

BEAR MANAGEMENT PLAN
GREAT SMOKY MOUNTAINS NATIONAL PARK

The Park visitor, as a temporary short term user, shares the same natural wildlife habitat as bear. Visits are generally short-term and temporary, but with long term effects. Bears are permanent residents and strive to survive in a habitat influenced by man, yet managed to be as near natural as possible. The purpose of this Bear Management Plan is to manage visitors, bears and Park operations in such a manner that the bear's natural existence is not impinged upon, yet provide for safe visitor use that will minimize bear-person conflicts.

Objectives

1. Preserve and perpetuate natural populations of black bear under natural conditions allowing to approximate as nearly as possible that which would exist without influence by post-Columbian humans.
2. Plan development and use of the Park to minimize and prevent person-bear conflicts.
3. Provide management that will allow bears to lead their natural lives with a minimum of interference by humans.

Implementation

The Chief Ranger, through the Office of Resource Management, shall be responsible for the overall coordination and implementation of this Plan.

A Black Bear Task Force, consisting of representatives from each operating division and research personnel, is established for the purpose of coordinating inter-divisional activity responsibilities and making an annual review on recommendations relative to the program. Members are encouraged to obtain on-site first-hand knowledge of bear problems and problem areas.

On-site and administrative review of each division's responsibilities will be conducted by the Assistant Superintendent.

(See Program Evaluation)

<u>Program Element</u>	<u>Division(s) Responsible</u>
Information and Education	Interp.,* RM&VP, Maint.
Sanitation/Garbage Disposal	Interp., RM&VP, Maint.*
Enforcement Controls & Management	RM&VP*
Reports and Records	RM&VP,* Interp., Maint, Visitors
Program Evaluation	RM&VP, Management,* Research & Task Force
Research and Monitoring	RM&VP, Interp, and Research*

* Primary Responsibility

INFORMATION AND EDUCATION

Information

1. Develop informational materials in the form of posters, exhibits, signs, brochures, slide and film strips or other media on the bear problem, the causes, Park regulations, the bear program, visitor conduct, camping procedures, proper food storage, refuse disposal and the dangers to bear and visitors and to visitors who come after the irresponsible actions and behavior of earlier visitors.

Material will be reviewed annually and that which is not in compliance with bear management objectives, or is no longer accurate or up-to-date, will be discarded to be recycled.

2. Develop programs for use in TV shorts, local TV channels serving motels, etc., school programs, newspapers and radio.
3. Public information (interpretive) radio transmissions, to carry bear messages to Park visitors.
4. Develop a brief slide, film and/or static display to show campers issued permits on behavior, conduct, food storage and disposal by visitors while in bear habitat. (See Education).
5. Develop report systems and report forms to record information and data needed for management and research.

Education

1. Include bear literature with replies to all mailed inquiries for information and advance camping reservations for the period April-October.
2. Include bear literature with all backcountry camping permits issued and to campers in developed Park campgrounds from April through October.
3. Bear posters, regulations, proper food storage procedures, conduct while in bear country and camping guidelines and other necessary bear information shall be made available to visitors at all visitor information stations, visitor centers and ranger stations.
4. Bear literature will be posted at appropriate trailheads, on all bulletin boards in campground and day use areas, at or in restrooms and at other suitable locations frequented by the public.
5. Interpretive programs will present a bear program weekly at each facility in response to the visitor interest and to present necessary information about bears, visitor conduct, handling of food and regulation requirements.

6. Using a short slide program, film or static picture display, present bear information with issuance of each Backcountry permit.
7. Present a bear information program at all seasonal training programs designed to the duties and responsibilities of the trainee.
8. Employees to emphasize bear information during ranger, maintenance and interpretive visitor contacts. Bear information to be brought out in announcements before appropriate interpretive programs and in the Park newsletter.
9. Use news releases to inform the public about bears, including references to enforcement of bear feeding violations.
10. Provide visual, taped or written information to TV and radio stations, newspapers and other media presenting public information located at some distance from the Park.
11. Personnel assigned to campgrounds will make roving contacts among campers with a purpose to make certain the camper is alerted about bears, personal conduct, food storage, Park regulations and enforcement.
12. Instruct campers to report all incidents to the nearest ranger, ranger station or visitor center, including mail reports if feasible.
13. Each Division Chief will see that his employees are informed of the responsibility of each employee to effectively answer visitor questions or direct them to a source for answers. Each should be aware of the Bear Management Plan and objectives, the bear situation, proper conduct, food handling and camping procedures, bear problems and preventive actions, and bear incident reporting procedures.
14. Employees shall take the opportunity to assure that visitors understand and comply with regulations and suggest precautions when they see violations.
15. Backpackers are to be encouraged through education and information media to utilize trail foods that reduce odors and garbage, and to properly store and suspend food when camping.

