

Re: November 23, 2005 Federal Register, Vol. 70, 225, pp. 70779-70780, Proposed rule to delist the Mexican bobcat.

To Whom it May Concern,

The Center for Biological Diversity believes there is no justification for delisting the Mexican bobcat (*Lynx rufus escuinapae*). Rather, the preponderance of evidence, as well as a much needed precautionary principle, calls for keeping the Mexican bobcat on the list of threatened and endangered species, conducting more research into its status, and developing a recovery plan for it.

The Fish and Wildlife Service and the petitioner, National Trappers Association, base the proposal to delist the Mexican bobcat primarily on an attempt to impeach the subspecific status of *L.r. escuinapae*. But the only indication that the Mexican bobcat might not constitute a subspecies stems from one statement in a single study of skull measurements (Samson, Fred B., "Multivariate Analysis of Cranial Characters Among Bobcats, with a Preliminary Discussion of the Number of Subspecies," Oct. 1979): "[C]ranial characters of *F. r. escuinapae* are similar to *F. R. texensis* and *F. r. californicus*." But Samson only sampled 14 skulls of *escuinapae*. Not only in the title of his talk, but in his text too he emphasizes that his analysis is "preliminary." He acknowledges, and does not attempt to refute, the finding by J. A. Allen (1903) that the pelage of *escuinapae* differs from that of other bobcats. Most important, he concludes that "although considerable variation in cranial measurements of the bobcat is evident, a pattern exists reasonably consistent with current taxonomic descriptions." Those descriptions include *escuinapae* as a valid subspecies. He continues: "The great number of subspecies of bobcats presumably reflects selective pressures exerted by the ecological conditions characteristic of the wide variety of habitats with the geographic range of the bobcat."

The habitats occupied by Mexican bobcats, the southernmost subspecies, are indeed significantly different than that occupied by bobcats in any other part of North America, and include vast regions of Sinaloan thornscrub and Sinaloan deciduous forest, found nowhere else in the bobcat's range. It is reasonable to presume that the unique ecosystems occupied by Mexican bobcats influence prey selection. Bobcats in the northern portion of their range depend inordinately on deer (Anderson, Eric M. and Matthew J. Lovallo, "Bobcat and Lynx," in *Wild Mammals of North America: Biology, Management, and Conservation* (Feldhamer, et al, 2003)). Unfortunately, no research has been conducted on food habits of Mexican bobcats. Mexican bobcats also occupy sympatric ranges with ocelots and jaguarundis, which are not found in the ranges of more northern subspecies. This overlap likely influences spatial, temporal and other behavioral attributes of all three species.

As noted in our previous comments (9/27/2003), the growing development of the U.S. – Mexico border with infrastructure such as roads, motorized patrols, lights and fences will likely reduce movement and interaction between bobcats on either side of the border, pushing each group further apart genetically. This may also threaten the future viability of the bobcat population in Mexico.

The Fish and Wildlife Service acknowledges, in an email of Karen Anderson to Michael Tewes of 12/19/2003, the importance of genetic analysis to distinguish bobcat subspecies. This analysis has not been completed, and it is inappropriate for the Service to now move ahead with delisting.

Despite the species' naturally high rate of fecundity, bobcat populations are vulnerable to human persecution. Anderson and Lovallo report that "Harvest of bobcats and lynx appears to be primarily additive to other forms of mortality. The highest adult survival rates come from populations that are essentially unexploited." Steven T. Knick, in *Ecology of Bobcats Relative to Exploitation and a Prey Decline in Southeastern Idaho* (Wildlife Society, 1990), found a trend toward localized extinction among bobcats subject to exploitation: "Recruitment to the harvested

population was primarily by immigration because yearlings did not successfully rear young and the population contained few breeding adults.”

There is no census of how many Mexican bobcats are being trapped, shot or poisoned. Bobcat pelts periodically fetch high prices. In 1989, almost 1,000 illegally transported bobcat furs from Mexico were confiscated by the Fish and Wildlife Service. Nobody knows how many get through. It is likely that a substantial number of Mexican bobcats are being killed for their furs at present.

Bobcats are also killed because they are potential predators on livestock. Bobcats in Mexico have been reported as a “major predator” on sheep, and “persecution by ranchers is more frequent” as a result (Nowell, Kristin and Peter Jackson, “Wild Cats,” IUCN/SSC Cat Specialist Group, 1996).

Though Mexican officials state that bobcats are abundant, they cite no status review or studies to back that up. If the Mexican bobcat were to be delisted, there is no reason to believe that the type of studies needed would be conducted. Rather, existing impacts would be increased.

Mexican bobcats are also vulnerable to reduction of numbers of prey. In many areas of Mexico, deer numbers are greatly depressed because of human hunting. Rodent and lagomorph populations have also suffered in many regions due to livestock grazing. Reductions in food availability result in bobcats needing to increase their home ranges, which makes them more vulnerable to human exploitation. Unfortunately, these impacts have not been quantified and analyzed for the Mexican bobcat. Given the general trend of habitat loss in Mexico and the challenges of regulatory protection in vast areas of rural Mexico, it is reasonable to presume that reductions in prey numbers and general degradation of habitat for the Mexican bobcat remain significant threats.

In sum, the Mexican bobcat is still imperiled by a host of factors. There is every reason to believe it is a valid subspecies. Conservation of Mexican bobcats would most benefit from an active program of research into the subspecies’ status, and such research should be conducted as part of recovery planning for the Mexican bobcat. In the interim, the proposal to delist the subspecies should be rejected.

Thank you for considering these comments.

Sincerely,

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