BEAR MANAGEMENT PLAN

North Cascades National Park Service Complex Sedro Woolley, Washington

Approved July 1975

W. Lowell White Superintendent

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I. Introduction

Black bear (<u>Ursus americanus</u>) and grizzly bear (<u>Ursus arctos</u>) are native to the North <u>Cascades</u>. The black bear has probably frequented the area in significant numbers since the last glacial retreat of the late Pleistocene. Today it is commonly seen and legally hunted throughout the region. The grizzly bear has probably always been much less numerous; possibly because of marginal habitat, particularly the lack of substantial ungulate biomass. At present the grizzly is extremely rare or even extinct in the North Cascades.

Both species are large predatory animals occupying a high tropic position in the ecosystem. With the exception of dangerous and destructive individuals, bears are popular with the visitor and bear sightings are always highlights of visits to wildland areas. However, by nature, bears are just one of many wildlife species which tend to gravitate toward human developments with some individuals eventually becoming dangerous and destructive. Their fear of humans is often replaced by boldness and aggressiveness through close association with man over a period of time. This management plan is designed to give management direction essentially to preserve and maintain a wild bear population by, (1) minimizing the number of bears reverting from "wild" to "nuisance" status, and (2) separating such nuisance animals from residents and visitors of the Park Complex.

Most black and grizzly bears are shy and retiring tending to keep or increase their distance when encountering humans. Sightings of these wild bears should be documented on Natural History Field Observation Form 10-257. Such records serve as an aid to park managers for annually assessing bear distribution and population status, and in natural history interpretation to the visitor.

Bears are typically individualistic in behavior and temperament. Accordingly, the actions of any individual animal are quite unpredictable. However, "problem bears" or potential "problem bears" display behavior patterns not difficult to recognize in most instances. To elaborate - a few individuals (both black and grizzly) comprising the minority of the population, commonly lose their extreme fear or wariness of man, and display this loss through development of the habit of spending portions of their annual existance in varying degrees of association with human beings. This is particularly evident where humans congregate, such as around visitor-use and administrative-use areas, particularly developed campgrounds, lodges, hostels, chalets, roadside viewpoints, visitor centers, backcountry camps, ranger stations and residential areas.

These "semi-wild" individuals often develop quite aggressive and destructive tendencies and the potential danger to humans is obvious. One extreme (and obvious) solution would be to exclude humans and remove the visitor development, or attractant, from the area. However, this form of management can seldom be justified unless dealing with an endangered species, and in remote backcountry areas. In a way such permanent closure runs counter to establishment of the developed area in the first place - that of providing facilities for recreational enjoyment for a substantial segment of the visiting public. Therefore, the only acceptable solution for management is to minimize the type of human activity which tempts wild bears, and as a last resort to remove from the area the few individual bears which become problems despite all best efforts of management.

II. Wild Bear Management

In North Cascades National Park, the black bear and grizzly bear are fully protected from hunting, feeding and molesting by Federal law (Title 36, Chapter 1, Part 1, Sec. 2.32, Code of Federal Regulations.)

Park management desires that both species continue to survive in natural population densities over their historic ranges. The human visitor to the Park should have the opportunity to observe these wild bears at a distance and to appreciate their ecological role in nature. Park management should stress such natural ecosystems in interpretive programs and literature and, where feasible, develop viewing areas from which the visitor may observe wild bears in their natural habitat.

In the Lake Chelan and Ross Lake National Recreation Areas, the Washington Department of Game annually manages an open hunting season on black bear between early September and the last of October. During this period, black bear may be legally taken by licensed hunters as a form of recreation compatible with the purpose of these two national recreation areas. During the closed season, the black bear is legally protected and therefore managed by somewhat the same philosophy prevailing in the national park.

The grizzly bear has been fully protected by State law since 1969. The last known legally harvested grizzly taken in the North Cascades was shot in 1964, according to Game Department information.

This bear management plan was developed to give uniform guidance in the control of "problem" bears to the extent that they are physically separated (in one way or another) from visitors, residents, and employees. Probably the most important section of the plan deals with procedures or guidelines to prevent bear problems from developing. This plan considers the welfare of the bear as well as that of the visitor and resident.

