

**QUESTIONS AND ANSWERS ABOUT  
PROPOSED CRITICAL HABITAT DESIGNATION FOR  
THE CACTUS FERRUGINOUS PYGMY-OWL IN ARIZONA**

**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: Where are cactus ferruginous pygmy-owls found?**

**A:** Once common throughout much of south and central Arizona and in what is now the Phoenix area, pygmy-owls are now limited to three general areas; Organ Pipe Cactus National Monument, the Altar Valley, and northwest Tucson and south-central Pinal County. Pygmy-owls also occur on the Tohono O’odham Nation, but we have no specific information on their numbers or distribution there.

**Q: Why are cactus ferruginous pygmy-owls endangered?**

**A:** The Arizona population was added to the Federal endangered species list in March 1997. The owl is endangered by the loss and modification of habitat due to dams, water diversions, and urban expansion as well as curtailment of its habitat or range and other factors such as low genetic variability. Arizona surveys have documented only 41 adult pygmy-owls in 1999, 34 in 2000, and 36 in 2001. Only 18 were detected in 2002; a decrease thought to be related to prolonged drought.

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

**A:** Cactus ferruginous pygmy-owls occur in riparian river bottom woodlands, and palo verde - mixed cacti scrub lands of the Sonoran desert. They also are found in grassland communities in the Altar Valley. In Arizona, the pygmy-owl roosts, breeds, nests, and forages primarily in dense and structurally diverse Sonoran desert scrub vegetation, and use saguaro and tree cavities for nesting. Pygmy-owls disperse to find new breeding sites and mates through this vegetatively dense habitat type, but frequently dispersal requires they cross expanses of semidesert grasslands or sparsely vegetated areas using tree patches of appropriate size and spacing as “stepping stones.” The pygmy-owl has been found only below 4000 feet in elevation.

**Q: What is critical habitat?**

**A:** Critical habitat is defined as areas of land and water with physical and biological features

essential to the conservation of a threatened or endangered species, and which may require special management considerations or protection. The Endangered Species Act defines “conservation” as **recovering** a species to the point where it is no longer threatened or endangered.

Critical habitat receives protection from the prohibition against destruction or adverse modification through required consultation under section 7 of the Act with regard to actions carried out, funded, or authorized by a Federal agency. “Destruction or adverse modification” (of critical habitat) is defined as a direct or indirect alteration that appreciably diminishes the value of critical habitat for the survival and recovery of the listed species for which critical habitat was designated.

**Q: How does critical habitat affect my private land?**

**A:** Requirements for consultation on critical habitat do not apply to entirely private actions on private lands. Critical habitat designations only apply to Federal lands or federally funded or permitted activities on private lands. Activities on private or State lands that are funded, permitted or carried out by a Federal agency, such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act, or a section 402 permit under the Clean Water Act from the Environmental Protection Agency, will be subject to the section 7 consultation process with the Fish and Wildlife Service (Service) if those actions may affect critical habitat or a listed species through modification of suitable habitat. Through this consultation, we would advise agencies whether the permitted actions would likely jeopardize the continued existence of the species or adversely modify critical habitat. Federal actions not affecting critical habitat or otherwise affecting pygmy-owls or their habitat (e.g., suitable habitat outside of critical habitat), and actions on non-Federal lands that are not federally funded, permitted or carried out, will not require section 7 consultation.

**Q: Does a 'critical habitat' designation mean an area is considered a wildlife refuge or sanctuary?**

**A:** Critical habitat is not designated to stop development or to establish a nature preserve. A critical habitat designation identifies areas that are important to the conservation of federally listed threatened or endangered species. A critical habitat designation requires Federal agencies to consult with the Service on any of their actions that may affect critical habitat in designated areas. We can then recommend ways to minimize any adverse effects.

