1182 Total=269

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March 20, 2006

Dr. Christopher Servheen
Grizzly Bear Recovery Coordinator
U.S. Fish and Wildlife Service
University Hall 309
University of Montana
Missoula, MT 59812

Dear Dr. Servheen:

We, the undersigned scientists, write to express our opposition to the U.S. Fish and Wildlife Service proposal to remove the Yellowstone grizzly bear population from the list of threatened and endangered species under the Endangered Species Act. See 70 Fed. Reg. 69854-69884 (November 17, 2005). The Yellowstone grizzly bear population faces significant threats to recovery because of its small size, significant annual fluctuations in mortality rates, inadequate habitat protections, major threats to key foods, genetic risks, and proposed additional human-caused bear mortalities.

Population Size: An isolated grizzly bear population of 500-600 bears is not a biologically recovered bear population. In order to withstand regional-scale stochastic events and to provide for genetic diversity, a population of 2,000-3,000 bears is needed. The grizzly bears are currently listed as a threatened species throughout the lower-48 states. Recovery efforts should focus on reconnecting Yellowstone-area bears to bears in the Glacier Park/Bob Marshall area and a stable population in central Idaho in order to achieve metapopulation dynamics and promote long-term recovery.

Significant Fluctuations in Annual Mortality Rates: Small populations of bears tend to experience significant variation in annual mortality rates and are likely to decline and go extinct. In the Yellowstone grizzly bear population, this anticipated annual variation in bear mortalities is exacerbated by increased bear-human conflicts and mortalities in years when whitebark pine seed cones in remote, high-altitude areas are not abundant. Managers need to provide further protections to minimize mortality for Yellowstone bears to buffer this added extinction risk.

Inadequate Habitat Protections: Habitat protection is essential to maintain, restore, and recover populations of endangered species. Long-term protection of essential grizzly bear habitat after the proposed delisting of the Yellowstone grizzly population has not been assured. Many lands currently occupied by Yellowstone-area grizzlies receive no protections under the delisting proposal because they are outside of the designated recovery zone. Lands necessary to connect Yellowstone bears to other populations are not protected. Even within the recovery zone, necessary restrictions on roadbuilding and habitat destruction rely on an enforcement mechanism—U.S. Forest Service National Forest Plans—that a recent Bush administration rulemaking has declared "nonbinding." Thus, necessary habitat protections to achieve recovery or even maintain current population levels are not in place. During bad food years there will be nowhere else for grizzlies to go; managers need to allow for alternative habitat and food sources.

Major Threats to Key Foods: The Yellowstone grizzly bears feed heavily on four key foods. All of these key grizzly bear foods are already currently in decline or face significant threats to their distribution and abundance. Whitebark pine, the keystone food source, is declining in many portions of the Yellowstone area due to mountain pine beetles, white pine blister rust, and global warming. Yellowstone cutthroat trout have been reduced due to the introduction of lake trout in

Yellowstone Lake. Army cutworm moths may suffer declines due to various agricultural practices. Ungulate populations may be reduced by factors such as the spread of chronic wasting disease or various management practices. The uncertainty of the continued abundance and distribution of these key bear foods poses threats to the Yellowstone bear population.

Genetic Risks: A small population faces extinction risks arising from loss of genetic variation that may prove essential to the population's long-term survival. The Yellowstone grizzly bear population has effectively been isolated for more than seventy years. The FWS has estimated that the population may have been reduced to roughly 200 bears in the 1970s. Currently, the genetic effective population size (N_e) is about 125 bears; much lower than the general scientific consensus of 500 or more for long-term persistence. DNA studies have documented that Yellowstone bears' genetic material is not as diverse as those of other grizzly bear populations in the lower-48 states. Because of concerns about the loss of genetic diversity, the FWS has stated that it will continue to monitor the genetic make-up of the Yellowstone grizzly population, and will relocate two bears every ten years to address genetic concerns. The ESA requires recovery of endangered populations in the wild; the Yellowstone grizzly bear population must be large enough to survive in the wild without chronic augmentation to address genetic concerns. In addition, if the Yellowstone population truly is a Distinct Population Segment due to unique genetic characteristics as the FWS claims, then introducing genes from other populations will destroy that uniqueness.

Proposed Additional Human-Caused Bear Mortalities: In addition to the serious threats that Yellowstone bears face even with the full protections of the ESA, a delisted bear population would be subject to intentional additional bear mortalities associated with proposed hunting seasons. For a relatively small population, any additional deliberate human-caused mortalities will have significant population impacts.

We, the undersigned scientists believe that there are many reasons that the Yellowstone grizzly bear population is not biologically recovered and should not be removed from the list of threatened and endangered species.

Sincerely,*

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Lance Craighead
on behalf of the
Craighead Environmental
Research Institute
and the listed scientists

continued in petition file...