

**BEAR INFORMATION MANAGEMENT SYSTEM  
(BIMS)**

**GENERAL**

The Bear Information Management System (BIMS) is designed to collect data (see attached reporting form) on species, numbers, locations, behaviors, and bear management actions for use in determining the need for real time emergency management actions, and long-term management strategies. The data is analyzed annually to improve protection of both bear species and to reduce the risk caused by bears to the visitor.

**OBJECTIVES**

1. To provide the staff and field personnel with pertinent and immediate information for use in making informed decisions regarding bear/people management.
2. To provide base information for resource management and research programs.
3. To provide accurate information for alerting field personnel of potentially hazardous bears and/or bear situations.
4. To assess long-term effectiveness of bear management strategies and interpretive devices.
5. To assess long-term visitor and bear behavior patterns.
6. To provide information for evaluating bear habitat for analyzing sites for visitor use facilities.
7. To provide data to the Interagency Grizzly Bear Committee on grizzly population trends.

**RESPONSIBILITIES**

**Chief, Division of Science and Resources Management:** Responsible for implementation of the bear monitoring system in concert with the Bear Management Plan. Responsible for assessments of sightings and incident reports received and dissemination of sightings and incident summaries to the field as specified in the Bear Management Plan and Guidelines. In the absence of the Chief, Division of Science and Resources Management, the Natural Resources Branch, Wildlife Biologist or their designee will perform these responsibilities.

**Emergency Operations Specialist:** Responsible for coordination of Communications Center operations as listed below.

In the absence of the Chief, Division of Science and Resources Management and the Wildlife Biologist, the Assistant Chief, Division of Science and Resources Management or designee, will be responsible for the Chief, Division of Science and Resources Management bear management responsibilities.

**Communications Center:** Responsible for disseminating incident and management action information as directed by the Bear Management Guidelines and the Communications Center Operations Manual and for coding and distribution of the Case Incident Reports as outlined below. They will maintain the system to insure Case Incident Reports are completed. A Case Incident Report number will be utilized for all bear sightings that involve an Incident or Management Action.

**BIMS Clerk:** Responsible for assisting the Chief, Division of Science and Resources Management and the Wildlife Biologist with entering and retrieving computerized daily reports of bear sightings, incidents and annual bear reports. Retrieving printouts will be the BIMS Clerk's responsibility. In the absence of the BIMS Clerk, the Wildlife Biologist, or designee, will assume these responsibilities.

**District and Subdistrict Rangers:** Responsible for providing verbal reports relative to incidents and management actions to the Communications Center, with written follow-up within five days. Routine sightings will need a completed BIMS form but may not need a Case Incident Report.

#### **ACTION PLAN**

##### **Reporting:**

1. All reports of bear sightings will be forwarded to the Wildlife Biologist.
2. All reports of incidents and management actions will be called in to the Communications Center by radio or telephone as they occur.
3. All incidents and management actions reported verbally to the Communications Center will be followed up by a Case Incident Report within five days. Instructions on how to complete and distribute this form are fully outlined in the "Law Enforcement Guidelines and Reporting Procedures." Briefly, the distribution of reports for bear monitoring purposes is as follows:
  - a) A Case Incident Report will be completed in the Subdistrict where the action or incident occurs and will be sent to the Communications Center within five days. A copy should be retained for the Subdistrict files, if desired.

b) After the Communications Center has approved the form, the original will be retained by the Communications Center in the numerical file.

c) Summary reports or copies of individual incident reports can be obtained for official use by contacting the Communications Center.

4. Any bear report containing information requiring immediate action should be relayed by telephone or radio to the Subdistrict Ranger in the area the incident has occurred as soon as possible by the person receiving the information.

#### **ROUTING SCHEDULE OF REPORTS AND LOGS**

Information received regarding incidents and management actions will be routed immediately to the Chief, Division of Resources Management by phone.

A copy of the Case Incident Report will be sent to the Wildlife Biologist as soon as it is received.

Dear Glacier National Park Resident:

Living and working in Glacier National Park provides you, your family and your guests with a unique opportunity to experience first-hand many of the natural wonders which are preserved and protected in your National Park. Among those magnificent natural resources are grizzly and black bears, mountain lions and wolves. Living and working with these large carnivores exposes humans and wildlife to certain risks. Grizzly bears, black bears, and mountain lions are large powerful animals that occasionally attack humans. We need your cooperation to provide a safe environment for people and for wildlife.

The following recommendations are provided to minimize the risk of injury to you, your family, and your guests and to the wildlife. While these precautions require some effort on your part, they will reduce the incidence of bear-related property damage, the potential for wildlife related injuries, and may allow us to avoid the subsequent loss of a bear, mountain lion or wolf:

1. Garbage must be stored either in a bear-proof garbage can or dumpster or inside a building that bears or other animals can not access.
2. **Bird feeders have been an attractant to bears in this ecosystem, and are illegal within Glacier National Park.**
3. Livestock and pet food should also be stored in containers and/or inside a building that bears or other animals cannot access. Don't leave pellets, dog food or bones out over night.
4. Barbecue grills, smokers, ice chests, coolers, beverage cans, and bottles are bear attractants and should be stored inside. Care must be taken to assure that no burning coals are brought inside buildings in grills or barbecue devices.
5. No food of any kind should be left outside unattended.

All bears and other predators can be dangerous. The likelihood of encountering a bear or mountain lion is very real, especially at night. While we attempt to minimize wildlife hazards we cannot completely eliminate the hazard or guarantee your safety. Always be alert to your surroundings, closely supervise children, and talk with them about what to do if they encounter a bear, lion or a wolf. The appropriate response when confronted with each one of these animals is different. Learn what the appropriate responses are and explain them to your children.

The following precautions are appropriate for all wildlife species:

- a. Don't travel alone or at night.
- b. Make noise when walking.
- c. If you must travel at night, use a flashlight.
- d. Avoid heavily wooded areas at night.

We would also like to take this opportunity to remind you not to feed or attract wildlife into your yard by salting, or any other form of baiting. Such activities are both dangerous and illegal.

Despite the brief pleasure you may receive from watching wildlife at the "salt lick", such habituation of wildlife species, especially carnivores, could endanger you or your guests and usually leads to the animals' death. For example, the concentration of deer attracted to a salt lick may attract mountain lions. Bird feeders not only increase the risk to humans, but also have been directly linked to unacceptable bear behavior in this ecosystem. Bear managers are usually unsuccessful in trying to change the actions of bears that have learned to eat from bird feeders, and the result is often the death of the bear. Please refrain from the temptation to use bird feeders within the park.

Glacier National Park's "Bear and Lion Information Management Systems" are important tools which provide accurate and timely information on bear and lion sightings, incidents, and behavior. This information is a critical component of Glacier's wildlife management program. We need your help! Please report all bear and mountain lion sightings and/or incidents to the Glacier National Park Communications Center, at (406) 888-7800 as soon as possible after they occur.

Please contact the District or Sub-District Ranger if you have any questions regarding the recommendations or precautions outlined in this letter.

Remember, every employee and resident has a shared responsibility for the future of bears and other wildlife.

If you would like additional information or are unable to contact the District or Sub-District Ranger, please contact the Chief Ranger's Office at (406) 888-7828.

Sincerely,

Mick Holm  
Superintendent

BEAR TAGGING PLAN

There is a need to identify individual grizzly bears in the field; therefore, Glacier is using colored "TEMPLE" 1-1/2" x 2" plastic tags, by using left and right ears and five different colors. Eight grizzlies can be marked before it will be necessary to use both ear combinations.

The tags are by numbers and on the back is "GNP" and also an L or R which designates the ear (left or right ear) if applicable. No L or R appears when two tags of the same color and number are necessary (tag in left and right ear, same color and number).

NOTE:

All black bears are marked with a numbered RED plastic tag. For those black bears caught on the west side, the tag is attached to the RIGHT ear; for those caught on the east side the tag is attached to the LEFT ear. If it is necessary to better identify a specific black bear, a ribbon could be riveted to the red tag.

GRIZZLY TAGGING PROGRAM

<u>Bear No.</u>	<u>Color</u>	<u>Location</u>	<u>Tag.No.</u>
-----------------	--------------	-----------------	----------------

EAST SIDE

4	green	right ear . . . . . (deployed at Many Glacier, 2003)	tag marked 254
5	yellow	left ear . . . . . (missing)	tag marked 260
6	orange	right ear . . . . . (St. Mary)	tag marked 271
7	green	right and left ears . . . . . (Goat Haunt)	tag marked 272
8	orange	left ear . . . . . (missing)	* 277

WEST SIDE

4	white	right ear . . . . .	tag marked 258
5	blue	left and right ear . . . . .	tags marked 273
6	white	left and right ear . . . . .	tags marked 274
7	blue	left ear; white right ear . . . . .	tags marked 275
8	white	left ear; blue - right ear . . . . .	tags marked 276

\* Tag needs to be marked with indelible ink

BLACK BEAR MARKING PROGRAM

<u>Bear No.</u>	<u>Color</u>	<u>Location</u>	<u>Tag. No.</u>
<u>ST. MARY</u>			
1	red	left ear . . . . .	322
2	red	left ear . . . . .	323
3	red	left ear . . . . .	324
4	red	left ear . . . . .	325
(also have red 326-329 and 451-468)			
<u>MANY GLACIER</u>			
1	red	left ear . . . . .	331
(missing)			
2	red	left ear . . . . .	333
3	red	left ear . . . . .	334
4	red	left ear . . . . .	335
(also have 336-339)			
<u>GOAT HAUNT</u>			
1	red	left ear . . . . .	340
2	red	left ear . . . . .	341
3	red	left ear . . . . .	342
<u>LAKE McDONALD</u>			
29	red	right ear . . . . .	405
30	red	right ear . . . . .	406
31	red	right ear . . . . .	407
32	red	right ear . . . . .	408
<u>NORTH FORK</u>			
3	red	right ear . . . . .	446
(missing)			
4	red	right ear . . . . .	447
5	red	right ear . . . . .	448
6	red	right ear . . . . .	449

It is important that the individually marked tags be placed in specified ear, or ears, as noted on the tag. The Chief, Division of Resources Management, or designee, will number and issue tags to District Rangers, who may distribute the tags to the Subdistricts if they wish.

Transient bears inadvertently trapped in operations involving the trapping of a problem bear may be relocated or released on site; no tags or identification will be used on bears released on site.