SANITATION AND GARBAGE DISPOSAL

1. No open land fill garbage disposal sites will be permitted inside the Park.
2. All Park, lessee, permittee, employee, and concession garbage cans kept outdoors in the Park will be bear-proof. Removable liners will be used.
3. Where trash containers, not of a bear-proof design, are used, they will be kept inside buildings.

4. During heavy travel periods (May-October) refuse collection at major campgrounds and picnic areas will be scheduled for evening collection daily (5-10 P.M.). Collection in other areas may be every other day and may be at other than evening hours.
5. During off-season periods (November-April) collection schedules may be three times weekly (or as collection service is required).
6. Personnel will maintain campgrounds, picnic areas, roadsides and other visitor concentration areas litter-free by education efforts, demonstration and clean-up work scheduling.
7. Concession operators and lessees not using Park garbage collection contract will submit an annual garbage disposal plan to the Superintendent by May for approval.
8. Every Park vehicle will be kept supplied with plastic trash bags. Personnel will remove all trash and garbage accumulations wherever observed in the course of daily travel in the Park. Precautions against traffic hazards will be strictly observed, in this effort.
9. LeConte Lodge will not resume use of an open refuse pit, or of refuse burial in the Park. Trash and garbage will be packed out by the most practical means available at intervals that will avoid odor, sanitation and storage problems. Garbage and trash will be held indoors in a metal container with plastic liner, sealed to reduce odors.
10. Information on proper disposal of garbage will be related to Park residents, live-in permittees, lessees and concession operators.

MANAGEMENT ACTION

Regulations - regulations apply to visitors and employees as well.

1. Conscientious enforcement is expected in all observed bear feeding cases.
2. Regulations requiring the proper storage of food will be enforced. Patrols and contacts will be conducted by Park Rangers to ensure that camper-food is properly stored and that campers understand and comply with the regulations.
3. Proper garbage disposal regulations will be enforced. Holders of backcountry permits will be expected to carry plastic or other type of trash bag to aid in compliance with the "Pack in - Pack out" rule which will be enforced by backcountry rangers. Campers must not bury trash or dispose of it in pit toilets.
4. Food left outside of a hard-sided vehicle, a secured structure, or not properly suspended will be cause for a citation.

Responsibilities

1. The Subdistrict Ranger will be responsible for implementation of bear control actions. The office of Research Management will assist and support when requested.
2. The Subdistrict and District Ranger will designate ranger and technician personnel to handle problem bears and to be trained in the capture and bear handling techniques and proper use and accountability of immobilization drugs. (See appendix for capture procedures.) The office of Resource Management is responsible for training of these designated personnel.
3. The Subdistrict Ranger will assess and determine the need for bear control action, using on-site knowledge of the bear and reports of past history; and will recommend translocation or killing, and the means by which the recommended action should be taken, to the Chief Ranger's Office through the District Ranger.
4. The decision on the transfer and relocation of a captured bear will be determined by the Chief Ranger's Office.
5. The decision to kill a bear will be made jointly by the Superintendent or Assistant Superintendent and the Chief Ranger's Office after a review of circumstances, except in emergency situations involving a direct threat to human safety. Any emergency action will be followed by an immediate report to the Superintendent and concurrently to intervening supervisors.
6. Employees will use the Bear Information Management System (BIMS) overprinted 10-343 for all bear incidents (property damage and personal injury), significant observations (see Appendix VI for definition of significant observations), and control actions. All BIMS overprinted 10-343's will have a control number assigned by Communications Center (see Appendix VI for details of completion).
7. The office of Resource Management will be responsible for providing bear closure signs for campsites. Subdistrict Rangers will be responsible for the erection and taking down of these signs at the appropriate time.
8. The District Naturalist and District Rangers will be responsible for posting bear literature in their respective areas of responsibility. (See Education, Item 4.)
9. Supervisors will keep their employees informed on reporting requirements of all bear incidents whether observed or reported to them by a visitor.

Developed areas

1. Roadside "bear jams" will be the responsibility of all Park personnel. The minimum action expected will be to inform Park Communications of the location of the jam so that authorized personnel can take action.

Loudspeakers, personal contacts and/or issuance of citations may be used, but a low-key approach may be the best. The manner in which a loudspeaker is used should always be in "good taste"; the following text may be used verbatim:

"For your safety, please do not crowd or feed the bear(s)."