**Q: How did we determine what areas to propose as pygmy-owl critical habitat?**

**A:** The proposed critical habitat provides an interconnected system of suitable habitat essential to Arizona pygmy-owl survival and maintains the viability of local populations of owls that are dependant upon continued genetic interchange. In establishing this system, we included verified owl sites, which we buffered with the mean dispersal distance documented for juvenile pygmy-owls in Arizona (8 km (5 mi)). We included three of the four recovery team-

recommended Special Management Areas (SMAs) for which we have adequate scientific information indicating that they are essential to the conservation of the listed population and threatened by habitat loss. We then linked these areas with habitat containing one or more of the primary constituent elements, using a matrix of land ownerships.

We prioritized areas to maintain connectivity between known pygmy-owl sites or SMAs that contain some or all of the primary constituent elements by including Federal lands first before State Trust lands. Private lands were included only if they were necessary to achieve conservation of the species.

**Q: Do all listed species have critical habitat designated for them?**

**A:** No. We don't designate critical habitat if doing so would not be a benefit for the species. To qualify as critical habitat, an area must contain the physical and biological elements essential to the species, and be in need of special management or protection. When the pygmy-owl was added to the endangered species list in 1997, we determined that designating critical habitat would not be beneficial because publishing species locations could lead to harassment of owls by overzealous bird watchers. A U.S. District Court ordered us to reconsider that critical habitat decision. In 1999, critical habitat was designated as the result of our reevaluation of the habitat needs of the pygmy-owl following analysis of survey efforts, public and industry comments, local and regional economic analyses, and a narrowly defined comparison of the costs and benefits of designating critical habitat.

**Q: Why are we proposing to designate critical habitat for the pygmy-owl again?**

**A:** On July 12, 1999, 730,000 acres were designated as critical habitat. On January 9, 2001, a coalition of plaintiffs filed suit challenging the validity of the listing of the Arizona population of the pygmy-owl and the designation of critical habitat. On September 21, 2001, the listing of the pygmy-owl in Arizona was upheld, but the critical habitat designation was set aside, remanding it back to us to redo with a full economic analysis, regardless of whether the impacts are attributed to listing or critical habitat designation. That economic analysis has been completed. We are required to use the best available scientific and commercial information when making a critical habitat determination. This proposal incorporates information discovered since 1999 as well as many of the recognized tenets of conservation biology that are also emphasized in the recommended recovery strategy for the pygmy-owl.

**Q: What were the results of the draft economic evaluation?**

**A:** The draft economic analysis projects 10-year costs resulting from the pygmy-owl's listing and critical habitat designation at \$108 million, with \$52 million of those costs resulting from critical habitat designation alone. The bulk of projected costs would be borne by the housing development and mining industries when they seek Federal dollars or permits to modify washes and streams and or discharge pollutants. Immigration and Naturalization Service, ranching, road construction, and parks, monuments and refuges are projected to

incur some costs protecting individual pygmy-owls, but of those entities, only INS is expected incur expenses associated with critical habitat.

We are required to consider economics when establishing critical habitat, but we are not permitted to consider economic impacts when evaluating whether a species needs protection under the Endangered Species Act. We have some discretion when weighing economic costs versus conservation benefits when designating critical habitat, as long as those considerations do not result in the extinction of the population. For that reason, we are seeking public input on the draft economic evaluation as well as the proposed rule.

**Q: What are the principle differences between the current proposal and the former critical habitat designation?**

**A:** The presently proposed critical habitat is designed to link areas of known owl occupation (since 1997) with neighboring owl locations to provide for genetic mixing and the dispersal of owls through suitable habitat on Bureau of Land Management, State, and private lands that are broader in some areas than the 1999 designation to accommodate the now-known mean dispersal distance of pygmy-owls (8 km (5 mi)). Some areas have been added based on pygmy-owl locations documented since the previous designation. Additionally, Park Service and Fish and Wildlife Refuge System lands have been added to the proposal to accommodate the western-most populations of pygmy-owls (Unit 5) as have the Buenos Aires National Wildlife Refuge in the Altar Valley and Saguaro National Park (West Unit). The proposed designation does not include all areas previously designated as critical habitat due to the lack of survey and research information sufficient for us to determine that they are essential to the conservation of the species in Arizona. The proposed designation does not extend north to the Salt River as had the 1999 designation.

