



## Questions and Answers: 12-month Finding For the Sonoran Desert Tortoise

Arizona Ecological Services Field Office

[www.fws.gov/southwest/es/arizona/](http://www.fws.gov/southwest/es/arizona/)

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### **Q: What action is the U.S. Fish and Wildlife Service taking?**

**A:** The U.S. Fish and Wildlife Service has determined that listing the Sonoran population of the desert tortoise as a threatened or endangered distinct population segment (DPS) under the Endangered Species Act (ESA) is warranted but precluded. The species will be added to the list of candidates for ESA protection, where its status will be reviewed annually.

### **Q: What is the Sonoran desert tortoise?**

**A:** The desert tortoise is a member of the Testudinidae family (terrestrial tortoises) of turtles in the genus *Gopherus*, or gopher tortoises. There are three generally recognized populations of desert tortoises: 1) the Mojave (currently listed as threatened under the Endangered Species Act (ESA); occurs north and west of the Colorado River in the United States); 2) the Sonoran (the petitioned population; occurs east and south of the Colorado River, south to the Yaqui River in southern Sonora, Mexico); and, 3) the Sinaloan (occurs south and east of the Yaqui River, extending into northern Sinaloa, Mexico).

Desert tortoises are land animals and the only native tortoise in Arizona. They are recognized by their gray to orange-brown, high-domed carapace (upper shell) which displays visible growth lines radiating from the center of each scute (shell plate). The desert tortoise may reach 8 to 15 inches in carapace length and four to six inches in shell height. Adult desert tortoises may weigh 8 to 15 pounds. Primarily herbivores, Sonoran desert tortoises consume a variety of plant material in their diet such as fresh, residual, and dried annuals, perennials, and plant litter. Sonoran desert tortoises are largely inactive from mid-October to late February or early March while they overwinter in constructed burrows or rocky cavities or crevices.

### **Q: Where are Sonoran desert tortoises found?**

**A:** The Sonoran desert tortoise in the United States occurs east and south of the Colorado River within Mohave deserts scrub, Sonoran deserts scrub, and semidesert grassland habitats. (A population in the Black Mountains of Mohave County exhibits a distinctly Mojave genetic makeup but due to its location, for the purposes of this finding, is also considered to be part of the Sonoran desert tortoise population.) In Mexico, the distribution of the Sonoran desert tortoise extends from the International Border of Sonora and Arizona, south to the vicinity of Guaymas, north of the Yaqui River, in southern Sonora.

**Q: What is the Service’s 12-month finding?**

**A:** Our determination – also known as a 12-month finding – that sufficient scientific and commercial data exist to warrant protecting the Sonoran desert tortoise as a DPS under the ESA was made after a comprehensive review of the best available scientific information concerning the Sonoran desert tortoise and the threats it faces.

A combination of habitat loss and threats resulting from increasing population growth in the Southwest and northern Mexico are threatening the Sonoran population of the desert tortoise. The Service finds that listing is “warranted but precluded” by higher listing priorities. The species will be added to the federal list of candidate species while the Service works on listing proposals for other species that are at greater risk of extinction.

**Q: What is a “Distinct Population Segment” (DPS)?**

**A:** Under the Endangered Species Act, “species” is defined broadly to include species, subspecies, and also to include Distinct Population Segments (DPS) of vertebrate species (that is, animals with backbones). A DPS is a portion of a vertebrate species or subspecies that is geographically discrete from the rest of its kind and also is significant to conservation of the taxon. The ESA allows the Service to add populations of species that meet DPS criteria to the endangered species list, even if the overall population of the species does not warrant protection under the ESA.

The Sonoran desert tortoise differs biologically, physiologically, genetically, behaviorally and ecologically from the Mojave desert tortoise which has been listed under the ESA as threatened since 1989. The Sonoran desert tortoise occurs south and east of the Colorado River and half of its range extends into northern Mexico where it is currently listed as threatened by the Mexican government.

The Sonoran desert tortoise is significant to the continued existence of the whole taxon because: (1) the large geographic range of the Sonoran population is significant (approximately 40 percent) to the taxon as a whole; (2) a gap of several hundred miles would result from the loss of the Sonoran population, which would effectively bisect the species’ range; and (3) there are behavioral, ecological, physical, and genetic distinctions among the Mojave, Sonoran and Sinaloan desert tortoise populations.

**Q: What does “warranted but precluded” mean?**

**A:** The resources (personnel and funding) available for listing actions are determined through the annual Congressional appropriations process. Congress and court orders have, in effect, determined the amount of money available for other listing activities. Therefore, the funds in the Congressional appropriation for listing, other than those needed to address court-mandated critical habitat for already listed species, set the limits on what ESA listing actions can be accomplished in a given year. In a “warranted but precluded” finding, we must show that our ESA listing program is making expeditious progress in listing actions.

