

DEPARTMENT of the INTERIOR

FISH AND WILDLIFE SERVICE

news release

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PRELIMINARY GRIZZLY "CRITICAL HABITAT" PROPOSAL IN THE WORKS

A proposal to designate critical habitat for the grizzly bear in certain parts of Idaho, Montana, Washington, and Wyoming is currently being prepared, Nathaniel P. Reed, Assistant Secretary of the Interior, announced today.

Designation of areas as critical habitat for this species--officially listed as threatened--would not result in a "steel cage" being placed around them, Reed said. Many of the current land uses in the areas would not be affected by the proposal.

Private and State activities where no Federal funding or authorization are involved would not be interfered with by the critical habitat determination. For example, hunting of game animals and other State or privately funded and authorized recreational activities would not be affected.

Critical habitat determinations are made by the Department of the Interior in accordance with the Endangered Species Act of 1973. Section 7 of that Act requires all Federal agencies to ensure that none of their actions jeopardizes the existence of endangered or threatened species or results in destruction or adverse modification of habitat critical to their survival.

The critical habitat proposal for this threatened species will include land areas which are essential to its survival and recovery. Reed emphasized that this is a proposal, and may be subject to change as additional biological evidence is gathered.

The proposal is expected to be published in the Federal Register sometime in August. This will notify the public of the specific areas under consideration and will invite public comments and information during a 90-day comment period. Public hearings will also be held in the affected States at places and times to be announced later in the Federal Register and in news releases. The Governors and appropriate agencies of these States will also be asked to advise the Department concerning this proposal.

Reed stated that he knew that the vast majority of Americans supported the concept of protecting the critical habitat that the grizzly bear must have if it is to survive in the "lower 48" States.

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INT: 6060-76

Congress of the United States
House of Representatives
Washington, D.C. 20515

COMMITTEES:
INTERIOR AND INSULAR AFFAIRS

PUBLIC WORKS AND
TRANSPORTATION

JOINT COMMITTEE ON ATOMIC
ENERGY

CHAIRMAN
SUBCOMMITTEE ON AGREEMENTS FOR
COOPERATION

July 2, 1976

Mr. Frank C. Craighead, Jr.
Moose, Wyoming 83012

Dear Frank:

I thank you very much for the excellent letter of June 26 and agree very much with what you say.

Good luck to you on the Alaska work and when you come back I will indeed rely upon you for some type of assistance in regard to the situation on the Grizzly Bear. Just how that assistance can take shape now, Frank, I don't know, but I suspect that we may very well have to wait until the elections are over now before we can sit down and do some truly objective and meaningful work and make a contribution to the critical habitat analysis. That's what I would really like very much, and I suspect just out of the sheer nature of the beat called politics that this thing will have to wait until after November 2.

Enjoy a good summer, old friend. My best to all of you.

Yours

Teno

TR/mmc

Grizzly habitat not 'cage'

WASHINGTON — An assistant secretary of the Interior Dept. says designation of critical habitat for grizzly bears will not result in a "steel cage" being placed around the areas.

The announcement by Nathaniel P. Reed was apparently in response to the public information meeting held in Cody recently which drew game and fish officials plus some 200 persons. Comments from outfitters and outdoorsmen were that if the federal government designated certain parts of Idaho, Montana, Washington and Wyoming as "critical habitat" for the threatened species the government would shut off all other uses including hunting and backpacking, to name a few.

In a prepared release by the U.S. Fish and Wildlife Service, Reed said private and state activities where no federal funding or authorization are involved would not be interfered with by the critical habitat determination.

He said that, for example, hunting of game animals and other state or privately funded and authorized recreational activities would not be affected.

Reed also said that the proposed action is a "proposal" and may be subject to change as additional biological evidence is gathered.

Casper S-T July 31 1976

Jenner world

MONTREAL (UPI) — Bruce Jenner, who prepared for this gold medal day by running 10-miles every day for the last four years, won the Olympic decathlon Friday with a world record score and laid claim to the title as the "World's Greatest Athlete."

The handsome, 26-year-old Californian jumped into the lead with a 15-foot, 9-inch, pole vault and then closed out the competition with a 224-9-1/2 javelin throw and finished second in his heat of the 1,500meters with a time of 4:12.61 to conclude the two-day, 10-event competition with 8,618 points.

West Germany's 23-year-old

Guido Kratschmer finished second with a total of 8,411 points, while defending champion Nikolai Avilov of Russia took the bronze medal at 8,369 points.

After finishing out of the running in the 1972 Olympics at Munich, Jenner spent all the time since then in a concentrated effort to win the gold medal here, and he saw all the hard work pay off in an easy victory.

Before the competition began, everyone thought the decathlon would end up as a two-man fight between Jenner and Avilov.

It was just that for seven

GRIZZLY BEAR MANAGEMENT HEARING

NOVEMBER 4, 1976

CODY, WYOMING

TESTIMONY OF DR. JOHN J. CRAIGHEAD

GRIZZLY BEAR MANAGEMENT HEARING

November 4, 1976

Cody, Wyoming

Testimony of Dr. John J. Craighead

I am Dr. John Craighead, Leader of the Montana Cooperative Wildlife Research Unit and Professor of Forestry and Zoology at the University of Montana, Missoula, Montana. I have been engaged in wildlife research and management for over 40 years, and I have directed the research of graduate students at the University of Montana for over 26 years. My brother, Dr. Frank C. Craighead, Jr., President of the Environmental Research Institute, and myself were the first to conduct intensive research on the grizzly bear in order to formulate better management.