NOTE: District Rangers will insure that the above "ear tags" are available and that any old tags not conforming to the active system are destroyed.

**CARRION**

<b>OFF TRAIL (More than ¼ mile from the trail)</b>	<b>ON TRAIL (Less than ¼ mile from the trail)</b>	<b>BACKCOUNTRY CAMPGROUND</b>	<b>DEVELOPED AREA</b>	<b>ROADSIDE</b>
<b>1. <u>PROCESS</u></b> bear sighting report.	<b>1. <u>PROCESS</u></b> bear sighting report.	<b>1. <u>PROCESS</u></b> bear sighting report.	<b>1. <u>PROCESS</u></b> bear sighting report.	<b>1. <u>PROCESS</u></b> bear sighting report.
<b>2. <u>EVALUATE</u></b> the report.	<b>2. <u>CLOSE</u></b> appropriate trail section(s).	<b>2. <u>CLOSE</u></b> appropriate campground and trail section(s).	<b>2. <u>NOTIFY 721 &amp; INVESTIGATE</u></b>	<b>2. <u>NOTIFY 721 &amp; INVESTIGATE</u></b>
<b>3. Consider <u>CLOSURE</u></b> if safety is an issue. Contact your supervisor for assistance if required.	<b>3. <u>INVESTIGATE</u></b> , leave carrion in place, contact SD Ranger or District Ranger for exceptions.	<b>3. <u>INVESTIGATE</u></b> , leave carrion in place, contact SD Ranger or District Ranger for exceptions.	<b>3. <u>REMOVE</u></b> carrion and <u>clean the site</u> .	<b>3. <u>REMOVE</u></b> carrion and <u>clean the site</u> to protect scavengers.
<b>4. <u>NOTIFY 721 and DOCUMENT</u></b> .	<b>4. <u>NOTIFY 721 and DOCUMENT</u></b>	<b>4. <u>NOTIFY 721 and DOCUMENT</u></b>	<b>4. <u>ALERT &amp; CONTROL VISITORS</u></b>	<b>4. <u>CONTROL VISITORS</u></b> and traffic.
<b>5. <u>PATROL</u></b> until carrion is consumed.	<b>5. <u>PATROL</u></b> until carrion is consumed and bear leaves area.	<b>5. <u>PATROL</u></b> until carrion is consumed and bear leaves area.	<b>5. <u>PATROL AREA</u></b>	<b>5.</b> Monitor for additional reports.
<b>6. <u>OPEN, NOTIFY 721 and DOCUMENT</u></b> after two clear patrols.	<b>6. <u>REOPEN, NOTIFY 721 and DOCUMENT</u></b> after two clear patrols.	<b>6. <u>REOPEN, NOTIFY 721 and DOCUMENT</u></b> after two clear patrols.	<b>6. <u>RELOCATE</u></b> if bear remains in or near developed area.	<b>6. <u>PATROL</u></b> area.
			<b>7. <u>NOTIFY 721 and DOCUMENT</u></b>	<b>7. <u>RELOCATE</u></b> if bear remains in area.
				<b>8. <u>NOTIFY 721 and DOCUMENT</u></b>

REV 1/98

**BEAR DISPLAYS HABITUATED BEHAVIOR**

(Frequents roadside, developed area, BC campground, trail, but retains natural foraging, comfortable in presence of humans)

<b>OFF TRAIL</b> (More than ¼ mile from the trail)	<b>ON TRAIL</b> (Less than ¼ mile from the trail)	<b>BACKCOUNTRY</b> <b>CAMPGROUND</b>	<b>DEVELOPED</b> <b>AREA</b>	<b>ROADSIDE</b>
<p>1. <b>PROCESS</b> bear sighting report.</p> <p>2. <b>CONSIDER</b> area restrictions or closure for resource benefit.</p>	<p>1. <b>PROCESS</b> bear sighting report.</p> <p>2. <b>POST</b> if bear is frequenting.</p> <p><b>NOTIFY 721 &amp; INVESTIGATE</b></p>	<p>1. <b>PROCESS</b> bear sighting report.</p> <p>2. <b>CLOSE</b> appropriate campground and trail section(s). Remove attractant if not natural occurrence.</p>	<p>1. <b>PROCESS</b> bear sighting report.</p> <p>2. <b>PREPARE</b> for aggressive hazing or aversive conditioning; if feasible include public education actions.</p>	<p>1. <b>PROCESS</b> bear sighting report.</p> <p>2. <b>PREPARE</b> for aggressive hazing or aversive conditioning; if feasible include public education actions.</p>
<p>3. <b>MONITOR</b> for additional reports.</p>	<p>3. <b>CONSIDER</b> closure, aggressive hazing or aversive conditioning; preemptive action (capture, onsite/ remote release); Approval of SDR &amp; Wildlife Biologist required.</p>	<p>3. <b>NOTIFY 721 &amp; INVESTIGATE</b></p>	<p>3. <b>MITIGATE</b> attractants</p>	<p>3. <b>MITIGATE</b> attractants</p>
<p>4. <b>PATROL</b> at least twice per guidelines</p>	<p>4. <b>CLOSE &amp; SWEEP</b> if bear remains in close proximity to the trail, feeding naturally and/or displaying neutral behavior.</p>	<p>4. <b>CONSIDER</b> aggressive hazing or aversive conditioning; preemptive action (capture, onsite/ remote release); Approval of SDR &amp; Wildlife Biologist required.</p>	<p>4. <b>CONSIDER</b> preemptive action (capture, onsite/ remote release)</p>	<p>4. <b>CONSIDER</b> preemptive action (capture, onsite/ remote release)</p>
<p>5. <b>REOPEN, NOTIFY 721 and DOCUMENT</b> after two clear patrols.</p>	<p>5. <b>PATROL</b> at least twice per guidelines</p>	<p>5. <b>PATROL</b> at least twice per guidelines</p>	<p>5. <b>MONITOR &amp; PREPLAN</b> for bear's return.</p>	<p>5. <b>MONITOR &amp; PREPLAN</b> for bear's return.</p>
	<p>6. <b>REOPEN, NOTIFY 721 and DOCUMENT</b> after two clear patrols.</p>	<p>6. <b>REOPEN, NOTIFY 721 and DOCUMENT</b> after two clear patrols.</p>		

**BEAR DISPLAYED AGGRESSIVE BEHAVIOR**

(Sought and obtained other than natural food, overly familiar with humans, property damage involved)

**NOTE: Exceptions may be allowed for natural defensive actions or other unique situations.**

<p><b>OFF TRAIL, ON TRAIL, BACKCOUNTRY CAMPGROUND</b></p> <ol style="list-style-type: none"> <li>1. <b><u>CLOSE</u></b> AREA.</li> <li>2. <b><u>NOTIFY 721 and DOCUMENT</u></b></li> <li>3. <b><u>INVESTIGATE, PHOTOGRAPH, and ID bear.</u></b></li> <li>4. Bear <b>observed</b>:             <ol style="list-style-type: none"> <li>A. <b><u>REMOVE</u></b></li> <li>B. <b><u>BIMS</u></b> filed, sent to Resources Management</li> <li>C. <b><u>OPEN</u></b> area</li> <li>D. <b><u>NOTIFY 721 &amp; DOCUMENT</u></b></li> </ol> </li> <li>5. Bear <b>not observed</b>:             <ol style="list-style-type: none"> <li>A. Prepare to <b><u>REMOVE</u></b> target bear.</li> <li>B. <b><u>PATROL</u></b> and closely monitor additional reports for return of target bear to same or other area.</li> <li>C. <b><u>KEEP</u></b> area closed until information indicates bear has moved away.</li> <li>D. <b><u>OPEN</u></b> area after patrols indicate target bear is not in the area.</li> <li>E. <b><u>BIMS</u></b> report to Resources Management</li> <li>F. <b><u>NOTIFY 721 &amp; DOCUMENT</u></b></li> <li>G. <b><u>MAINTAIN</u></b> alert status for return of target bear.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. <b><u>INVESTIGATE</u></b>:             <ol style="list-style-type: none"> <li>A. <b><u>CLOSE</u></b> as necessary to insure safety.</li> <li>B. Enforcement actions may be indicated.</li> </ol> </li> <li>2. <b><u>CONTROL PEOPLE</u></b></li> <li>3. Attempt to <b><u>REMOVE</u></b> bear:             <ol style="list-style-type: none"> <li>A. Bear <b><u>REMOVED</u></b>:                 <ol style="list-style-type: none"> <li>1. <b><u>OPEN</u></b> area.</li> <li>2. <b><u>NOTIFY 721 &amp; DOCUMENT</u></b></li> </ol> </li> <li>B. Bear <b><u>NOT REMOVED</u></b>:                 <ol style="list-style-type: none"> <li>1. <b><u>MAINTAIN</u></b> closure, <b><u>PATROL</u></b> &amp; monitor for additional reports.</li> <li>2. <b><u>OPEN</u></b> after patrols indicate target bear is no longer in the area.</li> <li>3. <b><u>NOTIFY 721 &amp; DOCUMENT</u></b></li> <li>4. <b><u>MAINTAIN</u></b> alert status for return of target bear.</li> </ol> </li> </ol> </li> </ol>
<p>REV 4/04</p>	

**DEVELOPED AREA or ROADSIDE**

**HUMAN INJURY AND/OR FATALITY**

**Note:** Considerations must be given to bears displaying neutral, defensive action, even in the event of human attack.

**OFF TRAIL, ON TRAIL, BACKCOUNTRY  
CAMPGROUND**

1. **CLOSE AREA.**
2. **NOTIFY 721, start DOCUMENTATION.**
3. **NOTIFY** Subdistrict and District Ranger(s) adjacent to incident area.
4. **INVESTIGATE**, if warranted.
5. Bear **OBSERVED** at scene:
  - A. **Remove** if bear is conditioned or predation is involved.
  - B. Notify 721 and document.
  - C. Area opened only with concurrence of Subdistrict & District Ranger.
  - D. BIMS to Resources Management.
6. Bear **not observed:**
  - A. Attempt to remove if bear is conditioned or predation is involved.
  - B. **Patrol & Monitor** for additional reports or return of bear to same or different area.
  - C. BIMS to Resources Management.
  - D. Keep area **CLOSED** until Subdistrict and District Ranger concur on opening.
  - E. **NOTIFY 721 & DOCUMENT**

1. **CLOSE AREA** adjacent to scene & **CONTROL** people.
2. **NOTIFY 721, start DOCUMENTATION.**
3. **NOTIFY** Subdistrict and District Ranger.
4. **INVESTIGATE**, if assistance needed, contact District Ranger.
5. Bear **OBSERVED:**
  - A. Remove bear from area.
  - B. Open area.
  - C. **NOTIFY 721 & DOCUMENT**
6. Bear **NOT OBSERVED:**
  - A. **PATROL & MONITOR** for additional reports or return of bear to same or different area.
  - B. Attempt to remove target bear.
  - C. Keep area **CLOSED** until Subdistrict and District Ranger feel threat is over.
  - D. **NOTIFY 721 & DOCUMENT**
  - E. Maintain alert status for return of the bear.

