



## Questions and Answers: 90-day Finding For the Cactus Ferruginous Pygmy-owl

Arizona Ecological Services Field Office

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**Q: What is the cactus ferruginous pygmy-owl?**

**A:** The cactus ferruginous pygmy-owl is a small, reddish-brown bird with a cream-colored belly streaked with reddish-brown, and a long tail. Pygmy-owls average 2.2 ounces and are approximately 6.75 inches long. The eyes are yellow, the crown is lightly streaked, and there are no ear tufts. Paired black spots on the back of the head may resemble eyes. Their diet includes lizards, birds, insects, and small mammals.

**Q: What types of information is the Service seeking prior to conducting a status assessment for the pygmy-owl?**

**A:** We are seeking information regarding the species' historical and current status; distribution, biology, and ecology; ongoing conservation measures for the species and its habitat; and threats to either the species or its habitat. Specifically, we are requesting input related to the genetics and taxonomy of ferruginous pygmy-owls, and the status, distribution and threats to the pygmy-owl in Mexico.

**Q: Once a species is petitioned for listing as endangered or threatened, how does the Service arrive at a listing determination?**

**A:** We evaluate the petition to determine whether it presents substantial scientific information indicating that listing under the Endangered Species Act (Act) may be warranted (commonly known as a 90-day finding). The petition finding does not mean that the Service has decided it is appropriate to give the pygmy-owl federal protection under the Act. Rather, this finding is the first step in a process that triggers a more thorough review of all the biological information available.

If a petition presents substantial information – as is the case for the pygmy-owl petition – we initiate a 12-month status review of the species to determine whether to propose adding the species to the federal lists of endangered and threatened wildlife and plants.

Based on the status review, we will make one of three possible determinations:

- 1) Listing is not warranted, in which case no further action will be taken.
- 2) Listing as threatened or endangered is warranted. In this case, the Service will publish a proposal to list, solicit independent scientific peer review of the proposal, seek input from the public, and consider the input before a final decision about listing the species is made. In general, there is a one-year period between the time a species listing is proposed and the final decision.
- 3) Listing is warranted but precluded by other, higher priority activities. This means the species is added to the federal list of candidate species, and the proposal to list is deferred while the Service works on listing proposals for other species that are at greater risk. A warranted but precluded finding requires subsequent annual reviews of the finding until such time as either a listing proposal is published, or a not warranted finding is made based on new information.

**Q: If the pygmy-owl is added to the federal List of Endangered and Threatened Wildlife, what protections will it receive?**

**A:** The Endangered Species Act makes it illegal to kill, harm or otherwise "take" a listed species, or to possess, import, export or engage in interstate or international commerce of a listed species without authorization in the form of a permit from the Service. The Act also requires all federal agencies to minimize the impact of their activities on listed species, and directs the Service to work with federal agencies and other partners to develop and carry out recovery efforts for those species. Listing also focuses attention on the needs of the species, encouraging conservation efforts by other agencies (federal, state and local), conservation groups and other organizations and individuals.

**Q: Wasn't the cactus ferruginous pygmy-owl previously protected under the Endangered Species Act?**

**A:** Only the Arizona population of the cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*) was previously protected under the Endangered Species Act. Utilizing the best information available in 1997, the Service added the Arizona pygmy-owl population to the federal endangered species list, under the Distinct Population Segment policy. In 2003, the Ninth Circuit Court of Appeals ruled that the Arizona pygmy-owl population was discrete, but found that the Service did not articulate a rational basis for finding that the Arizona pygmy-owl population was significant to the taxon. Subsequently, the Service found that the Arizona population of the pygmy-owl does not contribute significantly to the species as a whole as recognized in the 1997 listing. Following public comment, the Service removed the Arizona pygmy-owl population from the list of threatened and endangered wildlife on April 14, 2006. The delisting remains on appeal in the Ninth Circuit Court of Appeals. However, the issues and information considered in the delisting process were constrained by the opinion of the Ninth Circuit, and were different than the scope of the information and the analysis that we used in this petition finding, and will use in our status review.

**Q: Is the present petition seeking Endangered Species Act protection for the same population of cactus ferruginous pygmy-owls that was listed from 1997-2006?**

**A:** The petition, submitted by Defenders of Wildlife and the Center for Biological Diversity, presents new genetic, taxonomic and threats information that was not available, or not within the scope of analysis, when the Arizona population of the pygmy-owl was previously listed in 1997 or delisted in 2006. The petition relies largely on the recently proposed scientific reclassification of the pygmy-owl that recognizes the cactus ferruginous pygmy-owl subspecies (*Glaucidium ridgwayi cactorum*) (one of two pygmy-owl subspecies proposed within the *ridgwayi* species) in southern Arizona, and Sonora and Sinaloa, Mexico as distinct, and defined by a smaller range than the subspecies recognized in 1997. The petition seeks to list either the entire newly reclassified subspecies (throughout its range in Arizona and Mexico), or the Sonoran or the Arizona distinct population segments. Our 90-day review of the petition indicates that it presents substantial information that listing the entire subspecies may be warranted.