We began an in-depth study of the grizzly bear in Yellowstone National Park and vicinity in 1959. This research was prematurely and abruptly terminated in 1970. Between 1959 and 1968 there were relatively few problems with grizzly bears in the Yellowstone ecosystem. Bear - man encounters and bear visits to campgrounds and developed areas were of no great concern. (See Reference 1) Problems began to develop in 1968 with the rapid phase-out of the open pit

garbage dumps and a change in management of the grizzly bear within Yellowstone National Park. Many of these problems still persist.

In the state of Montana where a large grizzly bear population exists, no comprehensive ^{field} study of the grizzly bear was inniated until 1974. However, mortality of grizzlies was recorded annually by the state Fish and Game Department. Prior to that time there was an unlimited harvest of grizzly bears. The effect of this on the population was essentially unknown, but there was concern that the population might be declining. (See Reference 2) In any event there were relatively few problems relating to the grizzly bear throughout its range in the West during the decade 1958 - 1968. But, since that time, some very serious problems have developed which need to be clarified and rectified. These problems relate to grizzly bear habitat, to bear biology, to bear - man conflicts and to agency and jurisdictional disputes. The latter all too frequently tend to obscure the real issues.

I think most of us at this hearing would admit that the grizzly is in trouble. It needs understanding, space and isolation. We can assure these only if we place the welfare of the grizzly above jurisdictional considerations.

The Endangered Species Act, as you all know, prohibits federal agencies from jeopardizing a threatened or endangered species by disturbing or destroying critical habitat. This is a curb on federal authorized and funded actions carried out by federal agencies on the public domain. It can affect state actions and the private sector as well. That is one reason for this hearing. Critical habitat has not yet been scientifically defined for the grizzly bear, but progress is being made. Eventually, it will be necessary to describe, analyze and map prime wilderness habitat so that critical habitat subject to land use modification can be more precisely defined and evaluated. Many of the problems associated with the grizzly bear are occurring in occupied habitat subject to land-use modifications. Therefore, I believe that in delimiting critical habitat we should initially classify as critical: (1) land in wilderness status that currently support viable grizzly bear populations. This is essential habitat, and all such wilderness should be so designated; (2) land not designated as wilderness but occupied by grizzly bears and subject to high priority land-use conflicts; (3) wilderness or de facto wilderness no longer supporting viable grizzly bear populations, yet having the habitat potential to do so.

In the preliminary stages, critical habitat can be broadly defined as it has been done by the endangered species section of the U. S. Fish and Wildlife Service. Since the delineation of habitat as critical places restrictions on the agency managing the habitat and indirectly on state agencies managing the species, it is extremely important that in any final delineation, the broad habitat classification⁴ and delineations ~~should~~ be intensively studied on the ground and ecologically described; then modified on the basis of more precise information. Unless this is done, jurisdictional conflicts could significantly interfere with the preservation and management of the species.

The grizzly bear must have adequate wilderness habitat. To be more specific, in the Yellowstone ecosystem, this means approximately 5 million acres as delimited by the Craighead research team after 15 years of study. (See Reference 4) Starting from the SW corner of the boundary west of the Targhee National Forest at Grain elevator, Idaho, NW to a point SW of Island Park; then North to the most westerly extension of Hebgen Lake near Rock Creek; then NE to a point at Beaver Creek, Montana, west of highway 191; NE across highway 191 to a point at the intersection of Park and Sweet Grass counties just NE of the Fourmile Guard Station; then preceding SE across the Custer National Forest to a point by

the Beartooth Plateau north of Lonesome Mountain; then SE to the most eastern point south of Dead Indian Creek, and North of Trout Peak, Wyoming; then South to a point at East Fork Creek east of Shoshone Plateau in the Teton National Forest; preceding SW to a point near Continental Divide at Bliss Creek; West to a point at the east end of Jackson Lake near Jackson Lake Dam in Grand Teton National Forest, then west to point of origin at Grain elevator.

Yellowstone Park itself must be considered especially critical since it serves as a population center for the entire ecosystem. Unless data can be provided by the Yellowstone Interagency Study Team or from other sources documenting non-transient use of a larger area than just described, then, in my opinion, it would be wise at this time to adhere to the boundaries or approximately to those boundaries established by the long-term intensive grizzly bear movement studies of the Craighead team.

A second problem relates to research - the gathering of scientific information on which to base management procedures. Since 1970, there has been a flagrant lack of independent research on the grizzly bear in the Yellowstone ecosystem.

Independent scientists working through free independent institutions have been discouraged from conducting research

within this large ecosystem. This means that all information relating to the status of the grizzly bear in Yellowstone is currently being gathered by biologists affiliated with state or federal organizations or by students financed by state and federal funds. These biologists are working under administrative directives that make it very difficult for them to obtain objective scientific data or to be objective in their data analysis. Yellowstone National Park was the first and is perhaps the finest outdoor wildlife laboratory in the world. Scientific investigation of wildlife was a compelling reason for initially establishing the park. This national park must be opened to free scrutiny and investigation by competent scientists, not constrained by state or federal management authority, if we are going to get precise data and objective studies of the grizzly bear or for any other controversial species.

An interagency study team has been re-established to gather data and determine the status of the grizzly bear population in the Yellowstone ecosystem. Prior to the re-organization of this research team, a committee representing the National Academy of Sciences recommended the team be headed by a scientist from the private sector - preferably paid and answerable to an institution of higher learning. They also

strongly urged that independent researchers be included as members of the research team and that independent research be encouraged and supported within Yellowstone National Park. I wish to submit for the record the specific recommendations made by the National Academy of Sciences committee in regard to this point. Page 41 of The Report of Committee on the Yellowstone Grizzlies. National Academy of Sciences, July 1974.