**Q: How does the proposed critical habitat compare to the Cactus Ferruginous Pygmy-owl Recovery Team's recommendations for habitat conservation?**

**A:** This proposed designation does not include all lands recommended as Recovery Areas by the Recovery Team. Areas not being proposed for designation that are identified within the draft recovery plan have been excluded based on the lack of survey and research information indicating they are essential to the conservation of the species in Arizona. Three of the four recovery team-recommended SMAs for which we have adequate scientific information indicating that they are essential to the conservation of the listed population are included in the critical habitat. This does not mean that the other areas are not important for recovery, simply that we could not yet determine, based on the best available scientific data, that they are essential for the conservation of the species. We intend to promote conservation and recovery of the pygmy-owl in these areas through the use of other tools which may include the reestablishment of pygmy-owls through a section 10(j) experimental population rule, habitat conservation planning, safe harbor agreements, and section 7 consultations.

**Q: How does the pygmy-owl critical habitat designation affect the guidance that the**

**Service has provided to private landowners in pygmy-owl habitat?**

**A:** We have provided recommendations for landowners to avoid harming, harassing or killing (take) a pygmy-owl on their land. Whether or not your land is included in critical habitat, it is still illegal to take (kill, injure, harm or harass) a pygmy-owl. If your land is outside of critical habitat, yet contains the elements of owl habitat as defined in the guidance to landowners, you may still have pygmy-owls on your land and should consider having a permitted consultant survey for owls before planning any development.

**Q: Will livestock grazing be affected by critical habitat designation?**

**A:** Formal consultation under the Endangered Species Act is required only when federally-permitted grazing may adversely affect critical habitat. Federal land management agencies are required to evaluate the effect grazing has on federally managed critical habitat areas. The pygmy-owl has demonstrated that it can exist in grazed areas provided that the ecosystem health is maintained.

**Q: Would everything within designated critical habitat be treated as critical habitat?**

**A:** No. We did not map critical habitat in sufficient detail to exclude all developed areas and other lands unlikely to contain “primary constituent elements” essential for pygmy-owl conservation. Within the proposed critical habitat boundaries, only lands containing some or all of the primary constituent elements, or with the potential to contain them, are proposed as critical habitat. Existing features and structures within proposed critical habitat, such as buildings; roads; residential landscaping (e.g., mowed nonnative ornamental grasses); residential, commercial, and industrial developments; and other features, do not contain some or all of the primary constituent elements. Therefore, these areas are not considered critical habitat and are specifically excluded by definition.

**Q: What are the “primary constituent elements” of pygmy-owl habitat?**

**A:** The primary constituent elements for the pygmy-owl are those habitat components that are essential for the primary biological needs of foraging (provide sufficient prey base and cover from which to hunt in an appropriate configuration), nesting (trees and cacti of adequate size to support cavities in proximity to foraging, roosting, sheltering and dispersal habitats), rearing of young (adequate cover for protection from the climatic elements and predators in an appropriate configuration in relation to the nest site), roosting (provides substrates of adequate size and cover), sheltering (provides substrates of adequate size and cover), and dispersal (provide adequate cover and configuration to facilitate movement and reduce mortality factors [predators, prey availability, human factors, etc.]). These primary constituent elements for pygmy-owls in Arizona are found in areas that support Sonoran riparian deciduous woodlands, Sonoran riparian scrubland, xeroriparian communities, tree-lined drainages in semidesert and Sonoran savanna grasslands, and the Arizona upland and lower Colorado River subdivisions of Sonoran desertscrub.

**Q: Why is pygmy-owl critical habitat proposed as five different “Units”?**

**A:** The proposed critical habitat units (CHUs) encompass all of the verified recent sites (since 1997) occupied by pygmy-owls in Arizona, with the exception of pygmy-owls located on the Tohono O’odham Nation. Each of the proposed units serve varying functions necessary for the recovery of the pygmy-owl, including areas of significant breeding activity, the maintenance and expansion of groups of owls, facilitating the movement of juvenile pygmy-owls to establish breeding sites, as well as movements among currently known groups of pygmy-owls essential for gene flow. When consulting with Federal agencies on projects that may destroy or adversely modify critical habitat, we will evaluate the effects of their project on both the unit and the-whole-of critical habitat. Then we can best evaluate the scope of effects and recommend project modifications that conserve or augment the values that would otherwise potentially be lost to that particular unit.