III. Prevention Guidelines

Most of our effort should be directed toward preventing bear-related problems from developing. Some of these are listed as follows:

- 1. Do not construct extensive visitor-use developments in areas of known bear habitat, whenever possible.
- 2. Carry out an active public relations program where visitors or potential visitors are given warnings and pointers to follow to avoid bear conflicts while visiting wildland areas. Radio, television, newspaper articles, campfire programs, posters, brochures and other handout leaflets, etc., can be used.
- 3. Roadside bears should be protected from the motoring public. Roadside warning signs and an active law enforcement program are methods to employ short of eliminating the bears or closing roads.
- 4. All open pit dumps should be eliminated by use of county approved sanitary land-fills or complete removal of trash and garbage to outside landfills. Open dumps on closely-adjacent lands might present problems in which case special negotiations with the landowner might be effective.
- 5. If feasible, close some roads to public use during the spring when tender new grass growth on roadside berms attracts bears. Some bears make their first contact with humans in such disclimax environments.
- 6. Provide a list of pointers for backcountry users to better enable them to prevent bear confrontations. They should pack out all their unburnable refuse and maintain a neat, clean camp free of attractive odors.

- 7. Bear-proof refuse cans must be installed in all developed campgrounds, picnic areas, visitor centers, roadside pull-offs, and administrative areas where refuse collection containers are normally provided.
- B. Bear-proof cans should be installed at employee residences if refuse cans cannot be kept inside.
- 9. If feasible, provide bear-proof cans at concessioner developments or else require that non bear-proof cans be stored in bear-proof exclosures.
- 10. Private landowners should store their refuse containers inside garages or other outbuildings and keep their property reasonably clean.
- 11. Trash and garbage collections from refuse containers must be frequent enough to prevent overflow. Twice-a-day collection may eventually be necessary in heavily used campgrounds. Periodically wash containers to remove attracting odors.
- 12. Known areas, where bears present potential danger to human life, must be temporarily closed to visitor use.
- 13. Users of developed campgrounds should be given information relating to proper food storage to eliminate enticement to bears and other wildlife. This can be accomplished by handout leaflets, bulletin board posters and personal contact by uniformed employees.

IV. Management of Problem Bears

L. General

Despite all best intentions and efforts of park management a few impressionable wild bears will regress to a "problem bear" status. Some of these individuals may become bold enough to cause property damage and endanger human life. Since one cannot verbally reason with a bear, physical removal is usually the only recourse.

A "semi-wild" or "problem bear" can be defined as any individual (black or grizzly) which, by habit or temperament, displays atypical "wild bear" behavior in the presence of humans. Such behavior may range from complete indifference to people and open aggressiveness during daylight hours, to infrequent night-time forays through the camp simply out of curiosity or to raid garbage cans or camper food caches while the camp sleeps. The latter individual is one probably not far removed from a "wild bear" status, and one which may or may not develop into a bold daylight problem.

A wild bear will not, by choice, allow itself to come anywhere near humans, their shelters, or their other conveniences.

2. Bear Management Responsibilities

The Washington Department of Game is responsible for the management of public bear hunting and harvest in the Ross Lake and Lake Chelan National Recreation Areas. Hunting seasons and harvest limits are set each year by the Washington Game Commission. When at all feasible (generally at all times except in emergency situations) the District Managers or the Superintendent will consult with Game Department personnel at either Mount Vernon (206/424-1177) or Wenatchee (509/663-8139) before authorizing bears for destruction. At time of such consultation, agreement should be made regarding disposition of the carcass.

The National Park Service is responsible for management of bear habitat and the removal of individual problem bears which are threatening visitor safety and property. Game department personnel may wish to assist in trapping, tagging and relocation operations. If so assisting, they should work with the District Manager, or his designated representative, rather than independently, and be in uniform if working around the public.

Bear problems on private lands should be referred to the Washington Game Department or the county sheriff's office. They may request assistance from the National Park Service, particularly if they do not have personnel, traps, etc., available to handle the situation.

The park superintendent is generally responsible for the overall conduct of the bear management program. He (or the acting superintendent) must give approval before a bear is destroyed, except in emergency situations when immediate action is necessary to prevent human injury.

District managers are responsible for the conduct of the bear management plan in their respective areas. This includes preventative measures (refer to Sec. III, Prevention Guidelines), the reporting of bear incidents to the superintendent, and the capture, removal and relocation of problem animals. Also, as the superintendent's representative, the district managers may close certain areas for reasons of public safety.

The research biologist is responsible for the Annual Bear Management Report, writing and modifying the bear management plan, providing technical assistance and training to district personnel, and in conducting special trapping and marking research programs.