The following is recommended as the best approach for personnel to use when dealing with a "bear jam": personnel should work their way to the overlook, park their vehicle and dispatch the bear with a handful of gravel; this should begin to clear the traffic problem immediately. Then a few minutes should be taken to talk to the people remaining and to explain why this action was necessary. These points should be worked into the explanation:

- Bears conditioned to human presence and artificial food sources (panhandlers) have about one-half the life expectancy of a wild bear. They are relocated for their protection.
 - Panhandlers are very susceptible to poachers. They are taken both alive and dead.
 - Live poached cubs may live their lives in a roadside cage.
 - Four of the five bears killed by vehicles last year were panhandlers conditioned to highway feedings.
 - There were a number of human injuries associated with feeding, crowding, and attempts to pet bears last year.
 - Panhandler mothers teach their offspring the panhandling trade.
 - If the panhandling cycle can be broken, bears may revert back to a natural diet.
 - Roadside bears are not part of the natural scene.
2. Bears appearing two or more times in a developed area, to include roadsides or engaging in destructive or threatening behavior, will be captured and removed. If no prior history as a problem bear, it will be relocated to a remote area in the Park, or as a second alternative, transferred to an adjacent state. (See Responsibilities, Item 4 and Index, Guidelines - Relocation and Removal.) In transfers to states, preference will be given to placement in protected (no hunting) areas.
 3. The Subdistrict Ranger will assess and make the determination for removal of a problem bear. All personal knowledge about the bear and records of past bear incidents will form a basis for this decision.

Any transfer of bears to other agencies will be reported immediately, through channels, to the Superintendent.

4. Bears known to be transient will be permitted to travel through.

Backcountry

1. The following guidelines are recommended for handling unnaturally aggressive or problem bears. If Subdistrict Rangers elect to take action on a backcountry bear, these guidelines and time restraints must be adhered to as a minimum.
 - a. Ensure a closure is in fact necessary by documentation of at least two incidents in a one-week period. BIMS submissions will suffice as documentation. (This documentation, over a period of years, will also serve to eliminate or relocate campsites with constant bear problems.)
 - b. A campsite will be closed a minimum of one week after the second documented incident. A sign with the closure dates on it will be posted at the site. Attempts should be made to contact visitors using the site that evening and route them elsewhere.
 - c. Closed campsites will automatically be re-opened at the end of the one-week period unless further inspection and documentation warrant continued closure. Extensions will be for one week at a time, with automatic re-opening at the end of that period.
 - d. A campsite may be re-opened sooner than the one-week period if two consecutive overnight inspections reveal no further bear problems.
 - e. Communications Center (Backcountry) must be notified immediately of the campsite closure, the date of closure and the automatic one-week re-opening date. They will also be notified of any extensions and the date of re-opening. District Rangers of affected campsites will be notified by the Subdistrict Ranger who initiates the closure.
 - f. All campsite closures will be so noted in the Morning Report and Communications Center will ensure that closures are placed on the written Morning Report for the Superintendent's notice.
 - g. If practical, capture and transfer for relocation outside the Park. (Follow cooperative agreements with individual states and notify Resource Management office immediately.)
 - h. Consider use of aversive stimuli as an attempt to discourage visits to campsites (see appendix on Aversive Stimuli).
 - i. Remove bear by shooting with firearms or euthanasia with capture guns and drugs. The decision to kill a bear will be made jointly

by the Superintendent (Assistant Superintendent) and Chief Ranger with input by Subdistrict, District, and Resource Management personnel. All needed biological data will be collected and the carcass allowed to revert back into the ecosystem or removed for scientific study. (See appendix for guidelines.)

2. Campsite closures will require:
 - a. Posting and dating a closure sign at the campsite during period of closure.
 - b. Notification of Communications Center (Backcountry) of all closures, re-openings, etc.

REPORTS AND RECORDS

1. Employees will report all bear information on the BIMS overprinted 10-343. Reportable information is:

- Incidents involving injury;
- Incidents involving property damage;
- Observations of a significant nature (that could aid in managing a specific bear; see Appendix VI for significant observation defined).

BIMS overprinted 10-343's will follow 10-343 distribution procedures. BIMS forms initiated on a control action will accompany the bear until it is released. The person releasing the bear will then complete and submit the form.

2. Visitors are encouraged and instructed to report all incidents to a ranger or visitor center so that a proper record of the incident can be reported.
3. All known bear-inflicted injuries and incidents involving an assault or charge just short of a body contact will be reported immediately to Communications Center, which will relay the information to the Chief Ranger's Office. Any entry will be made in the Morning Report to the Superintendent.
4. A running record of reported incidents will be maintained in the Communications Center and will be available for reference. The computer information will be coordinated fully with the Servicewide system.
5. Bear Management Data Requests and Reports will be completed by the office of Resource Management.

