

50 CFR Part 17**Determination That *Echinocactus horizontalonius* var. *nicholii* Is an Endangered Species**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines that *Echinocactus horizontalonius* var. *nicholii* (Nichols Turks head cactus), a native plant of Arizona, is an Endangered species. Habitat destruction through mining, off-road vehicles, and increasing urban development threatens the continued existence of this species. Removal of plants by collectors has caused a depletion of natural populations. This action will extend to this plant the protection provided by the Endangered Species Act 1973, as amended.

DATE: This rulemaking becomes effective on November 28, 1979.

FOR FURTHER INFORMATION CONTACT: Mr. John L. Spinks, Jr., Chief—Office of Endangered Species, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C. 20240, 703/235-2771.

SUPPLEMENTARY INFORMATION:**Background**

Echinocactus horizontalonius var. *nicholii* (Nichols Turks head cactus) occurs in two adjacent Arizona counties. This cactus' entire range only occupies approximately 20 square kilometers of the Sonoran Desert. Within this range the cactus occurs in

low densities and is limited to a specific soil type. The total number of individuals has been estimated to be less than 500. *Echinocactus*

horizontalonius var. *nicholii* is a blue-green to yellowish-green cactus with a single columnar stem that reaches 1½ feet in height and 8 inches in diameter. This cactus has pink flowers and fruits which are covered with woolly white hairs. This cactus' continued existence is threatened and this rule will extend to it the protection provided by the ESA of 1973 as amended. The following paragraphs summarize the actions leading up to this final rule and the factors which cause this species to be Endangered.

The Secretary of the Smithsonian Institution, in response to Section 12 of the Endangered Species Act, presented his report on plant species to Congress on January 9, 1975. This report, designated as House Document No. 94-51, contained lists of over 3,100 U.S. vascular plant taxa considered to be endangered, threatened, or extinct. On July 1, 1975, the Director published a notice in the **Federal Register** (40 FR 27823-27924) of his acceptance of the report of the Smithsonian Institution as a petition to list these species under Section 4(c)(2) of the Act, and of his intention thereby to review the status of the plant taxa named within as well as any habitat which might be determined to be critical.

On June 16, 1976, the Service published a proposed rulemaking in the **Federal Register** (41 FR 24523-24572) to determine approximately 1,700 vascular plant species to be Endangered species pursuant to Section 4 of the Act. This list of 1,700 plant taxa was assembled on

the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the above mentioned **Federal Register** publication.

Echinocactus horizontalonius var. *nicholii* was included in both the July 1, 1975, notice of review and the June 16, 1976, proposal. A public hearing on the June 16, 1976 proposal was held on July 22, 1976, in El Segundo, California. A second public hearing was held on July 11, 1979, in Phoenix, Arizona for five Arizona cacti proposed as Endangered, including *Echinocactus horizontalonius* var. *nicholii*.

In the June 24, 1977, **Federal Register**, the Service published a final rulemaking (42 FR 32373-32381, codified at 50 CFR) detailing the regulations to protect Endangered and Threatened plant species. The rules establish prohibitions and a permit procedure to grant exceptions to the prohibitions under certain circumstances.

The Department has determined that this rule does not meet the criteria for significance in the Department Regulations implementing Executive Order 12044 (43 CFR Part 14) or require the preparation of a regulatory analysis.

Summary of Comments and Recommendations

Hundreds of comments on the general proposal of June 16, 1976 were received from individuals, conservation organizations, botanical groups, and business and professional organizations. Few of these comments were specific in nature in that they did not address individual plant species. Most comments addressed the program or the concept of Endangered and Threatened plants and their protection and regulation. These comments are summarized in the April 26, 1978, **Federal Register** publication which also determined 13 plant species to be Endangered or Threatened species (43 FR 17909-17916). Some of these comments addressed the general problems of cacti conservation. Additionally many comments on the cactus trade were received in response to the June 7, 1976, proposed rule (41 FR 22915) on prohibitions and permit provisions for plants under Section 9(a)(2) and 10(a) of the Act. These comments are summarized in the June 24, 1977, **Federal Register** final rule (43 FR 17909-17916) on plant prohibitions and permit provisions. One comment dealing specifically with *Echinocactus horizontalonius* var. *nicholii* was received from the Arizona Department