REV 1/96

**DEVELOPED AREA, ROADSIDE**

## BEAR PEPPER SPRAY POSITION PAPER

Hikers and campers should not develop a false sense of security by carrying the spray, and should follow appropriate bear avoidance safety procedures. While pepper spray has deterred or ended some attacks, there have been instances where it was not effective. Bear pepper spray, *when used appropriately*, causes temporary incapacitating discomfort which may provide a non-toxic, non-lethal deterrence of aggression by bears. When questioned by the public about what brand to purchase, park staff will refer to the following guidelines concerning pepper spray, and not make brand specific recommendations.

Selection: Glacier National Park has adopted the Interagency Grizzly Bear Committee guidelines for the selection and purchase of bear pepper spray. The guidelines are:

- Product should be clearly labeled “for deterring attacks by bears”
- Spray concentration of 1.0 to 2.0 % capsaicin and related capsaicinoids.
- Canister shows a net weight of at least 225 grams or 7.9 ounces.
- Should be derived from Oleoresin Capsicum
- Spray released in a shotgun-cloud pattern, not a stream.
- Spray should shoot at least 25 feet
- Spray should last at least 6 seconds
- Should be registered and approved by the EPA

If the user plans to hike or travel in Waterton NP or other Canadian areas, it is also advisable to select a brand of pepper spray that can be transported legally across the international boundary.

### Use:

- In order to be effective pepper spray **must** be readily accessible, not in the pocket of a pack, but worn on the belt, shoulder, or chest straps.
- The spray should **only** be used to deter aggressive encounters with a bear, and **never** applied to people or equipment as a repellent.
- Remove the safety clip.
- Adjusting for wind drift if necessary, spray a short burst when the animal is 40-50 feet away in order to create a cloud the bear has to pass through.
- If the animal continues, aim the spray at the face of the bear.

### Storage & Replacement:

- Check the expiration date and replace as necessary
- Avoid storing cans above 120° F (hot car interiors) or below 32° F if possible
- When transporting cans in a motor vehicle, insure they are secured in a closed container if in the passenger compartment to avoid accidental discharge.

**UNITED STATES**

***DEPARTMENT OF THE INTERIOR***

NATIONAL PARK SERVICE

Glacier National Park

West Glacier, Montana 59936

**BEAR MANAGEMENT GUIDELINES**

Glacier National Park

**(Revised April 2004)**

**Recommended by:**

\_\_\_\_\_

**Stephen J. Frye,  
Chief, Division of Visitor Services**

**Date**

\_\_\_\_\_

**Leo F. Marnell  
Chief, Division of Science and Resources**

**Date**

**Approved by:**

\_\_\_\_\_

**Mick Holm, Superintendent**

**Date**

# BEAR MANAGEMENT GUIDELINES

## CONTENTS

<u>Sec.</u>	<u>Topic</u>	<u>Page</u>
<b>1.0</b>	<b>DEFINITIONS</b> .....	1
<b>2.0</b>	<b>INTRODUCTION</b> .....	3
<b>3.0</b>	<b>PROGRAM</b> .....	3
3.1	Bear Monitoring System.....	3
3.2	Awareness Orientation and Information Distribution .....	4
3.3	Bear Management and Handling Training Criteria .....	4
<b>4.0</b>	<b>INFORMING VISITORS AND CONCESSION EMPLOYEES</b> .....	5
4.1	Before Visitors Arrive in the Park .....	5
4.2	Before Concession Employees Arrive in the Park.....	5
4.3	Visitors Entering and Traveling Through the Park.....	6
4.4	Scheduled Interpretive Programs and Walks .....	6
4.5	Backcountry Information .....	7
<b>5.0</b>	<b>PREVENTIVE MANAGEMENT ACTION</b> .....	7
	Preventing Bears from Using Developed Areas and Artificial Food Sources	
5.1	Frontcountry Areas .....	7
5.2	Backcountry Areas.....	9
<b>6.0</b>	<b>SPECIAL BEAR MANAGEMENT AREAS</b> .....	11
6.1	Granite Park .....	11
6.2	Apgar Mountains .....	11
<b>7.0</b>	<b>PREPARING FOR MANAGEMENT ACTIONS</b> .....	11
7.1	Hazing and Aversive Conditioning.....	11
7.2	Readiness for Trail Closure .....	12
7.3	Firearms, Immobilization and Capture Equipment.....	12
7.4	Preparation for Relocating Bears .....	13
7.5	Bears Destroyed.....	14
7.6	Natural Bear Mortalities Found .....	15
7.7	Research Capturing.....	15
<b>8.0</b>	<b>MANAGEMENT ACTIONS</b> .....	15
8.1	Considerations for Implementing Management Actions .....	15
8.2	Individuals Responsibilities for Decisions .....	16
8.3	Responsibility for Management Actions .....	17
8.4	Carrion .....	19
8.5	Photography of Bear Management Operations.....	20
<b>9.0</b>	<b>FOLLOW-UP AND EVALUATION</b> .....	20
9.1	Reporting Management Actions .....	20
9.2	Evaluation of Bear Management Actions.....	21
9.3	Evaluation and Revision of Plan and Guidelines.....	21

## APPENDICES

A	Bear Information Management System.....	23
B	Authorization to Handle Grizzly Bears.....	26
C	Bear Training Standards.....	29
D	Schedule of Refuse Collection .....	32
E	Letter to Landowners, Concessionaires and Residents.....	33
F	2004/2005 Bear Tagging Plan.....	35
G	Field Guidelines for Management Actions.....	37
H	Wildlife Management Action Form.....	42

## DEFINITIONS

Definitions are meant only to describe the terms as used in this guideline.

**AGGRESSIVE BEHAVIOR:** Condition where a bear charges and/or attacks one or more people in an unprovoked, non-defensive manner.

**AVERSIVE CONDITIONING:** Application of negative reinforcement aimed at behavior modification of a specific animal(s) using hazing techniques on a consistent basis.

**BACKCOUNTRY:** Park lands that are essentially undeveloped or natural in character, at least 250' feet from established roadways and developed areas.

**BACKCOUNTRY USE PERMIT:** A written authorization to engage in overnight backcountry camping.

**CLOSED AREA-BEARS:** Trails, campgrounds, developed areas and/or adjacent lands that have been determined to be potentially hazardous to human use, due to bear activity, if carcass is present, or where bears are foraging or remaining in the area. Only authorized personnel who are properly trained and equipped will be assigned to patrol closed areas. Entry into closed areas by unauthorized individuals is a violation of 36 CFR 1.5(f).

**CONDITIONED:** Describes bear behavior defined by any one or more of the following: has sought and obtained non-natural foods, destroyed property, displayed aggressive (non-defensive) behavior toward humans, or become overly familiar with humans.

**DEFENSIVE BEHAVIOR:** Reaction by a bear to protect itself, its young, or a natural food source, if surprised or in response to harassment.

**DEVELOPED AREA:** Roads, parking areas, picnic areas, front country campgrounds, concessions and administrative facilities, residences and/or adjacent lands.

**FREQUENTING:** Repeated observations or confirmed reports of bear sign or activity at short intervals in the same general area.

**HABITUATED:** Describes bear behavior which includes one or more of the following circumstances: has become accustomed to frequenting developed areas, backcountry campgrounds, trails or roadsides, but has retained its natural foraging behavior. Habituated bears have not necessarily become overly familiar with humans, but are comfortable in the presence of humans.

**HAZING:** The short term use of noise, pain, and/or other non-lethal aversive stimulus to move an animal away from a specific area

**LIVESTOCK:** Domesticated riding/pack animals and cattle that are (1) personal property kept for personal and commercial purposes (to include concession and trespass animals), or (2) property of the United States Government.

**MANAGEMENT ACTION:** Any action taken by management due to bear activity, that directly affects the bear and/or the public. This includes, but is not limited to, trail postings, trail closures, campground closures, bear relocations and bear removals.

**NATURAL BEHAVIOR:** Condition where a bear displays behavior consistent with what is found or expected in a free ranging natural population of bears without exhibiting “habituated” or “conditioned” characteristics.

**OVERLY FAMILIAR WITH HUMANS:** Condition in which a bear repeatedly and purposefully approaches humans in a non-defensive situation.

**POSTED AREA:** An area, most commonly a trail, that is posted at all reasonable entry points with a sign (“Bear Frequenting Area”) to warn the public that a bear has been frequenting the area.

**RELOCATION:** A management action in which a bear meeting specific criteria is taken from the area where a potential problem has been identified and transported to a predetermined location.

**REMOVAL:** A management action in which a bear meeting specific criteria is removed from the Park population or destroyed.

## **2.0 INTRODUCTION**

The Glacier National Park “Bear Management Guidelines” are intended to be used as a field guide for meeting the objectives of the Bear Management Plan.

These Guidelines will be reviewed biennially and updated as necessary. Comments and recommendations should be addressed to the Chief, Division of Science and Resources Management, Glacier National Park, West Glacier, Montana 59936.

## **3.0 PROGRAM**

### **3.1 Bear Monitoring System**

Park personnel will report all bear observations, including reports from visitors, (BIMS reports, see Appendix A) to the Division of Science and Resources Management. The Division will be responsible for logging and preparing all reports for computer entry by the BIMS Clerk.

The BIMS Clerk will code and enter reports into the computerized storage system each morning, Monday through Friday. All bear incidents and management actions will be reported to the Communications Center in a timely manner and will be followed by a Case Incident Report within five days, (refer to “Reports and Procedures” in the GNP Law Enforcement Guidelines). Designated bear management personnel should review printouts frequently for accuracy, and report any corrections to the BIMS Clerk. The reports will be evaluated by the Chief, Division of Science and Resources Management, or designee, who will present any recommendations for additional action to the appropriate district or subdistrict.