PROGRAM EVALUATION

1. Each Division Chief will be responsible for the Division responsibilities.

2. On-site and administrative reviews of progress of each division will be made by the Assistant Superintendent.
3. The Assistant Superintendent will oversee implementation of the Plan.
4. The black bear task force will meet once a year in January to review the past year's performance, and to recommend (to the Superintendent, through the Chief Ranger's Office) changes in the Plan. Areas of review may include:
 - a. Causes of incidents.
 - b. Backcountry problems.
 - c. Problems involving overnight and day use.
 - d. Problems of communicating with the public, and their response.
 - e. Effectiveness of plan implementation - procedures, operational relationships, staffing, and funding - re bear management.

RESEARCH AND MONITORING

Research relating to bears will be conducted systematically. As needs are defined, research institutions will be encouraged with financial assistance and logistic and data support whenever possible.

Two broad phases of research continue to be: (1) the ecology and behavior of the black bear, and (2) the bear-human interaction behavior study.

Continued and future research will be sought on:

1. Bear behavior as it relates to human use of the Park.
2. Habitat and ecological studies relating to wild boar and black bear interrelationships.
3. Field testing of new management techniques related to backcountry management, food storage, site closure, backcountry use limits and aversive stimuli or conditioning.
4. Laboratory and controlled field testing of behavioral evasive conditioning of bears from campsites.
5. Bear densities movements and population dynamics as they specifically relate to bear-human interactions and relative habitat quality and security from the effects of human use and development pressures from outside the Park.

A P P E N D I X

GUIDELINES

- I. Trapping
- II. Immobilization and Use of Drugs
- III. Relocation and Removal
- IV. Consideration for Campsite Closure
- V. Campsite Closure Sign
- VI. Details on Reporting to Include UTM Coordinates and Elevations
- VII. Disposal of Wildlife
- VIII. Aversive Stimuli
- IX. Relocation Sites and State Contacts

GUIDELINESI. Trapping

Trapping may be done by use of:

Culvert trap - confined to roadways and developed areas.

Aldrich snares - used primarily for capture of bear in backcountry. Used principally in research.

A. The Culvert Trap will be given first consideration for capture of front country bear.

1. In developed areas, traps will be placed in the least visited section, the trap door facing away from the people area. The public will be warned and kept away from the trap with placement of signs, DANGER-KEEP AWAY FROM TRAP, and if necessary, rope off the area.
2. Set trap door only between hours of 10 p.m. and 8 a.m., except when immediate capture is necessitated and when trap is continuously attended and monitored. If the set has been unsuccessful, the door will be locked in the closed position by 8 a.m.
3. Trapped bear will be moved to a cool, shaded, isolated place away from the public until it can be transported and relocated. Confinement shall not exceed 24/hours without justifiable circumstances. Animal to be watered occasionally.
4. Attempts will be made to maintain the integrity of a family unit when trapping a sow with cubs. The culvert trap with cub doors should be used, or a hog type trap set beside the culvert trap. People must be kept away from the area.
5. If cub capture by traps is unsuccessful within 24-hours, use will be made of nets, an aerial platform or as a last resort sedation with provision of a net, ropes or aerial platform to break the fall.
6. Change bait often enough to avoid spoilage. A ham strap or ham bone is the preferred bait, but chicken bones, beef bones and sardines can also be used. Sardines appear especially useful when baiting cubs.
7. If trap is not being used on successive nights, remove to a safe storage area.
8. Clean and flush out traps with water after each successful trapping before storing.

Appendix

- B. Aldrich snares may be used in approved research projects or by management for infrequent capture of a free-roaming bear.
1. Sets are to be made only by persons authorized by the Chief Ranger's Office.
 2. No sets to be made on, or within sight of trails.
 3. Sets must be made to insure cable encirclement well above the paw or foot.
 4. Sets to be monitored at least twice daily and no more than 12-hour lapse between checks.
 5. Bears captured are to be immobilized and removed from trap immediately to prevent injuries to the animal and reduce hazard to human safety.
 6. Aldrich snares may be used in research projects approved by Regional Chief Scientist and Superintendent when:
 - a. A definite need in research is established.
 - b. Proper "set" is demonstrated to insure ensnarement high on the leg.
 - c. Will be monitored as in Item "4" above.
 - d. Used to capture only a minimal number of bear.
 - e. An annual Work Plan on use of snares is submitted and approved.
 7. Used by management only when other trapping and immobilization efforts fail in capture of free-roaming bear.

