Yellowstone’s grizzly bear population needs to remain listed under the ESA

Reasons why the Yellowstone population needs to remain listed

Yellowstone’s grizzly bear population is still not recovered

Yellowstone’s population of 600-700 grizzly bears is completely isolated from all other grizzly bear populations and much smaller than the 2000+ animals widely considered necessary for long-term viability. Moreover, the Yellowstone population is, along with grizzlies to the north, a mere 2% of the roughly 100,000 grizzly bears that once roamed the Contiguous U.S. in a range that was formerly 100 times larger (see the figure at left). The Yellowstone population continues to be jeopardized by increasing human infrastructure, energy development, problematic livestock husbandry practices, habitat degradation caused by climate warming, hostile state management, and unreliable methods for monitoring status and trends (see below).

- **Yellowstone’s grizzly bears have lost critically important foods**
  
  Between 1975 and 2000 grizzly bears in the Yellowstone ecosystem benefited from a burgeoning of foods. Populations of spawning cutthroat trout and elk and bison increased substantially. A new food source comprised of army cutworm moths summering in alpine areas was discovered by bears and heavily used. The seeds of whitebark pine were abundant and consumed to the virtual exclusion of all other foods when available, with positive effects on the reproductive success of females grizzlies. Following good seed crops, females more often had 3 rather than 2 cubs. Bears of all ages and sexes also survived at a much higher rate when pine seeds were available because whitebark pine grows in remote high-elevation areas where there are few hazards from humans. However, since the early 2000s much of this natural bounty has gone away. Predation by recently introduced non-native lake trout has nearly extirpated cutthroat trout in Yellowstone Lake. Whitebark pines have been nearly extirpated by the spread of a non-native fungal disease and by a highly lethal climate-driven outbreak of bark beetles. Some elk and bison populations have also declined from highs reached during the 1990s and early 2000s, and alpine habitats of the army cutworm moth are severely threatened by climate warming. There is no doubt that food resources of Yellowstone’s grizzly bears have declined and put the population at grave risk, with a prognosis of more of the same to come.

- **State-level management of large carnivores is a problem**
  
  State wildlife management agencies in the West are locked down in an Iron Triangle that serves the minority special interests of hunters interested in killing deer, elk, moose, and bighorn sheep (i.e., ungulates). State agencies view large carnivores primarily as competitors for ungulates that could otherwise be on the market for sport hunting licenses, which are a major source of agency revenues. Sport hunting has been used during recent decades to drive down populations of mountain lions and wolves, and, barring California, accounts for roughly 70-80% of all deaths of adult carnivores in the West. The public trust doctrine is often invoked by state wildlife agencies, but much abused in actual practice in a system that marginalizes and excludes stakeholders who value large carnivores intrinsically or for contributions to ecosystem health. Over time, states will almost certainly manage grizzly bears in the same ways as they do wolves and mountain lions, which will preclude ever securing connections between ecosystems and reaching larger conservation goals.

- **Grizzly bears are vulnerable to the excesses of state-level wildlife management**
  
  Grizzly bears have one of the lowest reproductive rates of any terrestrial mammal. A typical female will only produce 2 cubs once every 3 years, with good odds that one of the cubs will die before it reaches adulthood. Grizzly bears also have difficulty colonizing new habitats, primarily because female grizzlies tend to stay in or near their mother’s range. This lack of resilience contrasts with that of wolves and mountain lions, which reproduce at higher rates, and readily colonize areas hundreds of miles away. Compared to other large carnivores, grizzly bears will be much more vulnerable to the effects of state-sponsored sport hunting, and much less able to recover from predictable hunting excesses designed by state agencies to benefit elk and moose populations. And, without doubt, colonization of new ranges will be the first casualty of state management.
• The US Fish & Wildlife Service cannot reliably assess the status of the Yellowstone population

Grizzly bears in Yellowstone’s mountainous and forested wilderness are notoriously hard to count, whether live or dead. This means that the US Fish & Wildlife Service (USFWS) has resorted to using indirect indicators together with statistical adjustments to track the population. Recent research has shown that the methods used by the USFWS are not only unreliable, but also generate spurious results that increase the likelihood that the USFWS will erroneously conclude that the population has grown, when, in fact, it has declined due to excessive numbers of deaths. Claims by the USFWS that the Yellowstone grizzly bear has grown at a substantial rate for several decades are unsubstantiated. Although some growth has probably occurred, it is much more modest than advertised, and population decline is probably occurring now as a result of deteriorating habitat conditions. New methods being introduced by the USFWS, and billed as an improvement, will actually increase the risk of over-killing bears and mistakenly concluding that observed levels of death are sustainable. A bad situation will almost certainly worsen if Yellowstone’s grizzlies are delisted and resources are not available to maintain current levels of monitoring.

• The Yellowstone grizzly population has benefited from, and will continue to benefit from, ESA protections

Grizzly bears in the Yellowstone ecosystem would not be as numerous nor as widely distributed as they are now without ESA protections. The ESA has protected habitat on public lands by requiring that land managers consult with the USFWS to insure their actions do not jeopardize grizzly bears or their habitat. Listing under the ESA also halted sport hunting of grizzly bears, led to the closure of garbage dumps and the clean-up of other human attractants, reduced the numbers of domestic sheep grazing in grizzly bear habitat, prohibited and penalized the harassment and poaching of grizzlies, resulted in increased research that has led to improved management, and provided essential funding for measures to reduce conflicts between bears and people. If delisting were to occur, land managers would be freer to manage to the detriment of grizzlies, sport hunting would be renewed, the mandate to eliminate human attractants would lessen, there would be little imperative to remove hazards associated with sheep grazing, harassment and poaching would be subject to much less severe state penalties, and funding to reduce conflicts and hazards would be harder to secure. Given the severity of threats facing Yellowstone’s grizzly bears, it makes no sense to delist the population, renew sport hunting, and lessen habitat protections.