3. Reporting Bear-Related Incidents

District managers and their permanent and seasonal staffs are responsible for documenting bear incidents on the proper forms within 3 days after the incident (immediately if personal injury is involved) and forwarding these reports to the Superintendent. A personal injury should be reported at once by telephone. The following forms will be used:

A. Form DI-134, Supervisor's Report of Accident/ Incident

To be used only when a person is injured by a bear. Prepare one report with one copy to be sent to the Superintendent immediately.

B. NOCA Form PT-10, Individual Bear Incident Report

Prepare one copy each for district manager and superintendent to cover any management action taken against a problem bear, and to document human injury and property damage.

C. Form 10-343, Case Incident Record

To be used for reporting bear molestings and bearcaused damage. Prepare one report and sned one copy to the Superintendent within 10 days.

D. Form 10-344, Supplementary Case/Incident Report

To be used for follow-up investigations of serious bear-related incidents including all bear molestings and significant property damage. Prepare one report and send one copy to the Superintendent within 10 days.

4. Control of Problem Animals

A. Backcountry Areas

Backcountry areas are those not reached by a maintained road to an outside road network.

Problem black bears will be handled by the following procedures by order of preference:

- (1) Temporary closure of camp and/or hazing of the bear.
- (2) If feasible live trapping and/or drug immobilization with helicopter relocation.
- (3) Destruction and proper disposal of carcass. Only if (2) is not feasible and the bear is judged to be dangerous and capable of inflicting bodily injury.

Problem grizzly bears will be handled by the following procedures in order of preference:

- (1) Temporary closure of camps and trails and/or hazing of the bear.
- (2) Live trapping and/or capture by immobilizing drugs and relocation by helicopter transport.

(3) Destruction <u>only</u> if bear is extremely dangerous (i.e. animal is actively harassing or attacking a person or persons) and such destruction is deemed necessary to prevent human death or injury.

B. Frontcountry Areas

Frontcountry areas are those human-use areas reached by a maintained road leading to an outside road network.

Any bear venturing into a visitor or administrative-use area, while the area is occupied by people, will be subject to removal. Humans in the area may also be subject to removal if conditions warrant. Methods to be followed in order of preference are as follows:

- (1) Remove all enticements to the animal. This means maintaining clean camps free of attracting odors, garbage, and accessible camper's food supplies. Hopefully the bear(s) will wander away voluntarily.
- (2) Hazing tactics as time permits the bear(s) should be chased and harassed from the area.
- (3) Close the area to visitor use if during the off-season or if only a few people are using it. Close only if alternate camping areas are available for use by the displaced campers.
- (4) Capture the bear with a standard culverttype trap and relocate. Relocation site should be approved by the land managing agency involved.
- (5) Capture the bear with immobilizing drugs if the animal will not enter the live trap. Transport and relocate as in (4) above.

(6) If (1) thru (5) methods do not work, then at the direction of the superintendent and district manager either [1] close the area regardless of the time of year and degree of use, or [2] destroy the bear(s). Every effort must be made to avoid the necessity for such destruction. For instance, an individual, judged by competent observers, to not be a hazard to people might be tolerated for a longer period of time while further attempts at live-capture continue.

C. Stehekin Valley

The Stehekin Valley is a unique combination of front country and backcountry. Most past bear problems here have been solved by legal hunting in the recreation area or by illegal shooting or poisoning by local inhabitants of private lands. All such solutions have been at the expense of the bear and indone respect deprive visitors of the opportunity to observe free-ranging wild bears in the valley.

Problem black bears will be handled by the following suggested procedures by order of preference:

- (1) Remove all enticements to the bears. This means maintaining clean camps free of attracting odors, garbage, and accessible camper's food supplies. Obtain the assistance of local inhabitants in removing bear attractants from their property.
- (2) Hazing tactics as time permits, the bear(s) should be chased and harassed from the area.
- (3) Close the area (if NPS owned) to visitor use and direct campers or picnickers to alternate sites.
- (4) Capture the bear with live trap or immobilizing drug, helicopter transport to a remote area and release.

(5) If bear cannot be captured alive, or if helicopter use is not possible, then either close the area regardless of degree of visitor use or destroy the bear.

5. Suggested Criteria Authorizing Specific Management Action

Once a bear has been identified as a "problem" animal, then it can be handled (or attempted to be handled) in one of four ways depending on the actions displayed by the individual bear. These are only suggested guidelines as the field ranger or technician must be free to make his own decision with help from his supervisor and district manager.

"Specific management action" refers to available methods or techniques to employ against individual nuisance bears. A nuisance or "problem bear" has been defined on page 4.

Basic management actions consist of the following:

- (1) Hazing or harassment; (2) Capture and release;
- (3) Capture and destruction; and (4) Destruction of free-ranging animal.