II. Immobilization and Use of Drugs

1. The use of immobilization drugs and drug delivery equipment will be restricted to those employees assigned responsibility for bear management. The designated employees must have completed specialized training in the proper use of equipment and drugs. Subdistrict Rangers will maintain an inventory for strict control purposes. The following information will be recorded for each drug:
 - a. Date received by subdistrict.
 - b. Date, amount used, purpose and signature of employee administering the drug.
2. Several drugs will be available for black bear immobilization. The primary drug combination which will be available is Xylazine (RompunTM) in liquid form, and Ketamine Hydrochloride (KetajectTM, KetasetTM), a freeze-dried white crystalline powder. The combination of these two drugs will replace other agents which are potentially dangerous to employees and bears, difficult to obtain, or cost-prohibitive.
3. Etorphine Hydrochloride (M-99TM) and its antagonist Diprenorphine (M50-50TM), Phencyclidine Hydrochloride (SernylanTM), and Succinylcholine Chloride (AnectineTM) will be available for limited field use. The Resource Management Specialist must approve the use of any of these drugs as alternatives to the Rompun-Ketamine combination.
4. Intramuscular injection will be administered by CO₂ or powder charge powered capture rifle or pistol. Immobilization using a syringe and jab stick may be used on any trapped bear. Following injection, the bear will be constantly monitored for respiratory complications, convulsions, excessive heat, dehydration, and sun or foreign debris damage to eyes. Monitoring will continue every half hour, whether stationary or mobile, until the onset of recovery.

DRUG COMPARISON TABLE

	Anectine	Sernylan	Ketaset	Ketaset/ Rompun	M-99
<u>EFFECTS</u>					
CNS depressant.		X	X	X	X
Muscle relaxant	X		X	X	
Anesthesia.		X	X	X	X
Analgesia		X	X	X	X
Sedative/Tranquilizer			X	X	
<u>SIDE EFFECTS</u>					
Convulsions		X			
Respiration (increased, decreased, normal).	D	D	N	N	D
Increased heart rate.					X
Excess salivation	X	X			
Addictive					X
Accumulated in body		X			
Stress during recovery.	X	X			X
Stress during induction	X				X
Inhibited coughing and swallowing	X	X			X
Temperature change (increase, decrease)		I			D
<u>ACTION</u>					
Rapid induction (< 5 minutes)	X				
Excessive down time (> 90 minutes).		X			
Occasional short down time (< 10 minutes)	X				
Predictable recovery.		X	X	X	X
<u>SAFETY FEATURES</u>					
Wide latitude of tolerance.		X	X	X	
Multiple doses safely given		X	X	X	X
Antidote.					X
<u>ANIMALS APPLICABLE TO</u>					
Ungulates	X		X	X	X
Carnivores (bears).	X	X	X	X	X
Carnivores (others)	X	X	X	X	
Excessive volume (animals > 200 lbs.)			X		
<u>MISCELLANEOUS</u>					
Federal restrictions (extreme, mild).	M	E	M	M	E
Stable in field		X	X	X	X
Cost (per 10 cc vial) in dollars.	5	12	10	10	30
Danger to user.	X				X

III. Relocation and Removal

Three alternatives exist for handling problem bears:

1. Relocate within the Park those bears known to be first offenders and exhibiting no belligerent or aggressive attitude toward persons and property.
2. Transfer to the respective state in which it was captured any bear known as second or more offender and exhibiting aggressive behavioral traits, including personal injuries and property damage.
3. Remove from the population by shooting or euthanasia those bears exhibiting aggressive traits responsible for injuries or extensive property damage.

A. Relocation

1. Bears captured in the frontcountry for the first time who have no history of prior problems will be relocated to a remote section of the Park at distances from the capture point of no less than 20 miles for sows and cubs and 30 miles for adults, or to the maximum distance possible. The Park has such few "wild" areas accessible for relocation that each case will be reviewed on an individual basis. Consult the office of Resource Management for the current best relocation site for a particular bear if any doubt exists.
2. Bears returning to point of capture but not considered aggressive to persons may be relocated if release at a greater distance is possible.
3. Bears captured a second time and exhibiting aggressive traits or responsible for property damage or injuries will be transferred to one of the adjoining states.
4. Bears captured during a previous year and considered non-aggressive will be treated as first offenders and relocated within the Park.
5. If the animal is to be relocated, the bear will be transferred to the mobile culvert trap. It can be transported to the release site while recovering from immobilization. At the release site, the bear will be kept under observation until it moves off under its own power.

