Communications Center can assist with further contacts. Medical assistance (if necessary): (907) 683-9555 Wildlife Management Technicians: (907) 683-9574 East-District Ranger: (907) 683-9527 West-District Ranger: (907) 683-9525

4. As soon as immediate contacts have been made notify the:

Wildlife Biologist: (907) 683-9577 Assistant Superintendent of Resources, Science, and Learning (907) 683-9572 Chief Ranger: (907) 683-9521 Public Information Officer: (907) 683-9583 Superintendent: (907) 683-9581

5. Designate an Incident Commander from the list of individuals contacted.

Responsibilities

Incident Commander

1. Call medical assistance or place it on standby, as required.

2. Appoint 3-5 member Initial Response Team trained to deal with medical emergencies, bear management, and scene investigation, comprised of the following:

- Wildlife Management Technician(s)
- Park Ranger(s)
- Translator (if required)

3. Establish a **Field Leader**. This individual may be part of the Initial Response Team. If not part of the Initial Response Team, he/she will assume command of the field operation upon arrival on the scene.



4. Initiate closure procedures.

5. Maintain a written record of the entire incident and response.

6. Ensure that each team member maintains a written record of his/her activities.

7. Activate Public Information Officer.

8. Keep the Superintendent, Assistant Superintendent of Resources, Science, and Learning, and Chief Ranger apprised of the status of the incident and response.

Field Leader

- 1. Evaluate available information.
- 2. Secure and evacuate all nonessential personnel from the area to insure safety.
- 3. Ensure the complete closure of the area.
- 4. Maintain communications with Incident Commander.

5. Establish teams to deal with a) Medical Emergency, b) Bear Management, c) Scene Investigation if necessary. Appoint Team Leaders as appropriate.

Bear Management Team Leader (Wildlife Biologist)

Implement the following procedures based on the following circumstances:

1. If injury/fatality occurred as a result of Curious, Mistaken Prey, Dominance, Surprise, Provoked, or unknown behaviors:

- Separate bear and people. Monitor the situation and keep the bear in view.
- Provide information on how incident could have been avoided.
- Document all actions.

A. Bear remaining in the immediate area of the incident, identification positive:

- Continue to observe animal for three days and close areas that it enters to prevent further contact with people.
- Conduct patrols to verify the bear is an unusual threat to people or if incident was unique.
- If test patrol determines the bear's behavior is **Conditioned**, **Rewarded**, or a **Threat**, destroy the bear.



- B. Bear not in area or its identification is uncertain.
 - Initiate closures in areas where it is suspected the bear may have moved to.
 - Conduct patrols to identify the bear involved in the incident.
 - If the bear is positively identified, follow the procedures outlined in A.

2. Non-defensive, unprovoked attack aimed at securing anthropogenic food. Tolerant, Conditioned, Rewarded, or Threat behavior is positively present:

A. Bear still in immediate area of incident, behavior and identification positive:

- Destroy.
- If there is doubt about the positive identification or behavior of the bear, relocate. Consider genetic techniques to positively identify the bear.

B. Bear not in area:

- Initiate patrol procedures.
- Open area when situation resolved or when five days of patrols have been conducted without contacting a bear with unacceptable behavior.

C. Bear in situation A or B was relocated:

- If bear originally contacted was relocated, continue test patrols for an additional three days and nights after the relocation to determine if the correct animal was moved.
- If another animal is contacted during these additional patrols then see 1B.
- If no bear is contacted exhibiting Tolerant, Conditioned, Rewarded, or Threat behavior after this additional patrol period, open the closure.

Scene Investigation Team Leader

1. Ensure victim is interviewed:

- Take measurements, photographs, and sketches of wounds.
- Examine victim's clothing for hairs, punctures, and tears.
- Remain in contact with medical personnel attending to the victim and obtain details.
- Collect samples of blood, hair and tissue from bear for future DNA analysis.



• Determine the level of bear safety information received by the victim before the incident occurred.

2. Incident site investigation.

- If approaching scene by helicopter, avoid landing at incident site, which could disturb evidence.
- Ensure tracks and other sign is not disturbed by people walking around at the scene.
- Take measurements and photographs of bear foot prints at the scene. Note unusual marks and make a plaster cast of prints.
- Take measurements and photographs of injuries, especially with visible bite and claw marks. Note the location of the injuries on the victim's body.
- Photograph, measure, and record all data.
- Note surrounding vegetation and growth stage.
- Identify likely directions of the bear's approach and departure.
- Identify landmarks for location from air search.
- Investigate and note all natural and human food sources.
- Map trails, paths, day beds, rubbing trees, and footprints.
- Collect scats for DNA analysis.
- If the suspect bear carcass is available, secure a cloth bag over the head and each foot of the bear. Use paper if cloth is not available. Avoid plastic.
- Deposit the bear carcass to an available cooler as soon as possible.
- Bag any material from scene for examining for tooth and claw marks and recovery of bear fur and possible bear blood. VERY IMPORTANT transport dead bear and evidence from victims in separate vehicles. NOTE Bloody material should be air-dried at room temperature. If it cannot be air-dried then it should be kept frozen.
- Collect the victim's clothing in a bag for identification of blood and bear fur. A cloth bag is preferred, but plastic is acceptable if clothing is dry. If the clothing is wet, air dry at room temperature.

3. Interview the general public who use the area or have recently been in the area and may have observed bear activity.

Communications Center

1. Assist by performing call-out emergency response personnel.



2. Monitor and record radio communications between Incident Command and the Initial Response Team.

3. Process closure notices.

4. Keep Superintendent informed.

Public Information Officer

1. Responds to requests for information from the news media.

2. May appoint one park spokesperson who is directly involved with the operation to provide press statements.

3. Prepares written news releases.

In the case of human fatalities, a Board of Review will be convened, consisting of the Superintendent, Regional Director's representative, and two non-NPS bear experts (from state, Federal agencies, universities, etc.)

In the case of bear deaths resulting from management actions, a panel consisting of at least one Park representative, Regional Director's representative, and two non-NPS bear management experts will convene to review the circumstances surrounding the death. The review will assist the park in evaluating current bear management procedures and developing bear management program direction.