1. "We recommend that the National Park Service and the U. S. Forest Service pursue a policy of supporting and encouraging independent research on Yellowstone grizzlies. The freedom of scientists to conduct research throughout the Yellowstone ecosystem is imperative if the data essential to successful management of Yellowstone grizzlies are to be obtained; the presence of independent investigators will enhance and invigorate study programs undertaken by land-management agencies."

2. "We recommend that the present interagency research approach be re-evaluated; its close ties to management supervision and management authority impose severe constraints on its effectiveness. We further recommend that coordination of the research effort be assumed by the nongovernmental body described earlier under Management Recommendation No. 1."

3. "We recommend prompt, adequate funding of a comprehensive research project on the Yellowstone grizzly population by qualified independent scientists, using every appropriate technique, including marking of individual bears for identification. The most urgent needs are to obtain reliable data on present population size, trend, and distribution; present reproductive rates by age class; present mortality rates by age class; and effects of social behavior on population regulation. Of these, the single most critical question is whether bear numbers are now increasing, decreasing, or relatively stable. Investigations since 1970 have not provided satisfactory data on these points. Successive annual censuses would provide such information, but unfortunately no adequately precise census method is yet available. It may, then, be more feasible to approach the matter indirectly by assessing recruitment and mortality through careful analysis of population structure."

The interagency research team is not a free body of scientists. It is state and federally controlled, and it has studiously ignored the published findings and research methods of the displaced Craighead research team. The deliberate take-over of an independent research effort and the "erasing" of previous scientific work and findings disregards scientific procedure and ethics and makes it impossible for the investigators

to objectively evaluate their current data. Such behavior degrades the wildlife profession and is not in the interest of the resource, the American people or the truth. I submit to you a prime example of this type of behavior. Page 1 of the Annual Report, Interagency Grizzly Bear Study 1974 and page 1 of Yellowstone Grizzly Bear Investigations, Annual Report of the Interagency Study Team, 1975. Msc. Report No. 9.

Both reports state, "Basic research on grizzlies was carried on for several years within Yellowstone Park proper (Craighead, et al 1974)." No other publication or reports of the Craighead research team are referenced, yet the team has produced over 26 publications (See Reference 3) and numerous reports all having a very direct scientific bearing on the status of the grizzly bear in the Yellowstone ecosystem and on the investigative work of the Yellowstone Interagency Grizzly Bear Study Team. Also, the publication that was cited by the interagency team documents 15 years of research on the Yellowstone grizzly bear population by the Craigheads and can in no way be construed as representing only "several years" of research. This can only be interpreted as deliberate misrepresentation by the interagency team. Appended is a list of publications by the Craighead team (reference 3) and a copy

of "A Population Analysis of the Yellowstone Grizzly Bears,"
1974, John J. Craighead, Joel R. Varney and Frank C. Craighead,
Jr. Bulletin No. 40, Montana Forest and Conservation Experiment
Station, School of Forestry, University of Montana. I request
that both these documents be made a permanent part of the record
of this hearing.

A third problem which arises directly from the one I
have just mentioned is that very little new solid scientific
data on the size and structure of the grizzly bear population,
its present reproductive rates, sex ratios by age classes and
other important biological parameters have been obtained after
four years of effort. The NAS committee set this as the
major objective of the interagency team. One reason for the
poor results is the researchers have been sharply limited
by administrative directive in the research techniques they
could utilize. The results of the research indicate that
either their techniques are too poor to yield the necessary
results or else the decline, which has been shown by the earlier
Craighead researchers to have occurred in the Yellowstone
population, is still a serious problem and the population
has not stabilized.

A fourth problem is that considerable research now being

carried on within the Yellowstone ecosystem is duplicating unnecessarily earlier research work by the Craighead team. For example, a major cause of the current grizzly bear controversy was the abrupt closing of the open pit garbage dumps. The Yellowstone administration advocated abrupt closure, the Craighead's a slow 10-year phasing out. The result was abrupt closure by the NPS in 1970. Yet, now, six years later nine out of ten grizzly bears captured during 1975 by interagency team members and instrumented with radios, were trapped in the Cook City dump which has been kept open and allowed to attract an increasing number of grizzly bears in spite of the NPS mandate closing all the open pit dumps in and out of the park proper. The investigators are attempting to determine the movement, home ranges and denning behavior of grizzly bears that are habituating this dump. This type of work was thoroughly researched by the Craighead team which was the first to develop a radio-tracking system for large mammals and to individually color mark grizzly bears for research purposes. As evidence of this flagrant duplication of effort (after destroying a similar Craighead research effort) I cite the Craighead publications largely being duplicated and refer you to the interagency report where the duplication is recorded but where the Craighead publications are not cited.

1. Craighead, Frank C., Jr. and John J. Craighead 1972 Grizzly bear prehibernation and denning activities as determined by radiotracking. Wildl. Mono. 32. 35 pp.
2. Craighead, Frank C., Jr. 1976 Movement and ranges of grizzly bears (*Ursus arctos horribilis*) as determined by radiotracking. Proc. Third Int. Conf. on Bear Research and Management.
3. See Interagency Report 1975, pages 32 - 43.

I ask, how does the interagency team justify spending tax dollars to document bear movements from the Cook City, Montana, garbage dump when the NPS systematically removed the radios and color markers from bears captured and instrumented earlier by the Craigheads for a similar purpose? How do they justify the wasteful and shameful destruction of one research effort only to re-establish it six years later?