In an effort to obtain the most management information on relocated bears with the least impact on the species, all non-tagged bears will be marked using pre-numbered ear tags and, if possible, a lip tattoo.

If the animal is transferred to the state, our ear tags should be affixed if the state does not place any on the animal. If state tags are used, their numbers should be documented on our BIMS form. A red tag with a contrasting colored number will be affixed to the left ear of the males and the right ear of the females. The red tag will be in the lower portion of each ear with the tag number facing forward. A plain metal tag will be affixed in the same manner in the other ear. (An aid to remembering is MALE-METAL-RIGHT; for example, in a male the red tag goes in the left ear and plain metal tag in the right.) The female is reversed. The lip tattoo may be placed on either upper lip and will correspond with the red tag number. Both tag numbers and lip tattoo numbers will be so noted on the control side of the Bear Management Form.

A field guide, Immobilization, Capture and Transport of Black Bears, will be made available to each employee assigned responsibility for bear management. A copy of the guide will be kept in each subdistrict immobilization kit along with the drug dispensing record.

B. Destruction

No bear will be removed or destroyed for exhibiting natural behavior such as defense of young or pursuing natural food sources.

Bears will be considered for destruction when transfer to a state is not feasible and if the bear has:

1. Inflicted personal injuries.
2. Been relocated a second time within the Park and is known to have caused frequent or extensive property damage to cars, buildings, tents, and camping equipment and inflicted personal injuries.
3. Known to have harassed campers in backcountry and to have been responsible for injuries or frequent and considerable damage to personal property; or to have harassed hikers by following or chasing them to get food carried by them or by charging, snarling or exhibiting other aggressive behavior which would cause persons to leave a site and when the bear cannot be chased off by normal means such as throwing objects, shouting, beating pans, etc.; or otherwise have represented a serious threat to the safety of backcountry users.
4. Exhibited injury trauma or a disease possibly transmissible to humans.
5. If a sow with cub(s) must be destroyed, the cub(s) may be transferred to a public zoo or, if at least one year old, may be transferred to a state for release in a protected (no hunting) area.

IV. Campsite Closure Procedures

A. Temporary closures:

1. A closure sign will be posted at the campsite with the dates of closure written on it.
2. The sign will be removed when the campsite is re-opened.
3. Communications (Backcountry) will be notified of all closures and re-openings and dates involved.
4. Follow-up inspections for closure compliance by permit inspection and on-site examination for illegal use, sanitation and litter, signs of bear presence and other signs of use will be made.

B. Permanent closures:

1. Campsites will be considered for permanent closure after repeated problems in a single season or a number of seasons. BIMS will provide the documentation for this action.
2. All anticipated new sites will be considered in relation to prime bear habitat and favorable den trees.

V. Closure Sign

<p style="text-align: center;"><u>DANGER</u></p> <p style="text-align: center;">THIS CAMPSITE IS CLOSED _____ (dates) _____ BECAUSE OF BEAR DANGER</p>
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VI. Details on Reporting

A. All bear information will be reported on BIMS overprinted 10-343 forms. Reportable information is:

- Incidents involving injury.
- Incidents involving property damage.
- Observations of a significant nature.
- Control activities.

A significant observation is defined as:

1. A bear involved in panhandling activities.
 2. A bear with ear tags/collars (note sequence of tags, color and numbers, if possible).
 3. A bear with identifiable marks and/or characteristics (scars, limps, missing toe, etc.) whether tagged or not.
 4. A bear displaying unusual behavior (aggressiveness such as low moan vocalization, blow vocalization, swats, charges, bites/snaps), sickness, injury, growths.
 5. A family group, numbers and size of cubs (yearlings or current year's young).
 6. Poached or dead bears.
- B. The following guidelines will be used when completing the BIMS overprinted 10-343.

BEAR MANAGEMENT INFORMATION

GENERAL

<u>Code</u>	<u>Description</u>	<u>Explanation</u>
1.5 1.6	UTM Coordinates	Place UTM coordinates for east & north.
1.7	Management Area	Select best one: 11. Frontcountry roadside 15. Frontcountry campground 12. Picnic site 2. Backcountry on trail 1. Backcountry off trail 3. Backcountry campsite 7. Backcountry shelter 4. Backcountry illegal campsite
2.1	Age of bear	Select as many as needed (up to 4 bears): 1. Unknown 2. Cub (current year's offspring) 3. Yearling (last year's offspring) 5. Adult
2.2	Size of bear	Select as many as needed: 1. Unknown 2. Small (under 99 lbs.) 3. Medium (100-150 lbs.) 4. Large (151 lbs. and up)
2.3	Sex of bear	Select one for each bear: 1. Unknown 2. Male 3. Female
2.4	Weight estimated in lbs. (up to 4 bears)	
3.1	Tag No. - Left Ear	Write in number (up to 4 bears); enter "unknown" if numbers cannot be read.
3.2	Tag No. - Right Ear	Write in number (up to 4 bears); enter "unknown" if numbers cannot be read.
3.3	Tagged ears (up to 4 bears)	1. Left ear 3. Right ear 4. Both ears