Anyone recording a sighting report which should be analyzed for possible management action should immediately contact the appropriate Subdistrict Office.

- 1) Designated staff, District and Subdistrict offices and Information Centers will receive a list of sightings.
- 2) A summary list of sightings, incidents and management actions by drainage or area, that are within the capabilities of the current computer monitoring program, are available upon request.

The objectives of this reporting and information system are:

- 1) To provide the Staff and field personnel with pertinent information for use in making logical decisions regarding bear/people management.
- 2) To provide accurate information for alerting field personnel to potentially hazardous bears and/or bear situations.
- 3) To provide base information for Resources Management and Research Programs.

### **3.2 Bear Awareness Orientation and Information Distribution**

Training and the distribution of information are the responsibilities of the Superintendent, delegated to the Chief, Division of Resources Management.

An annual Bear Management Orientation and Awareness training program agenda (see Appendix C) will be developed by a Wildlife Management Committee (designated by the Chief, Division of Science and Resources Management and Chief, Division of Visitor Services) and approved by the above Division Chiefs.

Informational subject material and educational programs will be reviewed, monitored and evaluated by the appropriate permanent supervisor. All seasonal personnel should consult with their permanent supervisor, prior to presenting public programs.

A Case Incident Report will be submitted after each training or program session, other than scheduled interpretive programs, which describes the training or program presented and lists the names of NPS or Concession employees who attended. If it is a public presentation, state the number of people attending. All new permanent and seasonal Park employees and concessionaire employees will receive a bear safety packet upon reporting for duty. The packet will contain a minimum of the "Waterton/Glacier Guide" and the "Enjoy Them at a Distance" sheet.

### **3.3 Bear Management and Handling Training Criteria**

Additional specialized training (beyond Orientation and Awareness) is required for management action decisions. Bear management actions such as posting, closing, patrols of closed areas, incident investigations, etc. will be under the direction and supervision of designated personnel who have successfully completed training criteria described in Appendix C.

The Superintendent will provide a written certification for designated personnel who have successfully completed established training and qualifications standards. Certification may be suspended or revoked at any time for reasons which include, but are not limited to: failure to meet required training and experience criteria, willfully participating in unsafe conduct, and actions which are determined to be negligent. The duration and remedy for suspension or revocation situations will be at the discretion and consensus of the direct supervisor, District Ranger, Division of Science and Resources Management Chief, Division of Visitor Services Chief, and Superintendent.

An annual training agenda will be developed by the Wildlife Management Committee and approved by the Chiefs, Division of Science and Resources Management and Division of Visitor Services.

## **4.0 INFORMING VISITORS**

Bears will be interpreted as free-ranging wild animals, a part of the naturally functioning ecosystem of Glacier National Park. All information on bears will emphasize that the potential for having a dangerous interaction with a bear can be minimized, but not eliminated, by controlling the nature and the degree of human activity. Through Park literature and other means of communication the Park user will be clearly informed that the potential for injury or death from bears does exist.

There are opportunities for interpretation, both prior to the visitors' arrival in the Park and during their stay.

Park Service employees will not address bears by pet "nicknames."

Bear pepper spray inquiries may be addressed by providing the visitor with the Bear Pepper Spray Handout, or referring to Appendix I of this document.

### **4.1 Before Visitors Arrive in the Park**

The Waterton-Glacier Guide, which contains information concerning bears, will be included in responses to all mail inquiries regarding visiting Glacier National Park.

Bulletin boards with appropriate bear information and warning signs should be in place as early as spring opening allows and should be kept in place as late into the fall as necessary.

Park management will review all news releases concerning bear management and safety in Glacier. Interpretive programs will be available to visitors, area schools and organizations on a continuing basis throughout the year. Presentation of the film Bears and Man, which describes grizzly bears in their wilderness habitat will be provided upon request.

The Glacier Natural History Association has a folder entitled About Bears, which is sold for \$1.00. This folder combines biological, habitat, and safety information on bears into one color publication. It is available at all visitor information facilities and for mail order sales. It may be donated when it serves Park interests at meetings and in correspondence.

### **4.2 Before Concession Employees Arrive in the Park**

Concession employees (Glacier Park Inc., Glacier Park Boat Company, Mule Shoe Outfitters, Glacier Park Guides) will be provided general information on bears and living and working in bear country, when possible, prior to their arrival in the Park. General Orientation Sessions targeted at concession employees containing information on bears and bear behavior will be presented early in each season at various locations throughout the Park. *Glacier Park Inc. will experiment with and evaluate the effectiveness of requiring employees to view the eight minute backcountry video as they check in at Glacier Park Lodge.*

### **4.3 Visitors Entering and Traveling Through the Park**

A printed alert (“Enjoy Them At A Distance”) will be provided at all staffed Park entrance stations to caution first-time visitors in bear country, along with the Waterton/Glacier folder and/or the Waterton-Glacier Guide, both of which contain information concerning bears. The bear alert handout unequivocally warns against feeding bears, leaving food out where it might attract bears and approaching bears seen near roads or on trails. Care will be taken to assure that bus passengers, Golden Eagle and Golden Age Passport holders are given the bear alert. The bear alert handout will also be available at entrance stations when not staffed.

The Park’s sign coordinator will assure that a sign, which informs visitors that bears inhabit Glacier and can be dangerous, is posted at each of the Park’s six entrance stations, at the Cut Bank Entrance, at both Park entrances on the Chief Mountain Road and at the entrance to each auto campground in the Park. Subdistrict Rangers will assure that bulletin boards containing warnings and current information on bear safety are located near all restrooms in large auto campgrounds, and near the fee collection box in smaller auto campgrounds.

At or in the immediate vicinity of each trailhead, a sign will be prominently located by Ranger personnel warning hikers that they are entering bear habitat and listing measures to minimize the risks of traveling and camping in bear country.

The Wilderness Manager will assure that posts are in place for these signs. Ranger personnel will check frequently that signs are maintained after installation. Standard signing should be in place as early as spring opening allows and should be kept in place as late into the fall as necessary.

### **4.4 Scheduled Interpretive Programs and Walks**

All public programs will include the following specific comments on bear safety:

- 1) Interpreters will emphasize the importance of proper food storage, that feeding bears is prohibited and that regulations are strictly enforced, both for visitor safety and to protect the wild character of the bears. They will point out there are inherent dangers in traveling and camping in bear habitat. Camping and hiking practices, which contribute to safety in bear country, will be described emphasizing the strong recommendation that visitors not hike alone.
- 2) Interpreters at public programs will explain the closure system (see sections 6.0 and 7.0).
- 3) All guided walks will include at the beginning some introductory comments to the effect that bears COULD be seen and that, if one is spotted, all visitors should remain motionless and silent and await the interpreter’s instructions. If a bear is encountered on a guided hike the interpreter will take action to insure visitor safety and notify appropriate subdistrict or district rangers.

If a management action is required, the interpreter will remain at the trailhead or safe location along the trail, until relieved, to provide warnings and information to other hikers. If circumstances suggest that the trail may be closed, assign one visitor to report to the nearest

ranger station, and to remain at the trailhead until designated bear management or subdistrict ranger personnel arrive to take whatever action is necessary.

If a grizzly is near the Logan Pass Visitor Center, wooden walkway, or parking area, the Communications Center will be notified and bear management assistance requested. A Logan Pass interpreter will monitor and interpret the situation for visitors. Consideration should be given to providing right-of-way for the bear. If the bear approaches the visitor center, it may be closed and appropriate protection personnel notified. An interpreter may remain with any visitors outside the closed area, and keep them informed. The continued presence of grizzly bears in the open meadows adjacent to the wooden walkway may result in its closure.

#### **4.5 Backcountry Information**

Refer to the “Backcountry Permit Writing Guidelines” and “Backcountry and Wilderness Maintenance Standards” (Appendices C and E of the Backcountry Management Plan), found in the Backcountry Ranger Handbook.

### **5.0 PREVENTIVE MANAGEMENT ACTION**

#### **Preventing Bears From Using Developed Areas and Artificial Food Sources**

##### **1) Enforcement and Regulations**

**Regulations which prohibit feeding of bears will be strictly enforced by protection personnel.** Park employees will promptly report any violation of these regulations.

Marked and unmarked patrols and strict enforcement programs will be utilized by protection personnel to reduce bear feeding, illegal camping, entering closed areas, unsanitary conditions, and other infractions, which lead to bear/human encounters.

Title 36, Code of Federal Regulations, Paragraph 2.10 (d), prohibits anyone from leaving food unattended or stored improperly where it could attract or otherwise be available to wildlife.

#### **5.1 Front Country**

##### **1) Garbage Handling by Residents and Businesses**

The Superintendent will issue a written request to all Park residents, Inholders and Park concessionaires, encouraging proper garbage storage and disposal. See Appendix E.

Landowners and concessionaires in the Park will be responsible for storing garbage so that it is not accessible to bears.

Citations may be issued when sanitation regulations are not followed within the park. The responsibility to comply with appropriate sanitation regulations will be included as an addendum to existing concession contracts and special use permits. The addendum will also be required to renew revocable use permits for Inholders operating businesses within the Park. Should requests for proper regulation compliance fail, appropriate enforcement action will be taken.

## 2) Garbage Removal Schedule

The Chief of Facilities Management will assure that garbage removal is scheduled and performed to keep garbage cans from overflowing in Park housing areas, roadsides and auto campgrounds.

Garbage from campgrounds where bear problems are most probable will be collected late each day. Late garbage pickup is especially important at picnic areas on weekends and holidays. (See Appendix D for garbage pickup schedules.) Maintenance will assure that bear proof garbage cans are available when needed.

## 3) Campground Patrol

Ranger personnel will circulate through auto campgrounds every evening as necessary to assure that food, garbage, cookware, and beverage containers are stored properly and to talk with visitors about bears and camping in bear country. Unsecured and unattended food and food containers which might attract and may provide a food reward for bears or other wildlife will be removed from unattended campsites and properly stored until claimed by the owner. Written notification will be left at the site, informing the owner as to the location of his/her property.