One reason for terminating the Craighead studies was the inference by NPS, never substantiated that color marking and radio tagging influenced bear behavior and that radio-tracking was not in keeping with Park policies. But now it seems this research team has resorted finally to the techniques developed by the Craigheads in order to begin to get information which could lead to better management of the species in Yellowstone. They should, of course, utilize the techniques but for better objectives than duplicating previous work.

The Craighead research showed that the grizzly bear has a very low reproductive rate, a little better than half a cub per adult female per year. (Craighead, John J., and Frank C. Craighead, Jr., 1976 Reproductive cycles and rates in the grizzly bear, Ursus arctos horribilis, of the Yellowstone ecosystem. Proc. Third Int. Conf. on Bear Research and Management.) It also showed that for a period of time in the Yellowstone ecosystem there were severe man-caused mortalities and that when these mortalities were high the grizzly bear population declined rapidly. Essentially, the mortality rate exceeded the birth rate and the population level dropped alarmingly. There has been no conclusive scientific evidence after nearly 8 years of research on the part of NPS biologists or the interagency team to show that the reproductive rate of the grizzly bear has increased or that the population is on the increase. On the contrary, the evidence submitted by the team in their 1973, 1974, and 1975 reports can very easily be interpreted as evidence of a continuing decline in the size of the Yellowstone grizzly bear population. Yet, they do not even suggest that this could be occurring. Clearly, the objectives and research of the Interagency Study Team should be investigated.

Another problem has been the designation of the grizzly bear as a threatened species. When this was accomplished, due largely to the finding of the Craighead team, one would expect concerted action on the part of state and federal agencies to immediately close ranks and work in the interests of the grizzly bear. Unfortunately, this has not yet occurred to the degree we should expect. Territoriality of a very severe nature exists between the federal and state resource agencies. This is affecting management decisions as well as research relating both to grizzly bear populations and to the animals habitat. When the grizzly bear was designated an endangered species under the "Endangered Species Act" of 1973, great emphasis was placed on encroachment, modification and destruction of the bear's habitat, and this has been cited as a major cause for the decrease in numbers of grizzly bears. Yet, if we look at this critically, it becomes obvious that with close to 10-12 million acres of wilderness or de facto wilderness set aside for the grizzly bear under the Wilderness Act of 1964, we probably have more habitat, ^{specifically} set aside for the grizzly bear than for any other single species. It is true we need to know more about the habitat requirements of the grizzly bear, and we do need to more precisely delimit those areas which must be

managed primarily for the grizzly bear. However, we should not let overemphasis on the critical nature of habitat obscure the fact that the real problem is that the grizzly bear has a low reproductive rate and that high man-caused mortalities can threaten a population. It is my belief that the grizzly bear should be designated as threatened until we have adequate scientific evidence that the Yellowstone and the Northwest Montana populations are on the increase. This is going to take time because the task is difficult and the approach to the problem not sufficiently objective. The population of grizzly bears in either of the large ecosystems could be declining, yet present research methods would not alert us to the danger. Thus, the justification for threatened status.

Now let me briefly summarize why the grizzly bear must remain on the threatened species list and why we must provide it with adequate habitat and more objective research.

First, the population status of the grizzly bear in the Yellowstone ecosystem is either still declining or unknown.

Secondly, the grizzly bear is highly vulnerable due to its aggressive nature which frequently puts it in conflict with man and with his livestock. The grizzly is easily

attracted to bait, making the great bear highly vulnerable to illegal hunting or control. Grizzly bears, as I have indicated, have rather special habitat requirements. They need isolation afforded by large tracts of land that support the wide range of foods they subsist on.

Third, the recovery potential of a grizzly bear population is low because of the bear's low reproductive rate, the vulnerability of the bear to man and the lack of known compensating mechanisms to offset these factors. They need wilderness, and we must consider all of the large wilderness areas and large wilderness parks as essentially critical to the survival of the species. Unchecked, the destruction and modification of habitat, on the peripheries of our large national forests, national parks, and wilderness areas, could eventually further decrease the habitat available to grizzly bears.

Fourth, the grizzly bear has some special attributes which must be considered. Being very large animals that are omnivorous as well as carnivorous, they have high energy requirements. They roam over vast terrain, sometimes as much as 500 to 1000 square miles in seeking their energy requirements. They exploit a wide range of foods including

that provided by man. This frequently brings them into conflict with human beings. They have an extremely strong homing instinct, which means that when they are trapped and transplanted, they rapidly return to the place of capture and thus are difficult to rehabilitate, especially man-conditioned bears feeding regularly in campgrounds. I also suggest that because of this homing instinct, it may be very difficult to transplant grizzly bears from one ecosystem to another and to establish a viable population in once-inhabited or potential habitat. But, the grizzly bear does have the ability to co-exist with man; this is evident from its close, though sometimes tragic, association with humans in our national parks. However, we must remember that the grizzly bear has an evolutionary history of dominance. It was a co-dominant of the North American Indian, and it has a built in habit or behavior pattern of getting the food it seeks. This dominance trait frequently brings it into direct conflict with man, especially in those areas set aside for both the preservation of the species and for public recreation. This direct threat to man is the grizzlies greatest handicap. It can lead to tragic injury or death of park visitors and to litigation against the federal government.

Since 1970 there has been an increasing number of tragic bear-man encounters in Yellowstone and Glacier National Parks. The number of serious incidents occurring during 1976 is alarming. On September 23, 1976, a young woman was fatally mauled by a grizzly in Montana's Glacier National Park. Earlier the same year, two other persons were killed -- one in Alaska and another in Canada, and two were seriously injured in Yellowstone. It is highly unlikely that these are due solely to increased visitor use and, thus, a greater probability of bear-man encounters. It would appear that these may be directly related to current management programs, and certainly there should be objective outside investigation of this possibility. I would suggest that whenever a serious injury or a death occurs from a grizzly bear attack, that outside independent expertise be called upon to help evaluate the incident. This would assure an objective investigation, use of all existing expertise, with greater expectation that these serious problems can be effectively resolved.