GENERAL (cont'd)

<u>Code</u>	<u>Description</u>	<u>Explanation</u>
3.4	Tag Color - Left Ear	Select or write in color (up to 4 bears): 5. Red 10. Aluminum or silver 3. Yellow 11. Other (specify)
3.5	Tag Color - Right Ear	Select or write in color (up to 4 bears): 5. Red 10. Aluminum or silver 3. Yellow 11. Other (specify)
3.6	Radio-collared bear	Enter YES or NO.
3.7	Tattoo	Enter number.

I. SIGNIFICANT OBSERVATIONS (Complete when no property damage and/or incident recorded.)

<u>Code</u>	<u>Description</u>	<u>Explanation</u>
..0	Significant observations	Enter <u>one</u> to indicate activity level of bear(s): 21. Panhandling 22. Low moan vocalization 23. Blow vocalization 24. Swat (bipedal position) 25. Swat (quadrupal position) 26. Charge (ears lowered) 27. Bite/snap
5.0	Narrative	Note identifying marks such as scars, color, whether bear limps or appears to be sick or injured, physical deformities, family group, etc. Describe other activities.

II. INCIDENT

<u>Code</u>	<u>Description</u>	<u>Explanation</u>
4.1	Incident or injury	Select <u>one</u> for most serious incident or most serious injury: 7. Injury required no treatment <u>or</u> treatment was refused 8. Injury required first aid 9. Injury required M.D. (emergency room)cont'd on next page....

II. INCIDENT (cont'd)

<u>Code</u>	<u>Description</u>	<u>Explanation</u>
4.1 (cont'd)		10. Injury required hospitalization 11. Fatal 1. Law enforcement only 3. Property damage (no injury)
4.2	Corrective action	Select <u>one</u> for most serious action: 1. None 3. Verbal warning 4. Written warning 5. Citation
4.3	Visitor offense	Select <u>one</u> to explain offense: 1. Unknown activity or no offense 3. Feeding bear(s) 9. Crowding bear(s) 10. Petting bear(s) 8. Harassing/teasing bear(s)
5.1	Property damage	Select as many as necessary: 11. Tent 12. Pack, foodsack 13. Ice chest 14. Building 15. Trailer (tent-type or self-contained) 16. Motor vehicle (truck, van, car, etc.) 17. Motor home 18. Other (specify)
5.2	Estimated damage (whole dollar)	Enter amount for each item damaged.
5.3	Food situation	Indicate item which most clearly describes situation for each object damaged: 21. Food presence unknown 22. No food present 25. Food present; left unguarded 27. Food abandoned when bear charged 36. Food hung improperly 37. Food apparently hung properly
6.0	Victim or owner	Select one or more: 1. Visitor 2. Inholder 3. Concessioner 4. Contractor 5. NPS employee
7.0	Narrative	Explain nature and seriousness of injuries.

III. CONTROL INCIDENT (Complete for each bear handled.)

<u>Code</u>	<u>Description</u>	<u>Explanation</u>
4.1	Capture and release ...or... Population loss	Select one: 23. Released in same area 28. Released to state 24. Released in other area of Park 29. Released to captivity 30. Died outside Park (vehicle accident, etc.) 31. Natural death in Park 32. Vehicle accident loss in Park 33. Illegal kill in Park 38. Illegal kill outside Park 34. Accidental management kill 35. Intentional management kill
4.2	Relocation site	Select one site: 1. Bunker Hill/Parsons Branch Road 2. Tremont 3. Greenbrier 4. Big Creek 5. Cataloochee 6. Balsam Mountain Road 7. 9-A 8. Twentymile
4.3	Area management	Select one: 11. Control action only 12. Post bear hazard warning 14. Limit access 15. Close area
5.1	Method of capture	Select one: 21. Firearm 26. Drugged, free-roaming 23. Snare 24. Trap
5.2	Drug used	Select one: 37. Ketamine 27. Sernylan 32. Anectine 38. Ropum 40. Ketamine/Ropum mix in cc's 30. M-99/M-50 50 39. Other
6.0	Amount of drug used/ narrative	Indicate in cc's each drug used include release site info

CASE INCIDENT RECORD

Comp. Rec. No.