Regulations will be enforced when food, garbage, cookware and beverage containers are not stored properly and warnings or citations may be issued. In general, citations should be issued whenever the property (food, containers, utensils, etc.) would attract and provide a food reward to a bear or other wildlife and where it has been determined that the parties were/are fully aware of the requirements for securely storing attractants. This would include such items as food, coolers with food in them, cooking equipment or utensils with food on them, beverage containers with beverages in them, etc.

All property left abandoned in excess of 24 hours may be impounded.

## 4) Food Storage Lockers

Food storage lockers have been provided in designated campsites at several Frontcountry campgrounds. These are provided for hikers, bicyclists, motorcyclists or other campers without automobiles. Sites with food lockers will be properly signed and patrolled to assure proper storage and use. It is the responsibility of the Subdistrict Ranger to assure adequate signing and proper use of these lockers.

Backpackers and tent campers without vehicle storage space should camp at sites containing food storage lockers or use food hanging devices. Signs at the entrance to the campground, Rangers and Campground Hosts will direct campers to campsites where food storage or food hanging devices are available.

#### 5) Bird Feeders, Pet & Livestock Feed

Bears of both species in this ecosystem have been documented to approach bird feeders, pet food, and livestock feed, and as a result, have become conditioned. Many of these bears have been killed as a result of this behavior caused by human placed attractants. In an effort to comply with the National Park Service mission, the Endangered Species Act, and to set the best possible example, park residents, landowners, and employees, must refrain from having these attractants available within Glacier National Park. **The presence of bird feeders, as well as unsecured pet and livestock feed within the park at housing, concession, and administrative facilities is prohibited and is in direct conflict with the emphasis placed on food security throughout the remainder of the park and adjoining lands.**

#### 6) Areas Adjacent to the Park

Glacier National Park will act as a catalyst to promote sanitary handling of garbage, related to wildlife protection, in areas adjacent to the Park.

### 5.2 Backcountry

#### 1) Backcountry Patrol Cabins

Anyone who uses a backcountry patrol cabin will pack out all garbage. Park personnel will assure that any food, horse feed, or other attractants left in a cabin are stored in such a manner as to make them unavailable to bears and other wildlife.

#### 2) Chalet Garbage

Garbage and other trash will be retained indoors in tight containers, such as plastic bags inside a standard garbage can. Such garbage and trash will be removed on a schedule frequent enough to prevent excessive accumulation and odor. Chalet garbage and trash will not be left unattended at the trailhead, unless it is placed in an approved bear-proof container. During chalet reconstruction, park service crew leaders assigned to backcountry chalet project work will be responsible for appropriate food and garbage management. During concession operations, park concessionaires will be responsible for appropriate food and garbage management at Granite Park and Sperry Chalets

#### 3) Logan Pass

A Ranger trained in bear management will be stationed at Logan Pass, when feasible, throughout the summer to monitor bear and visitor use of the area and to provide expertise in situations involving bear activity. The Ranger will work closely with other NPS personnel in the Logan Pass area to assure implementation of a comprehensive bear management program.

#### 4) Backcountry Campgrounds

If available information indicates a higher probability of bear incidents at a particular backcountry campground, the attributes of the campground will be analyzed to determine if the campground should be moved or closed or if other management actions should be accomplished.

District personnel, the Chief of Science and Resources Management, Wildlife Biologist, Chief of Visitor Services, and the Wilderness Manager will participate in the analysis and appropriate recommendations will be made to the Park Superintendent.

All aspects of backcountry campground management related to bear management and visitor use will be evaluated annually by District personnel, Assistant Chief Ranger, Wildlife Biologist, and the Wilderness Manager. The Wilderness Manager and responsible District Ranger will make recommendations to the Chief, Division of Visitor Services who will be responsible for acting on the recommendations to resolve problems.

Ranger personnel will inspect backcountry trails and campgrounds on a regular basis to contact visitors and to be watchful for garbage and food storage problems, and compliance with the Backcountry Guidelines. Whenever feasible, they will correct the situation at the time of inspection.

Pit toilets, food storage devices, and other backcountry facilities will be maintained as specified in Backcountry Maintenance Standards.

#### 5) Undesignated Backcountry Campsites

Persons camping in “undesignated” areas where no means of hanging food and/or garbage is available will be required to use portable bear-resistant containers. These containers are available free of charge at permit issuing stations, when food storage regulations are in effect.

#### 6) Trail Brushing

Trail brushing may lessen the probability of surprise encounters with bears by improving sight distance along the trail corridor. Trail maintenance planning will identify high priority areas and will assure that brushing is conducted on a regular cyclic basis.

#### 7) Disposal of Fish Entrails

Fishing regulations have been revised, so that entrails may be legally disposed of by puncturing the air bladder and depositing them in deep water in the lake or stream from which they were taken. Fish entrails should be discarded at least 200 feet from the nearest campsite.

This regulation is intended to provide a sanitary and safe method of disposal of entrails in bear habitat instead of burying, burning, depositing on the ground, or packing out.

## **6.0 SPECIAL BEAR MANAGEMENT AREAS**

### **6.1 Granite Park Chalet**

A Ranger trained in bear management will be stationed at Granite Park, when feasible, to monitor the area and contact campers and chalet area visitors as necessary, to assure that food and garbage are stored properly and to discuss bears and hiking and camping in bear country. Rangers and Interpreters assigned to Granite Park duty should refer also to section 4.3.

### **6.2 Apgar Mountains**

The Apgar Mountains, with the exception of the Apgar Lookout Trail, may be closed to human use when grizzly bears congregate in the Apgar Mountains in the late summer.

Large numbers of grizzly bears annually congregate in the Apgar Mountains in late summer and early fall to feed on huckleberries. The density of grizzly bears in the Apgars has been estimated at 0.54 to 1.7 bears per square kilometer (Martinka 1976, Kendall 1983). Minimum counts of unduplicated sightings of grizzly bears in the Apgars in various years have ranged between 20 and 31 bears (Kendall 1983).

The Apgar Mountains thus constitute important seasonal habitat for a significant portion of the Park's grizzly bear population. Closure to human use during the period of grizzly bear concentration will prevent disturbance of the bears during a time of weight gain critical to winter survival.

## **7.0 PREPARATION FOR MANAGEMENT ACTIONS**

### **7.1 Hazing and Aversive Conditioning**

Hazing and aversive conditioning techniques are used to correct inappropriate behavior of bears. Early intervention may prevent bears from becoming conditioned or overly familiar with people, thus minimizing the need for relocation or removal, minimizing the risk of accidental or illegal mortality, and minimizing the risk of human injury. Inappropriate behavior of bears includes those behaviors that warrant management action. Most hazing and aversive conditioning will occur in frontcountry and developed areas, but may occasionally be appropriate in backcountry areas. Hazing and aversive conditioning actions may be considered successful when the undesirable behavior ceases and the bear is unharmed.

Hazing of Grizzly bears will be permitted only by letter of authorization, issued by the U.S. Fish and Wildlife Service (see Appendix B). The Wildlife Biologist is responsible for submitting a timely request for authorization to haze and/or handle Grizzly bears.

Techniques approved for use on black and grizzly bears include the siren or horn, cracker shells, capsicum spray, trained bear dogs, rubber bullets, or other "thumper" devices. Such techniques may be used by personnel currently certified at Level II or higher (see Appendix C) for hazing habituated roadside bears. All hazing actions will be documented. A case incident report will be done for those instances where it appears likely that further actions with the specific animal are likely. In cases that do not meet these criteria, the action will be noted on the BIMS form.

In the backcountry, these techniques may be used only on a case-by-case basis with the approval of the subdistrict ranger and concurrence of the Wildlife Biologist. The rationale for this is based

on National Park Service policy, which requires Glacier to manage the backcountry (which is proposed for inclusion in the National Wilderness Preservation System) in accordance with the Wilderness Act, so as to not impair its wilderness characteristics until such time as Congress acts. This requires us to protect and manage these areas to preserve the natural conditions and so that they generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable. Routine use of hazing techniques could compromise these objectives, therefore all backcountry management actions must be carefully scrutinized.

For all hazing or aversive conditioning actions:

- 1) Visitors present will be informed of the action to be taken and why (preservation of the bear).
- 2) All bears to be aversively conditioned should be readily identifiable or marked with paint or dye, so effectiveness can be analyzed.
- 3) Documentation of conditions and results is completed on a Case Incident Report after each use of any technique, when it appears likely that further actions with the specific animal are likely.
- 4) All other use is documented on the Bear Sighting Report (BIMS).

Additionally, cracker shells or rubber bullets, or other projectiles may be used only if the following conditions are met:

- 1) Visitors will be moved to safe locations, preferably inside their vehicles or a building, prior to the discharge of any projectile. Efforts will be made to clear the area of visitors prior to the use of cracker shells or rubber bullets.
- 2) No flammable material is near the target areas.

As new or additional information becomes available regarding aversive conditioning, additional hazing or aversive conditioning techniques may be used with the approval of the Wildlife Biologist.

## **7.2 Readiness for Trail Closure**

All patrol and interpretive vehicles will carry signs for posting and closing trails and campgrounds, and barriers (chain, rope, or other barricades) for trail closures. Rangers and Interpreters on backcountry duty will carry signs and equipment for posting and closing backcountry trails and campgrounds. All signs will be posted in accordance with the Backcountry Wilderness Maintenance Standards, which contain a summary of bear management signs (see Appendix E of the Backcountry Management Plan).

## **7.3 Firearms, Immobilization and Capture Equipment**

All persons using capture equipment, firearms, and drugs in bear management or other wildlife management activities will be properly trained and qualified. Bear management personnel will not patrol an area that has been CLOSED due to a bear management action without a Park radio

and an authorized bear management weapon.

NPS-44, Chapter 9, Management of Firearms and Ammunition, Section 3, provides standards and qualification requirements for the use of firearms in resource management areas. The policy of Glacier National Park is as follows:

The primary purpose for the issuance of a weapon to resource management personnel is for the protection of the visitor in case of animal attack, or for the disposal of animals. Secondly, the weapon is available for personal protection in case of an animal attack during management actions, or the patrolling of areas closed due to bear problems. Thirdly, firearms may be carried off-duty by designated and trained resource management personnel, when authorized by the Superintendent, and specifically directed in writing by the Chief of Visitor Services or the Chief of Sciences and Resource Management. It is to be understood that the carrying of a weapon off-duty is for wildlife management purposes only, and firearms will not be issued to any person solely for the purpose of self-protection.