Present in-house investigations do not provide the breadth of expertise nor the objectivity so essential to evaluating bear-man attacks. The seriousness of fatal attacks in our national parks is illustrated by the U. S. District

Court of California Decision in Grizzly Bear Case involving the death of Harry Walker. I submit and respectfully request that the Modified Findings of Fact and Conclusions of Law and Order for Judgement in the trial of Walker be included in this testimony. (See Reference 5)

I have only touched on some of the more pressing problems complicating proper management of the grizzly. It is a complex biological, social, and jurisdictional problem; but, it can be solved by unbiased investigations, basic research, public understanding and perhaps most important our state and federal resource agencies must place their responsibility to the resource ahead of interagency power politics.

GRIZZLY BEAR CRITICAL HABITAT HEARING
TESTIMONY OF DR. FRANK C. CRAIGHEAD, JR.

Dec. 14, 1976, St. Anthony, Idaho

I am Dr. Frank C. Craighead, Jr., Senior Research Associate A.S.R.C., State University of New York at Albany and President of the Environmental Research Institute of Moose, Wyoming, a research and educational organization incorporated in 1955. *I am representing myself* My professional field is wildlife ecology and I have been engaged in research and management activities over a period of 40 years. I have with my brother, Dr. John J. Craighead, carried out ten years of very intensive field research on the grizzly bear in the Yellowstone ecosystem and I have been engaged in studies of grizzlies not only in Wyoming, but in Montana and Alaska as well. At the Cody, Wyo. Nov. 4, 1976 hearing on grizzly bear management I submitted written testimony addressed to Senator Gale McGee along with a letter enclosure from former Park Service Ranger Mr. Harry Reynolds, Jr. I hope and expect that this will be a part of the written record of the series of hearings on grizzly bear management. I now wish to further elaborate on this statement.

The Endangered Species Act of 1973 stated that the purposes of this act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened

species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a). In May 1975 the U.S. Department of Interior classified the grizzly bear as a threatened species. Section 7 of the Endangered Species Act states that all federal agencies should insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected states, to be critical. *Sec. 7 This made it mandatory that* ~~In other words,~~ critical habitat ~~must~~ be evaluated and delineated. This mandate has brought about conflict over jurisdiction and disagreement among state and federal agencies involved and it has engendered concern among outfitters, dude ranchers and stockmen whose livelihood depends on forest, park and wilderness lands and resources that may be considered critical habitat. Activities in these areas could conceivably be curtailed by the U.S. Fish and Wildlife Service after consultation as appropriate with the affected states. The public concern over governmental interference and regulation is a very real one. It is particularly relevant in regard to how much habitat will be considered as critical. Fully aware of these concerns I wish to make my statement based on my knowledge acquired from years ⁽¹⁸⁾ of work with the grizzly bear and my career as a biologist. I will

confine my remarks now to the Yellowstone ecosystem.

The Yellowstone grizzly bear ecosystem has been described in a technical paper, "A Population Analysis of the Yellowstone Grizzly bears", 1974, by John J. Craighead, Joel R. Varney and Frank C. Craighead, Jr. The boundaries of this area which roughly comprises 5 million acres are based on sight records, bear kills and on habitat and land use inventories. It is an area currently supporting grizzly bears. The boundaries are as follows:

Starting from the southwest corner of the boundary west of the Targhee National Forest at Grain Elevator, Idaho, NW to a point SW of Island Park; then north to the most westerly extension of Hebgen Lake near Rock Creek; then NE to a point at Beaver Creek, Montana, west of highway 191; NE across highway 191 to a point at the intersection of Park and Sweetgrass counties just NE of the Fourmile Guard Station; then proceeding SE across the Custer National Forest to a point by the Beartooth Plateau north of Lonesome Mountain; then SE to the most eastern point south of Dead Indian Creek, and North of Trout Peak, Wyoming; then South to a point at East Fork Creek east of Shoshone Plateau in the Teton National Forest; proceeding SW to a point near Continental Divide at Bliss Creek; West to a point at the east end of Jackson Lake near Jackson Lake Dam in Grand Teton National Forest, then west to point of origin at Grain Elevator.

Up until 1968, the grizzly bears in this Yellowstone ecosystem were not threatened. However, changes in management policies of the National Park Service drastically reduced the grizzly bear population, and imposed stress upon the population reducing the grizzlies' already low reproductive rate. The Craighead team long range studies of the grizzly bears in this area revealed that the population reached a peak of about 245 grizzlies in 1967 and dropped

to a projected 136 in 1974. Our population figures were based on 41 3-1/2 hour censuses made each year from 1959 through 1970. These were made at five localities throughout Yellowstone National Park. Our data on ranges and movements indicated that there was a single population inhabiting Yellowstone and the surrounding wilderness areas and that the grizzlies moved back and forth between Yellowstone and these peripheral wilderness areas. At that time Yellowstone National Park was the hub of the grizzly population. Our studies also revealed a very low reproductive rate for the grizzly, approximately one cub per adult female every two years. Our best estimate based on scientifically gathered data revealed approximately a 45 percent decline in size of the grizzly bear population by 1974. In the four years 1969-1972 we tallied 151 known grizzly bear deaths in the ecosystem from all causes.