1. ORGANIZATION CODE <u>1</u>	2. ORGANIZATION (PARK) NAME	3. LOCATION CODE	4. CASE/INCIDENT NO.
5. LOCATION OF INCIDENT		6. WHEN DID IT OCCUR? MO. DAY YR	7. DAY OF WEEK
8. OFFENSE/INCIDENT CODE		9. NATURE OF INCIDENT	
11. REPORTED BY		10. HOW REPORTED	
14. RECEIVED BY		12. ADDRESS	13. PHONE { HOME BUSINESS
18. INVESTIGATED BY		15. WHEN RECEIVED: DATE	16. TIME BROADCAST
		17. WHEN INVESTIGATED: DATE TIME	19. OFFICER/RANGER NO.
		20. WHEN CLEARED: DATE TIME	21. DISPOSITION

22.	INVOLVED PERSONS	23. ADDRESS	24. PHONE	25. SEX	26. RACE	27. AGE	28. DATE OF BIRTH
1							
2							
3							
4							

29. DETAILS OF INCIDENT

GENERAL: 1.5 _____ E. 1.6 _____ N. 1.7 _____

2.1 _____ 2.2 _____ 2.3 _____ 2.4 _____

3.1 _____ 3.2 _____ 3.3 _____ 3.4 _____

3.5 _____ 3.6 _____ 3.7 _____

I. SIGNIFICANT OBSERV.	II. INCIDENT	III. CONTROL INCIDENT
4.0 _____ 5.0 _____	4.1 _____ 4.2 _____ 4.3 _____	4.1 _____ 4.2 _____ 4.3 _____ 5.1 _____
	5.1 _____	5.2 _____ 6.0 _____
	5.2 _____	
	5.3 _____	
	6.0 _____ 7.0 _____	

30. QUANTITY	31. PROPERTY STOLEN OR DAMAGED	32. ESTIMATED VALUE	RECOVERED	
			33. DATE	34. VALUE
36. PROPERTY CODE OF HIGHEST VALUE 		36. TOTAL	37. TOTAL	
		00		00

INVESTIGATED BY (Signature and Date) 5/79 APPROVED BY (Signature and Date) 9

VII. Disposal of Wildlife

All wildlife within the Park boundary is considered Federal property and as such the meat or any body parts thereof shall not be used for personal benefit.

A. Animals killed within the Park must be disposed of in an approved fashion:

1. Remove carcasses to a site far enough away from any trail, road or area frequented by the public to avoid detection of any odors. Large animals should be quartered and scattered. The remains must be kept away from water sources.
2. Allow natural processes to revert the remains back into the ecosystem.
3. By burial.

B. The use of any carcass or parts thereof must be approved in writing.

1. For Park research there must be an approved research project.
2. For Scientific collection by agencies or institutions, an approved Collecting Permit is required.

(Refer to SMOP, Part III-E-1)

VIII. Aversive StimuliA. Chemicals

Lithium Chloride (LiCl_2) has been tried with varying degrees of success. There seems to be a wide range of tolerance for individual bears and its effectiveness is questionable at best. LiCl_2 can be obtained from the Resource Management office. Doses can be liquified and injected into sardines or crystals can be hidden in solid foods. In the single bait, a teaspoon is the approximate dosage. The Resource Management office should be consulted before attempting to use LiCl_2 . Allotment of the chemical will be determined by the Resource Management Specialist or the Chief Ranger's Office.

B. Shot

1. Shotgun shells loaded with dove or quail load (#8 or #9 shot, steel if available), low base can be used. The bear should not be shot closer than the following:

Standard or long barrel shotgun - 50 yards

Shot barrel or riot shotgun - 25 yards

2. .38 caliber rat or snake shot should not be used closer than five yards.
3. In order to avoid injury to the face or eyes, direct any shot at the rump area of the bear.
4. A great deal of discretion must be exercised when using any aversive stimuli, especially shot. Not only must the health and safety of the bear be protected, but adverse criticism may be incurred from well meaning visitors who do not understand the need for a control action. Therefore, it is recommended that shot be applied when visitors are not present. Early season aversive stimuli is much more effective than late season applications.

C. Other Means

1. Wrist slingshots with marbles or smooth stones may have some applicability.
2. Perhaps the most effective aversive stimulus with short-term results is a handful of gravel, especially if visitors are present.