

MEMORANDUM - August 17, 1982

To: Members of the Interagency Grizzly Bear Steering Committee
From: Chairman, Interagency Grizzly Bear Steering Committee *Rob Wauer*
Subject: Status of Grizzly Bears within the Greater Yellowstone Ecosystem

Issue: Evidence persists that the population of grizzly bears within the greater Yellowstone ecosystem has seriously declined in recent years. Unless some change occurs to reduce the grizzly's mortality rate soon, the probability of retaining this wildland species in Yellowstone National Park is minimal.

Background: The abundance and distribution of grizzly bears within the coterminous 48 states has declined in the past 280 years from 50,000 occupying the entire area west of the Mississippi River to fewer than 1,000 bears occurring in only six isolated places. By the 1960s, only two of those places had retained viable populations, the Yellowstone ecosystem and the northern continental divide ecosystem.

The management of grizzly bears within the Yellowstone ecosystem has evoked a great deal of controversy during the past 25 years:

1. In 1969, based upon several years of research by the Craigheads and NPS scientists and a review of their data by the NPS Science Advisory Board, the Service established a policy of closing garbage dumps in Yellowstone National Park and encouraging a population of "free-ranging" grizzlies.
2. In 1973, a six agency (NPS, FWS, FS, and states of Idaho, Montana and Wyoming) Interagency Grizzly Bear Study Team (IGBST) was initiated to determine (a) grizzly bear status and trends, (b) habitat use, and (c) relationship of land management activities to the behavior and welfare of the bear population. An Interagency Steering Committee, chaired by the NPS and consisting of representatives from each of the six agencies, was chartered to guide the IGBST.
3. In 1974, a committee of the National Academy of Science completed a review of the status of the Yellowstone grizzly bear population and concluded that the information available was too incomplete to pass judgement on the status of the grizzly bear population or the effectiveness of the NPS management program.
4. In 1975, the grizzly bear population south of the Canadian border was listed as "threatened" by the U.S. Fish and Wildlife Service.
5. In 1979, five National Forests and two National Parks completed joint guidelines for managing grizzly bears within the greater Yellowstone ecosystem; this document is updated annually.
6. In 1980, the Steering Committee chartered a comprehensive Technical Peer Review Panel to examine IGBST research results to date. The resultant report (February 1981) stated that the habitat work had progressed well and received considerable praise, that the management needs appeared to be reasonably well understood, but the status and trend information required considerably more attention. It recommended continuation of the field study until 1988, with an intensified two-year trapping and marking (radiotelemetry) effort in the field seasons of 1983 and 1984 designed to gather sufficient population data that would complete the database required for grizzly bear status and trend analysis.

7. At the March 1981 Steering Committee Meeting, the Technical Review recommendations were reviewed and resulted in the following determinations: (a) continue the study through 1988, (b) support a special initiative in FY 1983 and FY 1984 to radio-collar as many grizzly sows and young as possible so that a statistically reliable number of bears could then be tracked for three or four years to obtain missing information on bear mortality rates by age classes, and (c) increase the size of the Steering Committee by adding the Recovery Plan Coordinator and management representatives from NPS, FWS and FS.

8. In spring 1982, the Grizzly Bear Recovery Plan was approved; this document states that an all out concerted effort must be taken if the status of the Yellowstone grizzly bear is to improve.

9. In summer 1982, the IGBST analysis of the 1981 study results was completed and revealed that the most recent population estimate had dropped to 196 individuals, including as few as 30 adult females. L.L. Eberhardt (personal communications, July 25, 1982) reviewed this latest report and stated, "The presently available evidence indicates that the Yellowstone grizzly population most likely cannot sustain its present level unless adult female survival rates improve."

Discussion: The survival of grizzly bears within the greater Yellowstone ecosystem is dependent upon reversing the current population decline. This can only be accomplished by eliminating or severely restricting two principle causes of mortality of Yellowstone's grizzly bears: (A) illegal killing by outfitters, sheepmen, hunters, poachers, and others, and (B) habitat destruction or modification relating to human needs for resources and land development.

(A) In a statement to the Interior Sub-committee on Bear Management at Glacier National Park (August 1981), Joe Cutter (resident of West Yellowstone) said:

"Right this minute, within two hundred miles of Yellowstone, there are at least 500 illegal grizzly claws being offered for sale to those folks whose vogue is festooning their person with these gee-gaws. --They were obtained by poachers working around the Park's borders, and in one case, actually heisting a live bear from inside the Park. --In the past 30 days alone, I personally, have reported to the U. S. Fish and Wildlife Service Enforcement Division, either in face to face meetings, by telephone, or through contacts, 12 flagrant violations. --For example: 3 bear carcasses, one of which was a large grizzly, hanging in a frozen meat locker at a restaurant less than 20 miles from Yellowstone's west gate. a trayfull of approximately 30 grizzly claws on sale in the showcase of an Ennis, Montana, sporting goods store. an Indian jewelry dealer in Bozeman, Montana, who purchased two sets of grizzly claws from an Idaho/Targhee National Forest sheepman. a man in the vicinity of Quake Lake who is offering not only an impressive selection of grizzly claws but two dozen eagle talons and an assortment of eagle feathers. an individual in Cooke City, Montana, who was offering three grizzly hides and telling prospective customers that he could get anything they wanted in grizzly parts."