An interagency team that has been attempting to gather demographic data on the grizzly bear in the Yellowstone ecosystem since our research was terminated has come up with very little in the way of hard scientific data and the methodology employed is questionable as to its scientific authenticity. A June 1976 Interagency grizzly bear news letter states (and I quote): "Tabulation of flight data shows that only 36 grizzly bears were seen on observation flights during 1975 compared to 60 in 1973 and 125 in 1974. Hours of air observation were 76, 150 and 180 for 1973, 1974, 1975 respectively." The interagency 1975 report also states: "Four sows with cubs and three sows with yearlings were observed." Various reasons were given for

the low number of sightings, the low cub count and the poor trapping success. According to the May 1976 Wyoming Game and Fish Department Grizzly Bear Progress Report, "only two grizzlies and five black bears were captured after having culvert traps set for 116 trap nights." Also, "There was a complete absence of cubs of the year seen." The very obvious reason why there are considerably less adult and young grizzly bears seen or trapped than formerly was not considered. There are less grizzlies. At any rate, all available data does indicate that grizzly bear numbers are low, perhaps still declining, and that the grizzly bear is now a Threatened Species in the Yellowstone ecosystem.

Grizzly bears are being seen in greater numbers in localized areas of wilderness country surrounding Yellowstone Park. This is not the result of an increased grizzly population but reflects the dispersion of grizzlies from concentration sites in Yellowstone National Park to outlying areas where they are finding sources of fall food in the form of gut piles from killed elk. Each year these are attracting and will continue to attract more and more grizzlies. Though this removes them from possible "control" kills in Yellowstone National Park it also exposes them to increased mortality from poaching and other illegal killing.

On a basis of my knowledge of the grizzly bear in the Yellowstone ecosystem I believe that this entire area of 5 million acres should be considered as critical habitat. However, poor Park Service management, not habitat, is the crucial issue. I feel very strongly that all of Yellowstone National Park, with the exception of developed areas, should

be included in the critical habitat category. The surrounding wilderness areas now receiving more use by the grizzly than in the past should also be included for the time being. Under the Wilderness Act it is stated that a wilderness area is to be protected and managed so as to preserve its natural conditions. In other words, if the grizzlies are threatened, both they and their habitat should be managed in a way to give priority to the preservation of the grizzly bear. This could conceivably be done by the Forest Service working with the State Game and Fish Commissions.

In view of the fact that wilderness areas are already set aside for the protection of wildlife and their habitat I believe that it would be well if all wilderness areas recently occupied by grizzly bears be considered as critical habitat and that other non-wilderness areas where grizzlies exist or recently existed should be considered for further study.

I have given you my considered opinion as a bear biologist. I would like to conclude with a word of concern. Section 7 of the Endangered Species Act can conceivably give an ever^{onward}growing powerful bureaucracy still more control and regulation over the lives and activities of our citizens. Both the plight of the grizzly and the welfare of our citizens are going to have to be given careful scrutiny and consideration in interpreting and carrying out the authority that apparently is invested in Section 7 of this Act. It is going to take understanding, wisdom and tolerance.

*Some of these
mentioned*

David Marshall

Rep. Senate M^cPherson

Effect on other activities?

no sport hunting of grizzlies in Id. since 1946

not now includes Yellowstone ecosystem

Biologists don't agree — then uses Interagency team data to support a view

Sloped Olmberg for Dir. Id. 7.1.2.

1974 - 76 — seen in Id. in 3 areas

N. W. corner of state	] grizzly no's small & transient
N. E. of Ponderosa Lake	
Targhee Natl. for	

Wilderness Soc. representatives

Not enough information

10,000 sheep now grazing griz. critical habitat in Id.

Frank - This was my
testimony at Kalamazoo.

Testimony 10 December 1976 by

JOHN J. CRAIGHEAD, Ph.D., Wildlife Biologist,
USDI Fish & Wildlife Service;
Professor of Zoology and Forestry,
University of Montana

Critical Grizzly Bear Habitat Hearing

The Wilderness Act of 1964 declares that it is the policy of Congress to secure an enduring resource of wilderness and to preserve its wilderness character. This act gave protection to vast areas of grizzly bear habitat providing the security, space and isolation so essential for this wilderness species that can survive only under wilderness conditions. Thus, all wilderness now occupied or formerly occupied by grizzly bears is critical or essential habitat to the great bear and has been so decreed by Congress. Preservation of the wilderness can be equated with preservation of the grizzlies' environment. They are synonymous. Wilderness has already been tacitly if not specifically defined by Congress as critical habitat - habitat, that except under special provisions of the Wilderness Act, cannot be modified, altered or destroyed? Critical habitat has been described in the federal guidelines in terms of the vital needs of the species. It has not yet been scientifically defined for the grizzly; yet it is obvious that land, that for centuries has supported and still is supporting grizzly bears, must be habitat that meets all of their biological requirements even though we cannot yet scientifically describe all the ecological ramifications of the habitat. In time this can be done. We have made rapid progress using radiotracking, remote sensing technology and computer analysis. We have described and mapped major vegetation complexes and habitat types important to

grizzly bears, delineated bear use areas, activity centers and travel patterns. We ^{KNOW} ~~have~~ their denning needs, ^{food habits} space requirements and have acquired a large fund of information on behavior, reproductive biology and population dynamics. It all tells us that the grizzly needs isolation and space and that its habitat cannot be partitioned or segmented.

