30 YEARS OF THE ENDANGERED SPECIES ACT

PIMA PINEAPPLE CACTUS

The Pima pineapple cactus was once abundant throughout its small range in the lower Sonoran Desert of southern Arizona. Over time, the growth of several cities and surrounding communities endangered the cactus and its habitat. The Endangered Species Act saved the Pima pineapple cactus from extinction, and a conservation plan is in the works to protect the remaining habitat for the cactus.


Photo by Lorena B. Moore, www.mineralarts.com

HISTORY OF ENDANGERMENT

The Pima pineapple cactus naturally occurs only within a 50-mile by 45-mile area of Sonoran Desert grassland and scrub in southern Arizona and northern Sonora, Mexico. Only about 1,500 individual cacti remain in the United States.

Over the past 150 years, urban sprawl, livestock grazing, mining, the introduction of non-native grasses, and modification of the fire regime have radically altered the landscape of the Sonoran desert grassland and scrub habitat. Trampling by cattle and off-road vehicles also are serious threats to the cactus.

The primary threat, however, is sprawling development in several urban areas; an estimated 75 percent of the cactus's current range could be lost to urban development around Tucson in the next few years.

ROAD TO RECOVERY

The Smithsonian Institution recommended in its 1975 report on 1,726 imperiled plants that the Pima pineapple cactus be listed as threatened. However, like many other plants in that petition, the cactus languished unprotected for years as populations declined further. It was finally listed as endangered in 1993.

Since that time, agencies and individuals have made attempts to protect individual cacti where they are found. However, it was not until recently that a comprehensive plan to protect the habitat was proposed. Currently, the Sonoran Desert Conservation Plan, a habitat conservation plan for 5.9 million acres in southern Arizona, proposes to manage human development and open space to protect habitat for the Pima pineapple cactus and a multitude of other species, as well as preserving the character of the desert as a whole.

CONSERVATION TODAY

The cactus has now been listed as Endangered for ten years. Although it is far from recovered, its prospects have vastly improved with protections from the Endangered Species Act and subsequent funding for management and monitoring.

The Sonoran Desert Conservation Plan will offer habitat protection for the cactus and other endangered species, set guidelines for land management within the habitat, and bring in federal funding for surveys and land acquisition for the protection and recovery of threatened and endangered species.

ECOLOGICAL VALUE

The Pima Pineapple cactus is an integral part of the Sonoran Desert ecosystem. Beautiful silky yellow flowers bring color to the desert each summer. The succulent fruits provide an essential source of food and water to several desert animals.


Tom Newman/FWS

The protection of the Pima pineapple cactus is one of the issues driving the Sonoran Desert Conservation Plan, which offers to protect habitat for 19 other threatened and endangered species. It is widely accepted that this is necessary to maintain ecological integrity, quality of life, and economic growth in the area.

OUTLOOK FOR THE FUTURE

The survival prospects for the Pima Pineapple cactus and all native species within their range have greatly improved with endangered species listing.

While the increasing population of Pima county, with a growth rate of 25 percent every 10 years, continues to encroach on more habitat, the proposed Sonoran Desert Conservation Plan provides hope for the cactus and other endangered species, as well as the desert in general. Without such a plan, conservation efforts will likely continue to be piecemeal at best, and populations will very probably decline as more desert habitat is lost under uncontrolled development.


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Daniel Patterson


Jim Rorabaugh/FWS