A 1981 investigation of these and other reports by "undercover" FWS officers, only caused the sales and grizzly parts and related activities to move underground.

More recent (summer 1982) factors effecting the grizzly bear population within the Yellowstone ecosystem include:

1. Two male grizzlies were deliberately killed by a hunter at a black bear bait station in Wyoming. The shooter was caught, went to trial, fined \$1400, and released.
2. Two grizzlies (1 male and 1 female) were shot by black bear hunters in Wyoming.
3. Montana State trapped three grizzlies near Cooke City; two females were released unharmed in British Columbia and one male was killed (all were removed from the Yellowstone population).
4. A young radio-collared sow was recently found dead near where it had gone to den for the winter.
5. A young radio-collared male apparently starved in his den during the winter.

These data suggest that the estimated 1981 population of 196 grizzlies is already down to 187 (this does not take into account any unknown mortality).

(B) Habitat destruction and modification has occurred throughout the greater Yellowstone ecosystem in recent years, and additional significant threats to the habitat continue to pose potential negative impacts. Grizzly bear habitat has deteriorated both within and outside of the park. Human use of the land is gradually reducing the totality of available wildland space. Any human use of the land that had previously provided feeding, resting, denning, and travel space during some parts of the grizzly's existence is likely to add to the accumulative impacts upon this species in one way or another. Grizzly bear habitat is being nickle-and-dimed out of existence.

Yellowstone's buffer zones have been most seriously eroded. New and increasing developments surround the national park. And recent energy exploration has added to this picture. Potential geothermal developments at Island Park and oil and gas leasing in the Gallatin National Forest and Washakie Wilderness may all contribute to the declining status of the Yellowstone grizzly bear.

During the period of 1970 to 1973, modeling done by the Craigheads and analysis completed by the National Academy of Science Committee provided population estimates that ranged between 254 and 306 grizzly bears for the greater Yellowstone ecosystem. The IGBST is "reasonably certain" that today's population is less than 200 individual grizzlies.

Unless some positive management actions are taken soon to limit grizzly bear mortality, the population may reach a point from which it cannot recover.

Solution: We no longer have the luxury of time to research the remaining parts of the puzzle. The Yellowstone grizzly bear picture is presently sufficiently clear enough! Any additional delays in mitigation, actions that the bear management community has known it must take for several years, will likely result in the loss of grizzly bears from the greater Yellowstone ecosystem. It is imperative that highest priority be given to eliminating grizzly bear mortality. Only immediate and broadscale protection can save the grizzly. Increased protection efforts must be a united one by all of the pertinent land managers. Without it we will only be documenting the demise of the grizzly bear within the Yellowstone ecosystem.

To reach this end, I recommend the following dual program:

A. The greatest impact on the Yellowstone grizzly bear population is illegal killing by outfitters, sheepmen, poachers, and others. This impact may be greatly reduced or stopped altogether by:

- 1) Introduction of new legislation that would enforce stronger civil penalty for killing grizzlies and other threatened/endangered species, and requirement that all these cases must be heard in a federal court. Recent legislation increasing penalties for poaching moose and sheep in Idaho have greatly reduced moose kills.
- 2) Increasing U.S. Fish and Wildlife Service investigative capability to address illegal activities within the greater Yellowstone area to an extent that illegal killings will be greatly reduced.
- 3) Increasing NPS and FS protection activities in the Yellowstone ecosystem backcountry; this would entail increasing personnel and support funds to permit these agencies to properly carry out resource protection programs.
- 4) Developing a habitat enhancement plan for the Yellowstone grizzly population that would entail special assistance to the grizzlies during periods of the year when they are most stressed and/or vulnerable to human impacts; consider limiting of human access to grizzly habitats and supplementing food during critical periods.

B. It is important that management-oriented research continue. Rather than to go ahead with the special initiative trapping and telemetry program earlier recommended for FY 1983 and FY 1984, the study should proceed with the following revised objectives:

- 1) Develop a monitoring system which can be used and applied by management agencies on an annual basis to develop data to assess the trend of the grizzly bear population in the greater Yellowstone ecosystem, and to determine confidence intervals that can be applied to this monitoring system.
- 2) Investigate methods to facilitate the habitat enhancement program and to monitor the effects of this program.
- 3) Develop a method to quantify the effects of human activities on grizzly bear behavior and habitat use that will lead to reduced confrontations between humans and bears.

Funds to support objectives 1 and 2 are already available through the ongoing IGBST program. This change would increase flight time by fixed-wing aircraft to monitor grizzly bears relative to habitat enhancement and to determine the success rates of transplanted grizzlies. IGBST would assist the Park Service and states in trapping, marking and transplanting activities.

Objective 3 will require an additional (approximately) \$55,000 annually for two years. Glacier National Park would be the most logical location for this study.

Summary: This departure from the earlier recommendations of the Steering Committee is recommended because of the critical nature of Yellowstone grizzly bears. This revised emphasis must begin immediately.