**Q: Why isn’t the Tohono O’odham Nation included in the proposed designation?**

**A:** We determined, under section 4(b)(2) of the Act, that the benefits of excluding the Tohono O’odham Nation from the designation are greater than those of including it. Section 4(b)(2) allows us to exclude areas from a critical habitat designation when the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. Our determination considered the fact that most projects of a scale large enough to impact pygmy-owls on the Nation will already be considered under section 7 of the Act due to the possible presence of pygmy-owls, regardless of whether critical habitat is designated. In addition, we have received from the Tohono O’odham Nation a document entitled A Conservation Strategy for the Federally Endangered Cactus Ferruginous pygmy-owl on the Tohono O’odham Nation which outlines the general process by which the Nation and Federal agencies will coordinate to evaluate and address potential impacts to pygmy-owls related to various activities on the Nation. We also considered our working relationship with the Nation, and we believe that Federal regulation through critical habitat designation would be viewed as an unwarranted and unwanted intrusion into sovereign Tribal natural resource programs. Our working relationship with the Nation has been beneficial in implementing natural resource programs of mutual interest.

**Q: When would a critical habitat designation become effective?**

**A:** Critical habitat designation that would trigger ESA section 7 review of Federal activities would become effective 30 days following our final determination, scheduled under court order for July 31, 2003. However, section 7 also requires “conferences” on Federal actions that are likely to result in the adverse modification or destruction of proposed critical habitat. Our conference opinions do not require Federal agencies to offset proposed critical habitat destruction of adverse modification. However, most agencies accept the recommendations made in our conference opinions, as most conference opinions can be transmuted as biological opinions once critical habitat is finalized, thereby saving consultation and project

delays that could occur when a final rule becomes effective.

**Q: What sort of information would be of value in the critical habitat decision process?**

**A:** It is our intent that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, we solicit comments or suggestions concerning:

- (1) The reasons why any habitat should or should not be determined to be critical habitat;
- (2) Biological and other relevant data concerning the number and distribution of pygmy-owls in Arizona, quantity and quality of available pygmy-owl habitat, and what habitat is essential to the conservation of the species and why;
- (3) Current or planned land use activities in the subject areas and their possible impacts;
- (4) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat, including any impacts on small entities or families; and
- (5) Economic and other values associated with designating critical habitat for the pygmy-owl such as those derived from non-consumptive uses (e.g., hiking, camping, bird-watching, enhanced watershed protection, improved air quality, increased soil retention, “existence values”, and reductions in administrative costs).

**Q: How do I provide information to the Service?**

**A:** Send written comments to the Field Supervisor, U.S. Fish and Wildlife Service, 2321 W. Royal Palm Road, Suite 103, Phoenix, AZ 85021-4951 (602-242-0210, FAX 242-2513). We will conduct a public hearing to receive information and suggestions from 6:30 until 9:00 p.m. on Thursday, January 23, 2003, at Leo Rich Theater (Tucson Convention Center), 260 South Church, Tucson, Arizona. Written comments and oral comments provided at the public hearing are treated equally in our decision making. Written comments on the proposed rule must be received at the above address by February 25, 2003, to be included in the decision making process. The proposal, the draft economic analysis, maps, and other pygmy-owl information, are available on the Internet at <http://arizonaes.fws.gov> or by contacting the Field Supervisor.

**Q: What can a landowner do to enhance habitat for the cactus ferruginous pygmy-owl?**

**A:** The U.S. Fish and Wildlife Service is able to provide technical and financial assistance to landowners who want to improve or restore habitat on their property through the Partners for Fish and Wildlife Program and other private stewardship grant programs.