Inventories of all immobilization and capture equipment will be maintained in the Subdistricts, and records will be kept up-to-date on all drugs received and used. The Wildlife Biologist has Park-wide responsibility for drug use in bear immobilization and will be provided with use records as drugs are used.

The Science and Resources Management Division will be responsible for the proper disposal of all pharmacological agents used in bear and other wildlife management to prevent usage of those that have expired. An inventory of all wildlife management drugs on hand in each district will be reported to the Wildlife Biologist by December of each year to assure a full and current accounting. All empty drug bottles will be accounted for on forms provided at the time the bottles are issued. All drugs expected to expire before the next season will be turned into the Wildlife Biologist by December of each year. The Park Wildlife Biologist is responsible for submitting the DEA drug permit request each year.

All used syringes and disposable darts will be disposed of according to established protocol for Bio-Hazards. A Case Incident Report, bear handling form, and mortality log (as necessary) must be prepared following every bear management action.

#### **7.4 Preparation for Relocating or Removing Bears**

The Chief, Division of Science and Resources Management will evaluate the possibility of relocating grizzly bears from the Park to areas outside the Park, or from outside the Park into the Park, in consultation with cooperating agencies, the USFWS Grizzly Bear Recovery Coordinator, and in accordance with Interagency Grizzly Bear Guidelines. All management actions resulting in capture, movement, and/or death of a grizzly bear, or grizzly bear attacks resulting in human injury will be reported to the U. S. Fish and Wildlife Service, Grizzly Bear Recovery Coordinator (Chris Servheen) at 406-243-4903 or 406-240-6506. Note: **All grizzly bears moved in the Northern Continental Divide Ecosystem must be radio instrumented.**

Regional relocations will generally be preferred to enhance population levels in the greater ecosystem. While in captivity, relocation candidates will be isolated from human activity, will be kept in a cool, shaded area, given water, but not food, and held for less than 24 hours, if

possible.

Decisions to relocate individual bears will be based on a behavioral analysis using two categories: habituated, and conditioned. These definitions can be found in the Definitions.

Bears that are classified as HABITUATED may be released on site with behavior modification, or relocated within the Park (including bears captured outside of the Park) if a suitable release site, free of circumstances similar to the capture site, is available. HABITUATED bears may be relocated to other ecosystems or the Northern Continental Divide ecosystem outside of Glacier to enhance threatened populations. Habituated bears that cannot be placed will be treated as CONDITIONED bears. Bears of both species that are classified as CONDITIONED will be relocated outside the Park by cooperating agencies, placed in zoos or destroyed if behavioral modification has been attempted, failed, or is not practical.

Subdistrict Rangers will inform their District Ranger of any bear capture. The Chief, Division of Science and Resources Management, will also be notified of any grizzly bear captured. If the bear is to be relocated within the Park, a release site location will be determined by consensus of the District Ranger(s) of the affected area and the Chiefs of the Division of Science and Resources Management and the Division of Visitor Services. All Divisions will be notified of releases for employee and visitor safety. Radio discussions about release sites should not occur, except in emergency situations.

Prior to release of a bear in the backcountry, subdistrict rangers will check with the Communications Center for permits issued for the area in which the bear is proposed to be relocated. If the area is clear of permits and the site is selected for release, the backcountry office will enter an advisory in the computer for no less than 48 hours after the bear is released.

Relocation site selection will be on a case-by-case basis, and may include releases on-site or relocations as far as possible from the point of origin. Remote release sites will, generally, be free of human developments or activity, and some sites may require the use of a helicopter in the relocation process.

Established procedures involving helicopter use and landings will be coordinated by the Park Aviation Manager with approval by the Assistant Superintendent.

## **7.5 Bears Destroyed**

Except in emergency situations involving life safety concerns, the incident area will be closed and cleared of visitors before removal of the bear.

Removal of grizzly bears is governed by 50 CFR 17.40 and the Interagency Grizzly Bear Committee Guidelines. Except in emergencies involving life safety concerns, the USFWS, Grizzly Bear Recovery Coordinator should be consulted prior to removal. Carcasses of all grizzly bears killed should be sent to the Montana Department of Fish, Wildlife and Parks laboratory in Bozeman, Montana for analysis, per Interagency Grizzly Bear Guidelines. Waterproof tags should be attached to any bear carcass removed from the park with the following information:

- Date of Death or Date Found:                      -Location: Description and UTM's
- Collector and phone number:                      -Cause of Death (if known):
- What information is requested from the lab? (X-rays, corpora lutea, cause of death, time of death, etc.)
- What parts, if any, does the park want returned? (Hide, skull, etc.)

The use of carcasses or bear parts by Glacier National Park for study collection, interpretive programs, exhibits, or research must receive written approval from the Chief, Division of Science and Resources Management prior to removal of the hide, internal organs, or bone matter.

### **7.6 Bear Mortalities Found**

If a bear is found dead, the immediate area should be treated as a crime scene, and not be disturbed until personnel qualified in wildlife law enforcement have completed a crime scene investigation and the Wildlife Biologist has been notified. If the dead bear is a grizzly, the Wildlife Biologist will make a full report to the USFWS, Grizzly Bear Recovery Coordinator.

Bear carcasses resulting from naturally occurring mortalities will be treated as carrion. Items to be collected (if feasible) are hair and DNA samples, a premolar tooth (if black bear), and skull (if grizzly bear). The discovery and collection will be documented on a Case Incident Record, and samples turned over to the Wildlife Biologist for disposition. Contact should be made with the Wildlife Biologist to determine if other parts should be collected. If the carcass is perceived to be vulnerable to theft or likely discovery, consult with the appropriate Subdistrict Ranger concerning disposition of the carcass.

### **7.7 Research Capturing**

Bears may be trapped and radio instrumented for research purposes, after a thorough review of alternative methods to achieve research objectives. All research applicants will comply with Glacier National Park and USFWS permit procedures. Note: **All grizzly bears moved in the Northern Continental Divide Ecosystem must be radio-instrumented.** The Wildlife Biologist will insure that the USFWS and other appropriate agencies are notified when grizzly bears are radio-collared to facilitate cooperative monitoring.

## **8.0 MANAGEMENT ACTIONS**

Management actions are defined as any action taken by management due to bear activity, that directly affects the bear and/or the public. This includes, but is not limited to, trail postings, trail closures, campground closures, bear relocations, and bear removals.

The park superintendent is ultimately responsible for all bear management actions within Glacier National Park, and has delegated many operational decisions and responsibility to the

Subdistrict rangers, with some exceptions (see 8.1-3). Level II and III trained personnel should consult with the Subdistrict ranger prior to implementing other than emergency actions.

## **8.1 Considerations for Implementing Management Actions**

- 1) A “Wildlife Management Action” form (see Appendix H) will be completed for situations where immediate actions by field personnel are not critical for protection of life and/or property. File the completed original copy of the Wildlife Management Action form with the original Case Incident Report.
- 2) A conditioned bear may be removed from the Park by relocation, or being destroyed, if behavioral modification (aversive conditioning) has been attempted or failed, or if modification actions are not practical.
- 3) A habituated bear may be released on site with behavioral modification, relocated within the Park, if closing the area is not feasible or successful, and the bear has not become overly familiar with people.
- 4) Exceptions to # 2 and # 3 may be made for habituated or conditioned bears which display defensive behavior resulting from overt or illegal human actions.
- 5) Bears with no known record of problems, which are inadvertently captured during a trapping operation, may be released on-site or relocated in the Park and will not be tagged.
- 6) Hazing may be conducted by Level II or higher Bear Management trained personnel (see Appendix C) in accordance with Section 7.1.
- 7) All management actions will be documented on a Case Incident Report.

It will be the responsibility of the District Rangers to assure standardized implementation of the above guidelines by presentation of a single, specific action chart (Appendix G) for Park-wide use by field personnel.

## **8.2 Individuals Responsible for Decisions**

Decisions to take management actions (including destroying a bear) listed in the Guidelines (section 8.1), except in the following four cases, will be made by personnel specifically trained in bear management, who will report actions as soon as possible to the responsible Subdistrict Ranger and the Communications Center.

In all situations not critical to life or property, management decisions should be documented on a “Wildlife Management Action Form” (see Appendix H).

The following decisions will be made only by the Superintendent or Assistant Superintendent based upon recommendations from Staff and District personnel:

- 1) The decision to kill a bear in situations where immediate action by field personnel is not critical for life safety. Examples: Bear meets criteria for removal, but has already been captured or its location is not known.
- 2) The decision to allow LIMITED camping, i.e., hard-sided campers only, or to CLOSE an

auto campground, except in emergencies. In this case, emergency is defined as significant aggressive behavior, property damage, personal injury, or fatality. In emergencies, the decision to temporarily close an auto campground rests with the Subdistrict Ranger.

3) The decision to use a helicopter to move a trap or a bear. (Helicopter policy in Glacier National Park requires the approval of the Aviation Manager and Assistant Superintendent for any touchdowns in the Park.)

4) The decision to accept bears trapped by another agency outside Glacier National Park. Park wildlife staff will provide recommendations through the Chief, Division of Science and Resources Management on a case by case basis, taking into consideration the behavior that caused the animal to be trapped, conformity to behavioral definitions of this guideline, release location, and likelihood of success.

In all management actions which require follow-up (postings, investigations, closures), the individual responsible for the initial decision will also be responsible for follow-up actions.

The individual who makes a decision to close any area will inform the District Ranger and the Communications Center as soon as possible. The Communications Center will notify the Chiefs, Division of Science and Resources Management and Division of Visitor Services, and Information Centers throughout the Park..

### **8.3 Responsibilities for Management Actions**

#### **1) Posting of Bear Warning Signs on a Trail**

The Subdistrict Ranger will be responsible for posting “Bear Frequenting Area” signs on both ends of a trail segment(s) when it requires a posting. If bear(s) or bear evidence is not observed during two consecutive (but not in the same day) routine patrols, signs will be removed and the communications center notified. A trail should be posted if a bear is observed frequenting the area.