The Endangered Species Act of 1973, as you all know, prohibits federal agencies from jeopardizing a threatened or endangered species by disturbing or destroying critical habitat. This is a curb on federal authorized and funded actions carried out by federal agencies on the public domain. It does not dictate management practices to the states or to the federal land management agencies. But the potential to do so indirectly is there. But, how relevant or applicable is the Endangered Species Act and the federal ^{critical habitat} rule-making to wilderness, which by law is already protected from destructive federal actions except under very special provisions? I suggest that in ~~limiting~~ ^{delineating} critical habitat, we must logically classify as critical all land in wilderness status that currently supports viable grizzly bear populations. This is habitat essential to the bear, it was essential or critical when the Wilderness Act was passed and it is even more critical now. All such wilderness should be designated as critical habitat. Also, wilderness no longer supporting viable grizzly bear populations, yet having

the habitat potential to do so, is critical.

The most severe habitat problems associated with the grizzly bear are occurring in occupied habitat not classified as wilderness; and, therefore, subject to land-use conflicts and land-use modifications. Some land in this category has been defined as critical habitat by the Endangered Species Section of the U.S. Fish and Wildlife Service. It is extremely important that before any final delineation of these non-wilderness areas is made, that they be intensively studied economically as well as ecologically; then the present tentative critical habitat boundaries[~] modified on the basis of such studies. This seems to be the intent of Section 7 of the Act. But there appears to be widespread misunderstanding on this point. Many individuals, groups and agencies believe the broad critical habitat delineation made by the U.S. Fish and Wildlife Service may be final. It would be helpful to minimize these fears and to allay the jurisdictional concerns and conflicts both real and imagined. To accomplish this during the period of study and of final evaluation and delineation of critical habitat within the 13 million acre Fish and Wildlife Service proposal, I suggest:

- 1) Immediate or "instant" designation of all occupied wilderness or potential wilderness habitat (formerly occupied by grizzlies) as critical habitat. This can be accomplished through an administrative directive.

2) Designate as study areas all non-wilderness delineated as critical in the Fish and Wildlife Service's initial proposal of 13 million acres. Land areas falling in this category could be sub-divided as de-facto wilderness and as intensive land-use areas, and these yet further sub-divided by habitat and land-use or by the extent of present modification or destruction of habitat. These non-wilderness land units would then be added to the "instant" critical habitat only when further study clearly showed that such areas were essential grizzly bear habitat. Decisions for some areas could be rapid, others will require more time.

I would further suggest one exception to this general procedure. I think it is now possible to accurately define and delineate on a map, critical habitat for the Yellowstone Ecosystem, drawing boundaries to encompass both wilderness and non-wilderness land units. This is the only grizzly bear habitat that to date has been precisely defined by solid quantitative population, movement and habitat data. It took 16 years to delineate this with modern scientific methods. No doubt it can be further perfected with additional data but for the present, we should use what we have. To do so would lend credibility to the Fish and Wildlife Service's public assurance^A that the present proposed boundaries for critical habitat will be modified

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This was accomplished between 1959 and 1974 utilizing death records, sightings and movements of 287 marked or recognizable grizzly bears, ~~and~~ [~] 23 individual ^{natural} movements, 144 and 199 induced and conveyance movements were recorded. Hundreds of radio locations or fixes and thousands of man days of radio-tracking showed the movement patterns, travel corridors, home and ~~seasonal~~ ^{seasonal} ranges, activity centers and dispersal patterns. 267 death records were plotted on habitat maps; 97 of these were of marked animals. Evaluation of these data and the habitat provided the scientific basis for delineating the critical habitat of the Yellowstone ecosystem.

as scientific evidence becomes available. In the Yellowstone area it is already available.

The boundaries can be described as follows: Starting from the SW corner of the boundary west of the Targhee National Forest at Grain elevator, Idaho, NW to a point SW of Island Park; then North to the most westerly extension of Hebgen Lake near Rock Creek; then NE to a point at Beaver Creek, Montana, west of highway 191; NE across highway 191 to a point at the intersection of Park and Sweet Grass counties just NE of Fourmile Guard Station then preceding SE across the Custer National Forest to a point by the Beartooth Plateau north of Lonesome Mountain; the SE to the most eastern point south of Dead Indian Creek, and North of Trout Peak, Wyoming; then South to a point at East Fork Creek east of Shoshone Plateau in the Teton National Forest; preceding SW to a point near Continental Divide at Bliss Creek; West to a point at the east end of Jackson Lake near Jackson Lake Dam in Grand Teton National Forest, the west to point of origin at Grain elevator. This is approximately 5 million acres. The three million acres of Yellowstone Park must be considered especially critical since it serves as a population center for the entire ecosystem which includes both wilderness and de-facto wilderness.

I have briefly expressed some thoughts on the subject of grizzly bear habitat. Delineation of habitat as critical, places restrictions on the agencies managing the habitat and indirectly on state agencies managing the species. It may place restrictions on the private sector as well. This has created some highly emotional reactions. It is a complex biological, social, and jurisdictional problem. It won't be solved by emotionalism; but, it can be solved by application of our present knowledge, jurisdictional restraint, ^{additional} ~~basic~~ research and public understanding and a primary commitment to the survival of the bear.

cisely defined by solid quantitative population, movement and habitat data.

We should not let overemphasis on habitat act as a smoke screen to obscure the real problem which is management of bear populations. The grizzly bear has a low reproductive rate; and, therefore, high man-caused mortalities can threaten a population. This has recently occurred in both the Yellowstone and Selway Bitterroot ecosystems. It is my recommendation that the grizzly bear be kept on the threatened list until state and federal biologists have adequate solid scientific evidence that the Yellowstone and the Northwest Montana populations are on the increase. They don't have such evidence now. A sustained yield kill is not scientific evidence. Unfortunately, research by the managing agencies has lagged. It has been piecemeal and then ^{the} data ~~does~~ not support taking the grizzly off the threatened list. This is a premature conclusion that has been advocated. The population of grizzly bears in Northwest Montana could be declining, yet neither present knowledge nor current research methods would alert us to the danger until the bear populations are in real trouble.

