Letter to Steve Spangle regarding the proposed de-listing of the Cactus Ferruginous Pygmy-Owl (CFPO)

October 3, 2005

Mr. Steve Spangle, Field Supervisor
U.S. Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951

Dear Mr. Spangle,

Thank you for the opportunity to comment on the proposed de-listing of the Cactus Ferruginous Pygmy-Owl (CFPO).

The 3000 households represented by the Tucson Audubon Society are extremely interested in the fate of this tiny predator and have supported recent scientific research by Dr. Glenn Proudfoot to advance our understanding of its current status. Two of our members have the honor of serving on the United States Fish and Wildlife Service’s (USFWS) CFPO Recovery Team and have appreciated the opportunity to learn first hand from the experts in this area of study.

What we have learned has led us to support the endangered classification of the CFPO population in the Sonoran Desert for the following reasons:

• This sub-species is resident in that it does not migrate to a distinct wintering or alternate range.

• The Arizona population of Cactus Ferruginous Pygmy-Owls represents at least 50% of the owl’s historical range within the Sonoran Desert.

• The loss of the Arizona population would represent a significant gap in the range of the taxon. Based on historical ornithological reports (by Fisher, Breninger, and Gilman), this sub-species range extended north to New River in Maricopa County, along the Salt River in and around Phoenix, along the Gila River in central Arizona, and southward along the Rillito and Santa Cruz Rivers.

• Its historical range in Arizona, nearly ½ the state, indicates this population occurrence in the United States was, up until recently, an established viable population of owls.

• The loss of this sub-species across its range in Arizona is an unacceptable loss of potential genetic variability for the taxon, and may threaten its persistence across its Sonoran Desert range. Given the rapidly changing environmental conditions, including
significant habitat loss and fragmentation in this area, this could likely result in localized extinction.

- This taxon is truly endangered across its Sonoran Desert range in the United States. Possibly fewer than 20 owls now survive in southern Arizona and their habitat, saguaro studded old growth ironwood forest, has been increasingly fragmented over the last 30 years by urban development. To the west (Cabeza Prieta and Organ Pipe), hotter, much drier conditions and fewer suitable nesting cavities may limit the potential for establishing a viable population and restrict dispersal. Conditions in the Altar Valley (primarily semi-desert grasslands with limited available nest sites) will continue to restrict the number of CFPO dispersing north and south. Conditions on the Tohono O' Odham Nation are largely unknown, and outside of the USFWS' jurisdiction, but may contribute to the survival of CFPOs by providing areas for breeding and dispersal to the south and north towards suitable habitat in Pima County and Pinal County.

- The population of Cactus Ferruginous Pygmy-Owls within the Sonoran Desert is a distinct population segment (DPS) based on its Sonoran vegetation association (primarily Arizona Upland Sonoran Desert scrub sub-division and Sonoran low-elevation riparian) and the genetic variation revealed by the research of Dr. Glenn Proudfoot, late of Texas A & M University, currently at Vassar College, New York.

- Proudfoot's data shows that the eastern (Mexican/Texan) population of Pygmy-Owls became fragmented from the western population literally eons ago; that the Sinaloan, Sonoran, and Arizonan populations are genetically similar to one another and genetically distinct from the eastern birds.

- Proudfoot's data further suggests that more recently the Sonoran/Arizona population has been genetically isolated from the Sinaloan population.

- Proudfoot's information suggesting isolation may be supported by information on the distribution of owls in Sonora collected by University of Arizona researchers, Aaron Flesch and Dr. Robert Steidl (personal communication).

- Flesch and Steidl found that CFPOs were present in northern Sonora, but uncommon in southern Sonora where columnar cacti, with appropriate nesting cavities, become rare.

- Flesch and Steidl's data also reveals a disturbing trend – in Sonora, Mexico, the Pygmy-Owl population is declining drastically - 9% per year for the years 2000-2004. One factor possibly contributing to this is the agricultural conversion of desert vegetation to African buffelgrass, which has become an invasive weed in arid ecosystems; changing fire regimes and creating a monoculture that cannot support native species. Other factors, not previously addressed by the USFWS, may include parasitism (Proudfoot et al. 2005), long-term climate change, and recent drought.
We have previously submitted copies of these papers, as we obtained them, to then acting USFWS Director Steve Williams. We have also submitted copies of reports compiled and written by eminently qualified USFWS and Arizona Game and Fish Department scientists (Richardson, Abbate, Ingraldi, et al). We believe that new information on the distribution and population trends of CFPOs in Arizona and Mexico, coupled with new genetic information, provide a compelling rationale for maintaining the listing of the CFPO as endangered. Concurrently, using the best available scientific information and a biological, as opposed to a political, perspective warrants the analysis and consideration of listing a DPS for the Sonoran Desert population of CFPOs as endangered. As regards the significance of the population segment...

• The loss of the population within its Arizona range would endanger the persistence of the population across its entire, unique, Sonoran Desert range, given that significant habitat alteration is also occurring across its Sonoran range in Mexico.

• We have a legal and moral obligation to protect threatened and endangered species in the United States and any lands we administer.

• The goal of the Endangered Species Act is species recovery. Removing species from the Act's endangered list prior to their recovery undermines this critical piece of legislation that should support the maintenance of our nation's biological diversity.

• We should not defer to other countries legal systems to protect the native, established, species of the United States, which are threatened with extinction.

Again, thank you for the opportunity to comment.

Respectfully submitted,

Christina McVie
Vice President and Conservation Chair
Tucson Audubon Society
300 East University Boulevard, Suite 120
Tucson, Arizona 85705

References:


Primer Note: Development and Characterization of microsatellite DNA primers for ferruginous pygmy-owls (Glaucidium brazilianum); G. Proudfoot, R. Honeycutt and R. Douglas Slack; Molecular Ecology Notes, 2004
White Paper: Significance of the Western Population(s) of the Cactus Ferruginous Pygmy-Owl; FWS, December 2003