Authorizing criteria follows:

(1) Hazing or Harassment

Any bear entering an occupied public-use area for the first time should be chased away, if possible, by use of loud sounds, thrown rocks, chasing, etc. Field people should need no authorization from supervisors.

(2) Capture and Release

Any bear habitually entering or hanging around occupied public-use areas, and one that cannot be hazed away, should be captured and released at a distant site if a decision is made not to close the area to public use.

To qualify for capture and release a bear must <u>not</u> have developed particularly destructive or dangerous habits or be a habitual returnee. This is still a potentially wild bear.

(3) Capture and Destruction

A bear so qualifying must exhibit particularly agressive behavior which has resulted in significant property damage and which could easily lead to or has already resulted in human injury. A bear returning after two capture(s) and release(s) also qualifies. This is the habitual returnee or the occasional aggressive, dangerous animal which management does not want to return to the original site if released.

(4) Destruction of Free-Ranging Animal

To qualify for this treatment, a bear must be of the same type as outlined in (3) above, and in addition cannot be captured by live-trapping or drug immobilization after a reasonable effort to do so. A bear attacking or threatening to attack a person or persons would also be subject to immediate destruction. Generally firearms would be used to kill free-ranging bears. The close-proximity of people may necessitate maneuvering the animal to a better location.

In certain situations it may be necessary to effect destruction by drug overdose. Noise and visitor safety would be factors to consider in the use of drugs in lieu of firearms.

V. Guidelines Regarding Capture, Marking, Relocation, Release, and Carcass Disposal

 Capture of live bears can be accomplished by culvert trap, by foot snare, by use of immobilizing drugs, and by rope noose.

A. Culvert Trap

The culvert-type trap is the time-honored method of capture of bears. The trap is baited with whole

fish, fish entrails, canned salmon or other tasty, odor-producing substances. The bait should be firmly tied to the bait hook. Sometimes, spreading a trail of bait from outside the trap to the bait hook will lead a reluctant bear to the door release hook.

Bear traps should be placed in areas away from public view but still in the general area frequented by the bear. Culvert traps are potentially dangerous and can inflict serious injury to humans playing around with the mechanism. Also, trapped bears can reach out of some traps (with wide-spaced bars) to injure curious visitors. For these reasons, conspicuous warning signs must be placed on each side of the trap. Large plywood signs with red lettering on a white background are effective. It also might be possible to rope off the area around the trap. Chance of visitor injury might also be lessened by operating the trap only at night.

Traps should be checked as often as possible to keep people away and ascertain whether or not a bear is inside. A minimum of once-a-day is suggested.

Once trapped the bear should not be held more than 24 hours before disposition. A shorter term is preferable. The trap should be kept in a cool shaded area and drinking water supplied to the bear if it is necessary to hold the animal for more than a few hours. If possible move the trap and occupant to a ranger station or other more secluded area away from curious visitors if release cannot be made within a reasonable time.

A sow with cubs-of-the-year should not be removed from the site of capture without the cubs. This will only hasten her return. If at all possible the cubs should also be captured (not an easy task) and released with the mother.

B. Foot Snare

The use of Aldrich-type wire snares can be effective in areas where culvert type traps cannot be used, or in situations where the bear will not enter the culvert trap.

However, this capture method is specialized and time consuming, therefore can usually only be justified for research (capture, immobilization by drug, tagging, biological examination, etc.) or for the capture of particularly valuable and/or dangerous individuals such as grizzlies in remote areas.

C. Immobilizing Drugs

Drug injection from a distance can be useful in the capture of free-ranging trap-shy bears; for destroying bears with drug overdose in situations where firearms cannot be used; and for immobilizing trapped animals for tagging, biological examination, release from a foot snare, etc.

This technique requires a considerable amount of specialized equipment, materials, time and training. Even then the technique is often quite unreliable due to so many variables, many of which the investigator cannot control.

Unless the bear is to be tagged and released at the site of capture (as in research study) drug-immobilized bears must be quickly placed in a culvert trap or some similar confining container before the drug wears off. Otherwise there is no point in using the drug in the first place.

If a trap is not available, it may be possible to transport small immobilized bears for short distances in a pick-up truck. This procedure may someday be more applicable with the advent of the use of drugs other than Succinylcholine Chloride. Whenever possible, the use of drugs should be avoided. An animal suddenly hit with a massive drug dosage goes through a very traumatic psychological and physiological experience which may adversely affect its future behavior, if it even survives.