Now let ~~me~~ ^{us} briefly summarize why the grizzly bear must remain on the threatened species list and why we must assure it adequate wilderness habitat and more objective research.

First, the population status of the grizzly bear in the Yellowstone ecosystem is either still declining or unknown.

Second, the bears status in the Bob Marshall ecosystem extending from Scapegoat to the Canadian border is also unknown. In the Selway Bitterroot ecosystem a viable population no longer exists.

Third, the grizzly bear is vulnerable due to its aggressive nature, which frequently puts it in conflict with man and with his livestock. The grizzly is easily attracted to bait, making the great bear highly vulnerable to illegal hunting or to control measures. Illegal kills are very difficult to confirm and document. Only a portion of these are annually recorded using present methods. Thus, annual man-caused mortality is generally higher than recorded, making accurate population estimates based entirely on kill records, highly questionable.

Fourth, the recovery potential of a grizzly bear population is low because of the bears low reproductive rate, the vulnerability of the bear to man and the lack of known biological compensating mechanisms to offset these factors. Grizzly bear populations don't readily make a comeback.

Fifth, being very large animals, that are omnivorous as well as carnivorous, they have high energy requirements.

They roam over vast terrain, sometimes as much as 500 to 1000 square miles in seeking food. They need wilderness ecosystems to survive and thus threats to our large wilderness ecosystems are threats to the bear. You can't segment the habitat.

STATEMENT OF U.S. SENATOR JAMES A. MC CLURE AT THE PUBLIC HEARING ON THE FISH AND WILDLIFE SERVICES PROPOSAL TO DETERMINE CRITICAL HABITAT FOR THE GRIZZLY BEAR - ST. ANTHONY, IDAHO, DECEMBER 14, 1976

In 1973 the United States Congress passed the endangered species act with the intent of aiding in the preservation of those plant and animal species which have dwindled in numbers to the extent that their very survival is threatened. We are now examining the habitat of the grizzly bear to determine whether or not to set aside parcels of land in the states of Idaho, Wyoming, Montana and Washington, to provide the surroundings in which the grizzly bear may roam. The current proposal by the U.S. Fish and Wildlife Service would place over twenty thousand square miles of land, mostly timber land, under the critical habitat designation.

Because a significant portion of this proposed grizzly bear habitat is within the borders of the State of Idaho, I am greatly concerned about the effects of such a designation on the people of my state, on their livelihood and on their recreational pursuits. I note that the Fish and Wildlife Service, in a comprehensive statement at the beginning of these hearing, spelled out the need for a reasonable program for the implementation of this law. It is stated, "there should be little impact on an individuals livelihood or recreational pursuits." I believe that statement should be referred to often in the consideration of this critical habitat designation.

It is my feeling that the major problem facing us here today in the consideration of this proposal is that no one is able to say specifically what the designation of this area as critical habitat for grizzly bears would have on other established or proposed activities. For example, are we to close this area to hunting, fishing, camping, livestock grazing, the construction of summer homes or to other proposed activities? What effects would this designation have on the timber industry?

While the assignment of this area as critical habitat would not in itself prohibit recreational pursuits, livestock grazing, or timber harvesting, it does demand that the Federal Agency administering any program in the area take into account whether the specific activity might harm the habitat, it would place this discretionary authority in the context which would allow wide interpretation by the various Federal Agencies involved.

It is my understanding that each specific activity must be examined as to its biological impact on the critical habitat. At this point in time, however, it is impossible to say what the biological impact would be and what decisions would be made. In practical application this simply would mean that the grizzly bear habitat would become a permanent headlock on government agencies in the performance of their duties. Further, this proposed critical habitat provides the vehicle to create huge bottleneck in our courts with the increased possibility of legal battles over each government program in the habitat area.

I have served the Congress for a total of ten years and during that time I have seen a number of laws passed with little regard to the broad effect that the law would have. ~~In some cases laws have proven to have had a disastrous effect that the law would have.~~ In some cases laws have proven to have had a disastrous effect on those they were designed to protect. The designation of this area as critical habitat without the full knowledge of the broad effects of this designation is not only foolish for those of us who live in the area but may indeed prove detrimental to the very animal species we are attempting to protect. In summary then let me state that I do not want to see the grizzly bear vanish from the lower forty eight states as a species. I do want to take all reasonable steps toward the protection of the grizzly bear, but I emphasize the word reasonable. I believe the enactment of this proposal without the full knowledge of its full effect to be unreasonable.

I have been joined by U.S. Senator Clifford Hansen of Wyoming and jointly we have already taken the following action; we have asked the Secretary of the Interior to cease its pursuit of this designation at this time. We have also asked the Secretary of Interior to undertake an Environmental Impact Statement of this proposal under Section 102 (2)(c) of the national environmental act of 1969. This act provides that any major federal action be subjected to such an impact statement and certainly the designation of this large area of land falls under the definition of a major federal action.

Further, and I quote from our communication with the Secretary of the Interior "we also ask that the department of the Interior and the U.S. Fish and Wildlife Service expand the data gathering activities to include not only the biological information concerning proposed habitat, but also to provide answers to citizens concerning their specific activities and the effect of those activities of the habitat.

I appreciate the opportunity to present this testimony for the hearing record and I will be following closely the actions which will be taken.