**Q: Will the Service use the taxonomic revisions presented in the petition when determining whether to list the pygmy-owl?**

**A:** Scientific literature suggests that the taxonomy of the pygmy-owl has been inconsistent and ever-changing. The use of genetics and other characters to clarify pygmy-owl taxonomy may provide the basis for taxonomic revision. Previous taxonomic information and publications related to the pygmy-owl did not have the benefit of current techniques that allow the analysis of genetic material.

We are required to use the best available scientific information. Relying exclusively on one taxonomic checklist or another would be arbitrary given the discrepancies between existing checklists and the limited frequency of updates. We have the responsibility and authority to determine whether an entity is listable, even if it conflicts with existing, accepted taxonomic distinctions, as long as the information on which we rely is reliable and credible. Information presented in the petition is found in peer-reviewed professional

journal articles or published by a reputable institution. We judge these sources to be reliable with regard to the information they present.

The central issue of the current petition, and one for which we seek the expertise of avian taxonomists to help us resolve, is the proposed change in the taxonomy of the pygmy-owl to *Glaucidium ridgwayi cactorum*. The acceptance or rejection of the proposed taxonomy will define the taxon and its associated range, which we will use to determine the species' status and the substantiality of the information provided by the petitioners on whether listing under the Act is warranted. We find that the petitioners have provided reliable and substantial scientific information that a taxonomic revision may be warranted.

**Q: If the pygmy-owl is listed, will critical habitat be designated?**

**A:** If we determine that listing the pygmy-owl is warranted, it is our intent to propose critical habitat to the maximum extent prudent and determinable at the time we would propose to list the species. Therefore, with regard to areas within the geographical range currently occupied by the pygmy-owl, we also request data and information on what may constitute physical or biological features essential to the conservation of the species, where these features are currently found, and whether any of these features may require special management considerations or protection. In addition, we request data and information regarding whether there are areas outside the geographical area occupied by the species which are essential to the conservation of the species. Please provide specific comments as to what, if any, critical habitat should be proposed for designation, if the species is proposed for listing, and why the proposed habitat meets the requirements of the Act.

**Q: What threatens the pygmy-owl?**

**A:** The petitioners presented substantial information that the current distribution of pygmy-owls in Arizona is much reduced from its historical distribution and that populations in Arizona and Mexico are declining due to the following threats:

- Destruction, Modification or Curtailment of Habitat or Range
  - Riparian forest habitat destruction in Arizona and Sonora
  - Habitat destruction from urban development in Arizona and Sonora
  - Conversion of habitat to non-native buffelgrass in Arizona and Sonora for livestock grazing, and the subsequent escape and expansion of buffelgrass into adjacent habitats
  - Habitat modification due to livestock grazing in Arizona and Sonora, and
  - Construction of a border wall that modifies habitat and potentially limits gene flow.
- Disease or Predation
  - Parasites in Arizona and West Nile Virus in Arizona and Sonora, and
  - Predation to fledgling owls in Arizona.
- Inadequacy of Existing Regulatory Mechanisms
  - Pygmy owls in Arizona receive inadequate protection from federal and State laws and County conservation efforts, and
  - There are no adequate regulatory mechanisms to protect pygmy owls in Mexico.
- Other Factors
  - Fire following non-native plant species invasion in Arizona and Sonora that is converting Sonoran desertscrub into non-native grasslands.

**Q: Is the cactus ferruginous pygmy-owl presently protected?**

**A:** The pygmy-owl is protected in the United States pursuant to the Migratory Bird Treaty Act. This law prohibits the taking (killing, pursuit or harassment) of the pygmy-owl or the possession of its parts (feathers, eggs, etc.) It does not address habitat. Similarly, Arizona State law provides protections for individual owls, but does not provide any specific protections for pygmy-owl habitat.

**Q: Where are cactus ferruginous pygmy-owls found in the United States?**

**A:** Historically occurring throughout much of south and central Arizona, including the Phoenix and Tucson areas, pygmy-owls are now found at Organ Pipe Cactus National Monument, the Altar Valley, south-central Pinal County, and the Tohono O'odham Nation lands. Under the original taxonomy, pygmy-owls found in southern Texas were also classified as the *cactorum* subspecies. The recently proposed taxonomy classifies the pygmy-owls in Texas as a different subspecies.