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Delisting the Grizzly

Mortalities Exceed Limits

— BY JIM HALFPENNY, PH.D. —



PHOTO: CHRIS MORTENSEN

My name's Jim and I'm an ursophile. I'm worried. No, I'm flat scared.

People are talking about delisting the Yellowstone grizzly bears from their protected status of Threatened under the Endangered Species Act. Wyoming's governor and legislature, and many concerns in Idaho and Montana, are applying political pressure to delist the grizzly.

Based on the opinions of some politicians, we have met the recovery goals set by the Interagency Grizzly Bear Recovery Committee. In an update issued July 17, 1995, the Fish and Wildlife Service states that the government has achieved its "recovery plan population goals" in the Yellowstone region. (Also, a recent federal court decision ordered the managing agencies to re-evaluate parts of the recovery plan, see *Ursus* Files, page 40.)

Arguably, the grizzly population in Yellowstone is probably as healthy

as it's been since the early 1970s, but the natural events of the last two years in the Yellowstone ecosystem show the population is alarmingly vulnerable.

During 1994 and 1995 we have lost 29 grizzlies (11 and 18 respectively) from the ecosystem. These are known deaths, which include natural deaths, "man-caused," and those bears removed from the ecosystem to zoos. The year 1995 is particularly significant with the loss of 18 bears; since 1973 (after the park dump closures), there has NEVER been a year when known and probable losses exceeded 17 grizzlies. The losses came in the form of five bears sent to zoos, two euthanized by management agencies outside of Yellowstone, five were killed by hunters in self-defense, two were poached, three were tragically electrocuted by a power line in Yellowstone's Hayden Valley, and one died of natural causes.

Much of the trouble seems to come from the low food production of Yellowstone's whitebark pine trees which forces the bears to disperse into lower regions, leading to increased conflicts with humans. Those in favor of delisting are proposing that the dispersal is a result of an increased bear population.

In 1993, the Grizzly Bear Recovery Plan outlined Recovery Parameters with goals in three essential categories: 1) females with cubs, 2) distribution, and 3) mortality. All three goals must be met before the grizzly can be viewed as recovered and delisted. During 1994 and 1995, we lost more grizzlies than the mortality goals would allow for delisting.

Briefly, to meet mortality goals during any two consecutive years, mortality must not exceed four percent of population estimates, and no more than 30 percent of the deaths may be adult females. If 236 bears is

accepted as the estimate of grizzlies in the ecosystem, then mortality must not exceed nine bears (four percent of 236). Additionally, no more than three deaths may be adult females. Clearly mortality during both 1994 and 1995 (two consecutive years) exceeded these limits.

More critically, the Recovery Plan recognizes that adult female mortality is a key factor influencing potential recovery. The loss of a single female weighs more heavily on population dynamics than does the loss of a male. While a male may mate every year with several females, females go three years between matings. Currently, there may be as few as 63 adult breeding females in the ecosystem.

In 1994, three adult females were lost (one unknown cub that was lost could have been a female), and in 1995, seven females have been lost so far (three adult, three subadults, one cub of the year). Since 30 percent of nine is less than three, the recovery goals have not been met for two consecutive years. Additionally, it is alarming that in two years, the ecosystem has lost six adult females or almost ten percent of the breeding females (remember also that in 1990, we lost four adult females - six females total).

Admittedly, when it comes to counting bears, we are all a bit uncomfortable about the reliability of population estimates in the Yellowstone ecosystem. But there is no uncertainty about the number of bears that are known losses from the ecosystem. With the uncertainty of sampling bears and this level of known deaths, a conservative approach is the best and most scientific way to help our ursine friends. Delisting at this point in time is not conservative, may not be helpful, and may be the death knoll of these magnificent creatures in the Yellowstone ecosystem. The past two years have been hard on the grizzlies. For the health and sake of the grizzlies, management protection and monitoring of Yellowstone bears should continue unaltered for the present time.



Author Jim Halfpenny is a frequent contributor to BEARS Magazine, and lives in Gardner, Montana, the north entrance of Yellowstone.