#### **2) Investigations**

The Subdistrict Ranger will be responsible for obtaining details on the incident or sightings and, if necessary, close and check the trail and pertinent area thoroughly. Upon completion of such investigations, the Subdistrict Ranger will determine whether to keep the area closed or open it. The Chief, Division of Science and Resources Management and/or designated investigation team are available to assist as required. Short term investigative closures may be implemented to substantiate reports, allow bear movement across a trail, or through a well defined area. If upon investigation the report is unsubstantiated or it is determined animal has moved out of the area, the area may be reopened and not require multiple patrols.

#### **3) Limiting Access to a Campground**

After a decision by the Superintendent to limit camping, implementation will be the responsibility of the Subdistrict Ranger. Use will be limited to hard-sided camping units. Some camper vehicles, such as the VW buses and similar units, have a small canvas-sided pop-up-top.

These types of vehicles will be allowed in campgrounds with the hard-sided restriction, as long as they are not popped up during the night.

It will be necessary for campground personnel to make an effort to notify the owners of this particular type of vehicle of the fact that their top must be down during the night hours.

There are certain types of trailer campers with tops that rise; however, all sides, and in fact, the entire external surface of these units are hard-sided. They usually utilize fiber glass panels which slide into place as the unit is cranked up. This type of trailer camper is hard-sided, and will be allowed in campgrounds designated for hard-sided camping.

#### 4) Closure

The Subdistrict Ranger will be responsible for placing and installing closure signs and physical barriers at trailheads and junctions leading to a closed area. A trail or backcountry campground should be closed if a bear is observed remaining in close proximity to the campground or trail, feeding naturally, and/or displaying neutral or aggressive behavior, or if carrion is discovered in a campground or along a trail which may attract bears and pose a risk. In general, areas more than ¼ mile off trail would not be subject to closure, unless safety is a significant issue. Backcountry campgrounds near the closed area may also be closed at the discretion of the Subdistrict Ranger. Ranger personnel should check daily to assure that trailhead closure signs are in place.

Short term investigative closures may be implemented to substantiate reports, allow bear movement across a trail, or through a well defined area. If upon investigation the report is unsubstantiated or it is determined that the animal has moved out of the area, the area may be reopened and not require multiple patrols.

Nighttime closures may be implemented as a preventive measure in high visitor use/high bear use areas. The closure may be removed in the morning after the area has been patrolled.

Ranger escorts of visitors through a closed area should be limited to the initial evacuation of the incident area. Once the area is closed and cleared of visitors, no subsequent visitor escorts through the closed area are permitted, except in enforcement situations.

Bear management personnel will not patrol an area that has been CLOSED due to a bear management action without a Park radio and an authorized bear management weapon.

Bear Management trained personnel will patrol the closed area daily, if feasible, in heavy-use areas such as Grinnell Glacier, upper Two Medicine or Avalanche Trails, (but not less than two patrols in a five-day period); and every two days, if feasible, in light-use areas such as Poia, Otokomi, Cobalt or Quartz Trails (but not less than two patrols in a ten day period). If the bear(s) is not encountered or observed, and if there is no physical evidence of the bear(s) after two consecutive patrols, the trail and/or campground may be reopened. The area may also be reopened if the bear(s) is observed leaving the area or if the same bear(s) is observed in another area.

Observations, findings, and evidence must be documented on a Supplemental Case Incident Report, (10-344). If a different bear is encountered during the patrol of a closed area, that sighting should be treated as a new situation.

If information suggests that the frequenting or closure condition no longer exists for a posted area, the special condition postings should be removed. Standard bear warnings and information signs will remain in place.

Postings and closures may be removed effective 11/20 each winter consistent with food storage and undesignated camping regulations. Postings or closures may be left in effect after this date at the discretion of the Subdistrict Ranger, if specific conditions warrant.

Under certain circumstances, and with the prior approval of the Subdistrict Ranger, park employees and other appropriate wildlife professionals on official business may accompany a Level III Bear Management trained personnel into a closed area.

In addition, park employees may be authorized, in writing by the responsible Subdistrict Ranger, to enter areas which are closed due to high seasonal bear densities (such as the fall Apgar Mountain concentration) or where bears are remaining in an area feeding naturally and/or displaying neutral behavior without the company of a Level II or higher Bear Management employee. The Park radio should be visible upon entering the closed area.

#### 5) Relocating or Removing a Bear

Only trained and necessary bear management personnel will be present in the immediate vicinity of the operation during capture and handling actions (also see section 8.5).

“Removal” means to relocate the bear to an area outside the Park or destroy it. The preferred option will be to capture and relocate bears to an area outside Glacier National Park in which case the accepting agency must be fully informed of the reasons requiring the bear’s removal.

“Relocation” means to move the bear to another area within the Park. Habituated bears may be relocated or released on site with behavior modification; however, a bear will be relocated, or released on site, more than once only if a thorough review of the bear’s history by the Chief, Division of Science and Resources Management (or designee) indicates a high probability of a successful relocation and/or other extenuating circumstances. Bear release sites will be determined on a case-by-case basis with concurrence of the Wildlife Biologist, Subdistrict and District Rangers of affected areas.

When practical, one Ranger will stay with an immobilized bear during a relocation within the Park, to monitor the bear’s condition. Bears removed to outside the Park may be tagged with Park ear tags, if other tags are not available. The ear tagging of all bears will be done according to established guidelines, which allow identification by placement and color of ear tags.

Bears inadvertently captured may be released on site. Eartags, tattoos, micro-chips, or radio collars will not be placed on bears inadvertently captured.

All grizzly bears moved within the Northern Continental Divide Ecosystem will be radio-instrumented. All bears moved should have a microchip implanted, or be lip tattooed.

If chemical immobilization is necessary and the situation is not an inadvertent capture, a microchip should be placed (if available), and a bear handling form completed. The completed form should be sent to the office of the Wildlife Biologist.

A conditioned bear may be removed from the Park, by relocation or being destroyed, if

behavioral modification (aversive conditioning) has been attempted or failed, or if modification actions are not practical.

A decision to destroy a bear (see section 8.2) may be made if it meets the criteria for removal (see section 7.4) and one of the following conditions exists:

- a. A life-threatening emergency.
- b. Capture measures are not feasible, or are unlikely to promptly remove a problem bear.
- c. Capture measures have been unsuccessful.
- d. A relocation site within the Park is not available.
- e. Relocation alternatives outside the Park do not exist.

Records of all bears that have previously been tagged in the Park are available through the office of the Chief, Division of Science and Resources Management.

#### **8.4 Carrion**

Naturally occurring carrion in the backcountry (see definition section) shall be left undisturbed and in place until such time that it no longer represents a potential food source or attractant to a bear.

The rationale for this policy is based on our objective to retain the primitive character of Glacier's backcountry, which is managed so as to preserve its natural conditions, and which generally appears to have been affected primarily by the forces of nature. Exceptions to this policy include:

- \*carrion that poses a threat to a management action or emergency operation
- \*dead animals that are so small or decomposed that they do not represent a realistic attractant for a bear
- \*carrion that is verified to be associated with a wildlife crime, other human induced mortality, or domestic livestock
- \*situations involving lengthy closures of popular destination day use areas (as per Chief Ranger direction)

Explosives may be utilized to eliminate carrion when one of the situations listed above occurs, and other methods are not practical.

Naturally occurring carrion in developed frontcountry areas should be removed to a remote site.

#### **8.5 Photography of Bear Management Operations**

1) Any photography, still or video, of bear management operations, if done by other than NPS employees must have the approval of the Chief, Division of Science and Resources Management. Any photography, still or video, of bear management operations must be done under safe conditions. The person in charge of the operation has the authority to establish a safe zone and exclude all personnel not directly involved with the handling operations.

2) Photographs taken are the property of the USNPS (including negatives) and should not be released to public media without the concurrence of the Chief, Division of Science and Resources Management, and the Public Affairs Officer.

- 3) All personnel involved in bear management operations should have, as a minimum, basic briefing in bear management procedures and appropriate safety measures. This is especially critical with respect to photographers, pilots or others not directly involved in actually handling the bear.
- 4) Video tapes and still photographs of management actions can serve as a valuable training and public education tool but their value must be weighed against the safety and control concerns enumerated above.

## **9.0 FOLLOW-UP AND EVALUATION**

### **9.1 Reporting Management Actions**

Every bear management action will be fully documented as to methods used and effects on the bear; the following documentation will be completed: BIMS report (see Appendix A), Wildlife Management Action Form, Bear Handling Form, and a Case Incident Report. The investigating Ranger will use the GNP Bear Incident Interview Questionnaire (found in the Bear Management Field Operations Manual) for personal injury incidents.

The destruction of any grizzly bear will be reported immediately by the Chief, Division of Science and Resources Management to:

- a. U. S. Fish and Wildlife Service, Chris Servheen,  
406-243-4903 or (cell) 406-240-5606 (as of 2/15/99).
- b. Montana Department of Fish, Wildlife and Parks, Glenn  
Erickson, 406-444-2612 (as of 2/15/99).

All management actions resulting in capture and relocation of a grizzly bear will be coordinated per "Guidelines for Determining Grizzly Bear Problem Status and for Control Actions in the Northern Continental Divide Ecosystem" (under revision). Any injury or death as a result of a bear attack will be reported to the U. S. Fish and Wildlife Service, Chris Servheen, 406-243-4903 or 406-240-6506, and the Intermountain Region Office.

### **9.2 Evaluation of Bear Management Actions**

Every bear-caused injury and every bear handling, relocation or mortality will be evaluated by incident participants and others designated by the Chiefs, Division of Science and Resources Management and Division of Visitor Services for follow-up management action or for improving management strategies and tactics. Every bear-caused human fatality will be reviewed by a formal "Board of Inquiry" which should include the Wildlife Biologist, at least one ranger familiar with Park bear management activities, and individuals from other cooperating agencies as appropriate. The investigation team will produce a report detailing the events surrounding the fatality and the resulting management actions.

### **9.3 Evaluation and Revision of Plan and Guidelines**

The Wildlife Biologist and the Wildlife Management Committee (designated by the Chiefs, Division of Science and Resources Management and Division of Visitor Services) will be responsible for preparing and submitting annual summary reports and updating the Bear Management Plan and Guidelines.