In light of this, the Sonoran desert tortoise will be added to the federal list of candidate species while the Service works on listing proposals for other species that are at greater risk of extinction. The Service will annually review the Sonoran desert tortoise finding until a listing proposal is published, or a “not warranted” finding is made based on new information. Any proposal to add the Sonoran desert tortoise to the federal list of threatened and endangered species will be subject to public review and comment through a rulemaking process.

Candidate species are assigned a Listing Priority Number (LPN) to prioritize their progress in the listing process based upon their population status, threats and taxonomic uniqueness; LPNs range from 1 (high priority) to 12 (lowest priority). The Sonoran desert tortoise was assigned an LPN of 6.

**Q: Does adding the Sonoran desert tortoise to the list of candidate species provide any conservation benefit?**

**A:** The Sonoran desert tortoise will be added to the list of candidate species eligible for ESA protection. While candidate species receive no statutory protection under the ESA, inclusion on the candidate list promotes cooperative conservation efforts for these species. The Service's ultimate goal, which is shared by many state wildlife agencies, Tribal entities, private organizations and individuals, is to intervene and successfully address the needs of candidate species so that listing is no longer needed.

For example, the Service provides technical assistance and competitive matching grants to private landowners, states and territories undertaking conservation efforts on behalf of candidate species. The Service also works with interested landowners to develop Candidate Conservation Agreements. These voluntary agreements allow citizens to manage their property in ways that benefit candidate species, in some cases precluding the need to list the species. These agreements can also be developed to provide regulatory certainty for landowners should the species become listed under the ESA. The Service is currently working with landowners and partners to implement voluntary conservation agreements covering 5 million acres of habitat for more than 130 candidate species nationwide.

Addressing the needs of candidate species before the regulatory requirements of the ESA come into play often allows greater management flexibility to stabilize or restore these species and their habitats. In addition, as threats are reduced and populations are increased or stabilized, attention can be shifted to those candidate species in greatest need of the ESA's protective measures.

**Q: If the Sonoran desert tortoise 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 ESA 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), Tribes, conservation groups and other organizations and individuals.

**Q: If the Sonoran desert tortoise is listed, will critical habitat be designated?**

**A:** We will consider proposing critical habitat to the extent prudent and determinable at the time we would propose to list the species. Therefore, we continually seek 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. Any listing or critical habitat proposal would be subject to public review and comment through a rulemaking process.

**Q: What threatens the Sonoran desert tortoise?**

**A:** A major threat to the species is the conversion of Sonoran desert scrub to fire-prone grasslands. In Mexico, grassland conversion programs continue to benefit livestock grazing. In the U.S., intentional conversion programs were discontinued by 1987, but the invasion of nonnative grasses continues, primarily along roadways and trails. Grassland wildfires also consume non-fire adapted Sonoran desert plants that provide cover and forage for desert tortoises and other wildlife.

Other threats include illegal collection, predation by domestic and feral dogs, genetic contamination and introduction of diseases from released captive tortoises, habitat degradation by increasing off-highway vehicle use, and fire wood collection in Mexico – all factors associated with an expanding human population and urban interfaces. Barriers to tortoise dispersal include roadways, urban development, border fences and anticipated large solar projects on desert floors. Continued drought has affected tortoise forage availability and habitat; this is likely to continue as shifts in rainfall and other weather related climate change factors affect the Southwest. Sonoran desert tortoise populations can typically withstand any one of these additional impacts alone, but succumb to the combined effects of multiple threats.

**Q: What would listing under the ESA mean for Sonoran desert tortoises held in captivity by private citizens?**

**A:** The Sonoran desert tortoise is currently a popular household pet for many Arizona families. At this stage, it is premature to speculate on federal rules regarding domestic tortoises if the Sonoran desert tortoise were listed. However, when the Mojave desert tortoise was emergency listed under the ESA in 1989, Mojave desert tortoises lawfully held in captivity prior to the publication of the listing in the *Federal Register* were not subject to regulation under the ESA (or take prohibitions thereof) provided that such holding and any subsequent holding or use of these individuals was not in the course of a commercial activity.

Regardless of whether the Sonoran desert tortoise is listed, both federal and state wildlife agencies strongly encourage private citizens to never release captive tortoises back into the wild. Released captive tortoises pose a threat to wild populations through the spread of disease and genetic contamination. Breeding captive desert tortoises is also strongly discouraged, as this may hurt on-going conservation efforts and contribute to the over-abundance of unwanted tortoises.

**Q: Can I submit comments on the Sonoran desert tortoise status assessment?**

**A:** The 12-month finding is completed and available at <http://www.fws.gov/southwest/es/arizona/>. However, any proposal to add the Sonoran desert tortoise to the federal list of threatened and endangered species will be subject to public review and comment through a rulemaking process.

Information regarding the status and conservation of, and any potential threat to, the Sonoran desert tortoise will be of value to the annual review of today's finding and may be submitted by mail to Field Supervisor, Arizona Ecological Services Office, 2321 West Royal Palm Road, Suite 103, Phoenix, AZ 85021-4951 or by email to [SonoranDT@fws.gov](mailto:SonoranDT@fws.gov).