Only employees who have taken part in annual training programs in the use of immobilizing drugs should be allowed to use this technique in bear control.

Details regarding the use of specific drugs, antidotes, projectile equipment, and post-immobilization treatment will be covered during training sessions.

One final note regarding care of immobilized animals. A drugged bear in a trap should be held until the drug wears off before release. During this period; the observer should remain quiet and out of sight and smell of the victim in order to allow a relaxed recovery period. Bears released before complete recovery can be seriously injured by falling from cliffs or into lakes and rivers, or from trees after climbing a considerable distance.

D. Rope Noose

The rope noose can sometimes be used to capture cubs late in the spring or early summer before they reach a more unmanageable size. Cubs taking refuge in low trees can sometimes be roped and lowered to the ground if one is lucky.

2. Marking

It is desirable to be able to recognize problem bears in case they return to visitor-use areas. Where few problem bears are involved, such as in the Cascades, individuals can most often be identified by natural markings and color, or by habits, or accompanying young (in the case of females).

It may be sometimes necessary to place unnatural marks on the animal for means of identification, in which case spray paint or daubed paint may constitute a temporary mark. Paint can be applied while the bear is in the trap but a better job can be done while the animal is under the effects of a drug. However, it is strongly recommended that no bear be drug-immobilized simply to mark with paint or bleach.

Free-ranging bears can be marked with a light-colored dye or bleach applied with a special marking projectile syringe fired from the standard Palmer-type Cap-Chur gun.

Aluminum or plastic ear tags, with or without plastic streamers, form more permanent markings, but the animal must be drugged or otherwise restrained before such tags can be applied. It is recommended that ear tags or other similar methods of marking not be used except in the case of an approved management-oriented research study or as requested by the Washington Game Department.

3. Relocation and Release

Relocation and release sites should be decided upon in advance. Bears should not be released on public lands outside the Park Complex without prior agreement with the land management agency. Problem bears must not be released on privately-owned lands or within five miles of occupied private land, developed campgrounds, backcountry camps, towns, etc., as they may tend to move into these areas to renew their raids.

Bears should be released as quietly and quickly as possible and out of public view, preferably on a side road or other secluded spot. Most black bears will cause no trouble upon release. However, for safety, the individual(s) releasing the bear should be armed and, if possible, two people should make up the release party.

4. Carcass Disposal

It is inevitable that an occasional bear will die from drug effects or it will be necessary to destroy a particular problem individual by drug overdose or conventional firearms.

The park or game department biologist may want to examine the carcass before disposal. Check with park headquarters and the game department before disposal.

Carcasses in front country areas should be incinerated if facilities are available. Otherwise disposal shall be by burial in approved locations well away from lake shores, streams, wells, or any public-use area. Under no circumstance will a carcass be tossed over a cliff or otherwise left lying on top of the ground.

Carcasses in backcountry areas should be buried or preferably hauled out by helicopter, if feasible. If soil depth is inadequate, the carcass might be covered by talus rock piled on top to form a mound. Body parts (claws, feet, hide, skull, etc.) cannot be kept for personal use except upon approval by the superintendent.

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

North Cascades National Park Sedro Woolley, Washington 98284

		Check one:
		[] Molesting [] Damage [] Injury
	INDIVIDUAL BEAR INCIDENT	REPORT
•	. District:	, Date:
•	Person concerned:	
•	. Address: (street) (town)	(state) (zip)
•	Species of bear couring incidents	
	a. Description:	
	b. Adult [] Yearling [] Cub []	
•	. Time of incident - specify date and hour:	
	. Place of incident - give exact location, inc	luding campsite No. and
	loop:	
•		в (5)
	a. Nature of injury:	
	1 11	
	c. Was a Form DI-134 prepared? Yes []	No []
•	. If property damage, give:	
	a. A brief description, including dollar va	lue:
	. Describe molesting incident:	

(over)

10.	a.	Was h	ear being	fed from	hand?	Yes		No	[]			
	b.	Was f	Food being	thrown to	bear?	Yes	[].	No	[]			
	c.	Was food stored inside damaged tent, car, or trailer?			amaged	Yes	[]	No	[]			
	d.	Descr	ribe clean	liness of	campsite:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	and the second second					

11.	Acti	ion ta	iken:								3	
	a.	Bear Bear	trap set: captured: immobilize released:	Time: ed: Locat	ion:				date:			
	b.	Bear	destroyed	Location	n:							
		Circu	umstances:									
		Carca	ass Location									
	c.	Other	action:		`							
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Superintendent