Biennial review of the Bear Management Plan and Guidelines will consist of a request for written comments from employees regarding the Park's bear management program. Other agencies will be sent copies of the Bear Management Plan and Guidelines, after each major revision for their evaluation and comments. This input will be discussed by management personnel in scheduled evaluation meetings and the results incorporated into the Bear Management Plan or Guidelines.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
Glacier National Park  
West Glacier, Montana 59936

**BEAR MANAGEMENT PLAN**

**Glacier National Park**

(Reviewed April 2004)

Recommended by: \_\_\_\_\_ Date

Stephen J. Frye,  
Chief, Division of Visitor Services

\_\_\_\_\_ Date

Leo F. Marnell  
Chief, Division of Science and Resources

Approved by: \_\_\_\_\_ Date

Mick Holm  
Superintendent, Glacier National Park

## **INTRODUCTION:**

Glacier National Park was established on May 11, 1910, protecting 4,100 square kilometers (1,013,594 acres) of wilderness in the northern Rocky Mountains, an area of glaciated peaks, glaciers, knife-edge ridges, forests, lakes and meadows. Bear species in the Park include both black bear (Ursus americanus) and grizzly bear (Ursus arctos), the latter is a threatened species protected by the Endangered Species Act of 1973.

Visitor use in Glacier has increased from about 4,000 in 1910 to near 2.0 million annually. Most visitation occurs during the summer when bears are most active. Increasing use of the Park exerts an increasing pressure on bears for space and solitude.

In addition, current and proposed activities adjacent to Park boundaries, such as sub-divisions, logging, and oil and gas exploration and development, continue to reduce regional habitat and place increased pressure on bears as they range in and out of the Park.

The staff of Glacier National Park is responsible for protecting and perpetuating the naturally functioning ecosystems in the Park, including bears and their habitat, and for providing visitors the opportunity to enjoy the natural setting. In addition to this Bear Management Plan, Bear Management Guidelines assign responsibility and list guidelines for the prevention and management of human/bear encounters in Glacier. The Chief, Division of Resources Management is responsible for both documents.

Glacier comprises approximately 20% of the Northern Continental Divide Grizzly Bear Ecosystem (NCDGBE), and supports the goals of the Grizzly Recovery Plan. Glacier National Park bears may be used to augment or restock populations in the NCDGBE or other ecosystems, if the Park's naturally functioning ecosystem would not be significantly damaged.

This Plan incorporates comments received from "Formal Consultation" with the U. S. Fish and Wildlife Service, under Section 7 of the Endangered Species Act. Any exception to this Plan must be approved by the Superintendent.

## **GOALS**

**1. To provide for the long-term survivability of the grizzly bear in Glacier National Park and the Northern Continental Divide Grizzly Bear Ecosystem.** This Plan conforms to the regulations and guidelines set forth in the Endangered Species Act, as they pertain to the threatened grizzly bear.

**2. To fulfill the mandate of Congress, as expressed in the Organic Act of 1916.** The act states that the Park will: "...conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

The Park will strive to protect and maintain the natural habitat and status of grizzly and black bears, and maximize the security and safety of the Park visitor, while recognizing the inherent dangers of a natural wilderness, such as Glacier National Park. When bears consistently occupy a specific backcountry area for natural food or some other reason, visitors may be temporarily excluded. In developed areas efforts will be made through management, education, and law enforcement to minimize or eliminate unnatural bear attractants. If, despite these efforts, a bear's behavior indicates habituation to an artificial environment, such as a developed area, hazing, aversive conditioning, or relocation techniques may be used. If there is a continuing safety hazard related to bears in any area of the Park, the area will be closed to visitor use until the hazard is resolved.

**3. To minimize the number of incidents involving bear/human confrontations.** Grizzly bears and black bears are part of the native post glacial fauna of Glacier National Park. Both species have demonstrated an exceptional ability to successfully inhabit the Park environment. At the same time, bear nutritional requirements, inherent behavior, and learning capacity, combined with human-use patterns and behavior, have led to competition for space and conflict with Park visitors. An active management program is therefore required to assure conservation of bears and to enhance the safety of Park visitors.

Glacier's bear management policy is to maintain natural population dynamics and, to the extent possible promote natural behavior in the presence of humans. (It is recognized that shyness may be a desirable, but not a completely natural behavior resulting from selective pressures during the past century against certain traits considered undesirable by humans.)

Glacier's bear management policy is implemented using individual bear behavior as the basis for management decisions. Natural defensive behavior, including the protection of young and natural foods, will usually result in a management response directed at controlling human activity. Behaviors considered undesirable, including unprovoked, overt aggression and human predation, will result in a management response directed toward bear removal. Bear behavior that reflects habituation to developed areas and/or humans will result in management actions directed toward discouraging the behavior, such as; hazing, aversive conditioning or relocation of the bear. Opportunity for bear/human confrontation will be further minimized through other forms of Park-wide human-use management.

The Bear Management Plan is developed from a base of scientific information collected in the Park or extrapolated from studies in other areas. Park policy recognizes the unique contribution that a relatively undisturbed bear population makes to the regional ecosystem. Field studies will, therefore, minimize invasive research techniques, such as trapping, handling, marking, collaring, and aircraft operations which disturb natural behavioral processes.

#### **OBJECTIVES**

- 1. Provide specific training opportunities about bear biology and management to all persons employed in the Park.** Bear management training will be conducted annually for Park staff and additional specific training will be provided to employees involved in bear management. Park staff also receives periodic training through opportunities provided by a variety of sources outside the Park which meet minimum animal handling requirements outlined in NPS 77, Natural Resources Management Guidelines and Glacier's Bear Management Guidelines.
- 2. Inform visitors and potential visitors of the presence of bears and the inherent dangers of visiting bear country.** Inform visitors how best to minimize risk and enjoy a quality experience. Education of park visitors is recognized as a key element in the bear management program.
- 3. Provide reasonable visitor information and consistent regulation enforcement to encourage compliance with proper food and garbage handling procedures.**
- 4. Aggressively enforce residential and commercial food storage and solid waste disposal regulations within the Park.** Glacier National Park will also serve as a catalyst in resolving local sanitation situations adjacent to the Park.
- 5. Assure "bearproofing" of all garbage containers and garbage storage and handling facilities in the Park.**
- 6. Incorporate bear reports received at Park Headquarters into summaries, and disseminate to District and Subdistrict Rangers, Information Centers, and adjacent cooperating agencies on a regularly scheduled basis.** Summary reports will aid in assessing potential bear-human problem areas.
- 7. Initiate aggressive management actions when indicated to assure that objectives of this Plan are achieved.**
- 8. Provide for research and monitoring of the biological aspects of the bear management program to assure that the program activities are consistent with the best available scientific information available.**
- 9. Assess all current and proposed Park operations, policies, management actions, and resource management programs for compatibility**

with the management and conservation of grizzly and black bears.

10. Collaborate with Federal and State agencies, Indian Tribes, and private individuals and organizations in the Northern Continental Divide Grizzly Bear Ecosystem to enhance the regional survivability of the grizzly bear.

11. Incorporate appropriate research findings into the Bear Management Plan and Guidelines.

12. Cooperate with other agencies; including the U.S. Geologic Survey Biological Resources Division, U.S. Forest Service, U.S. Fish and Wildlife Service, the State of Montana, the Blackfeet Tribe, Confederated Salish and Kootenai Tribes, county governments, Waterton Lakes National Park, and the provinces of Alberta and British Columbia, to facilitate beneficial grizzly bear and prey species management and research.

13. Review the Bear Management Plan and Bear Management Guidelines biennially, and revise as needed.

#### **RESEARCH SERVICES**

The Park will initiate, coordinate, and encourage research on the biology, ecology, and behavior of bears to provide a sound scientific basis for the Bear Management Plan. Research will be supervised by the Chief, Division of Resources Management. Non-manipulative research techniques will be encouraged to minimize disturbance to bears.

Collection permits for research projects involving grizzly bears (as well as other threatened and endangered species) must be approved by the Superintendent. Prior to issuance of a collection permit the principle investigator for the project must prepare and present, along with the request for a collection permit, a comprehensive safety plan addressing the field activities associated with the project. Researchers and assistants working in Glacier will be required to follow the protocols for conducting research in Glacier as outlined in the terms and conditions of the individual collection permit.

The Park will participate in and encourage the timely exchange, review, and evaluation of scientific information related to bears and bear management with other agencies and scientists to assure that current information is available to management. The Park will coordinate with the U. S. Fish and Wildlife Service, the Blackfeet Tribe, Confederated Salish and Kootenai Tribes, the Montana Dept. of Fish, Wildlife and Parks, and other neighbors in monitoring grizzly bears released in or adjacent to the park. Monitoring will be accomplished by radio tracking, when feasible.

#### **TRAINING AND INFORMATION DISTRIBUTION**

Training and informational programs will be monitored in the field and evaluated by the Chief, Division of Resources Management. Subject material for training sessions or public programs will be reviewed with the Chief, Division of Resources Management and Park staff. All seasonal personnel should consult with their permanent supervisor, prior to presenting public programs. After each training session, a Case/Incident Report will be submitted, which identifies the training presented and lists the names of NPS or Concession employees who attended. Interpretive programs given to the public do not require a Case Incident Report.

All seasonal Park employees, new permanent employees, and concessioner employees will receive a bear safety packet upon reporting for duty.

#### **AVAILABILITY OF TECHNICAL INFORMATION**

Employees and other interested parties will be able to study the "Bear Management Plan" and "Bear Management Guidelines" in any staff office, Subdistrict Office, or Information Center. The Chief, Division of Resources Management will send to each of these locations and to the Communications Center a copy of the Bear Management Plan and a description of the Park's bear monitoring system. Further technical information and research related to bears and their habitat is available in Glacier's "George Ruhle Library" at Park Headquarters and in the Science Center Library.

#### **MANAGEMENT SITUATIONS**

Glacier National Park has been mapped according to the "guidelines" set forth by the Interagency Grizzly Bear Committee. Only two of the five "management situations" have been selected for application in Glacier. Over one million acres (1,006,236 acres) has been established as Management Situation 1, which states, in part, that management decisions will favor the needs of the grizzly bear when grizzly habitat and other land-use values compete and grizzly-human conflicts will be resolved in favor of grizzlies, unless the bear is determined to be a nuisance. The remainder of the Park, 7,359 acres, has been designated "Management Situation 3". This management direction states that grizzly bear habitat maintenance and improvement are not the highest management considerations; grizzly bear presence will be actively discouraged; any grizzly involved in a grizzly-human conflict will be controlled. Further details on the "management situations" can be obtained at Park Headquarters, from the Chief, Division of Resources Management.