of Transportation concerning the species distribution. This comment noted that W. Hubert Earle's book, *Cacti of the Southwest*, listed the range of this species as Texas, New Mexico, and Mexico, as well as Arizona. Since this variety was not described until 1969, many earlier floras included the Arizona plants under *Echinocactus horizonthalonius* and thus included all these states and Mexico under its distribution. At least one publication also included a statement that perhaps the disjunct Arizona plants had been transplanted there from the more southern part of the species range. However, more recent biological evidence indicates that this statement was erroneous. The Governor of Arizona was also notified of the proposed action, but he submitted no comments specifically dealing with *Echinocactus horizonthalonius* var. *nicholii*.

On July 11, 1979 the Service held a second public hearing in Phoenix, Arizona and again solicited comments on five Arizona cacti. During this period the Bureau of Reclamation voiced concern that there was a lack of data to support the listing of these five cacti and a lack of detailed information on their Critical Habitats. However, extensive data supporting the listing of these taxa is available from either the Service's regional office in Albuquerque, N.M. or the Washington, D.C. Office of Endangered Species. It has been determined that designating Critical Habitat is imprudent due to the increased pressure this would cause due to over-collecting. Conservationists, botanists, the Bureau of Land Management, and the Arizona Commission of Agriculture and Horticulture all indicated their concurrence with and/or their strong support for the proposal to determine *Echinocactus horizonthalonius* var. *nicholii* to be an Endangered species.

Conclusion

After a thorough review and consideration of all the information available, the Director has determined that *Echinocactus horizonthalonius* var. *nicholii* (Nichols Turks head cactus; synonyms: *Echinocactus horizonthalonius* Lemaire) is in danger of becoming extinct throughout all or a significant portion of its range due to one or more of the factors described in Section 4(a) of the Act.

These factors and their application to *Echinocactus horizonthalonius* var. *nicholii* are as follows:

(1) *Present or threatened destruction, modification or curtailment of its habitat or range.* This species occurs in

two adjacent counties of Arizona and is currently threatened by several factors including copper mining operations, urban development, and off-road vehicle use. The area where the species occurs has not been extensively mined as yet, although several small mines and numerous test pits are already present. Some of the test pits are within the range of the cactus. This species' habitat is also adjacent to an urban area and some habitat destruction has occurred near a sanitary landfill. A dirt bike path also runs through a portion of the species' habitat near the city. This species occurs on lands administered by the Bureau of Land Management, the Papago Indian Reservation, and on a small piece of private land.

(2) *Overutilization for commercial, sporting, scientific, or educational purposes.* Although the commercial use of this cactus is low, the impact from collectors is an important cause in the decline of this plant and has been recognized since 1950. The plants are frequently used for landscaping purposes in the city near where it occurs.

(3) *Disease or predation (including grazing).* Some plants are occasionally found to be uprooted, probably by peccaries. There is no evidence of recent grazing within the distribution of the plant on lands administered by the Bureau of Land Management. However, if intensive grazing does occur it would be harmful to the species, especially young plants.

(4) *The inadequacy of existing regulatory mechanism.* This plant is protected under Arizona law, A.R.S. Chapter 7, Section 3-901, specifically prohibiting the collection of all members of the Cactaceae (*Cactus family*), except under permit. This species occurs on lands owned by the Bureau of Land Management and the Papago Indian Reservation. Bureau of Land Management regulations prohibit the removal, destruction, and disturbance of vegetative resources unless such activities are specifically allowed or authorized (43 CFR 6010.2). Indian Reservations have the power through tribal resolutions to restrict the taking of plants from their lands as well.

All native cacti are on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. However this Convention regulates export of this plant, but does not regulate internal trade in the cactus, or habitat destruction. Except as noted in the preceding paragraph no other Federal protective laws currently apply to this species. The Endangered Species Act will now offer additional protection for the taxon.

(5) *Other natural or manmade factors affecting its continued existence.*

Although the existence of several dispersed populations tends to alleviate the threat to the taxon should severe depletion occur in one area, the restriction of the plants to a localized and specialized habitat and the rather low total population level are factors which tend to intensify the seriousness of any adverse effects occurring within any of the species' range.

Effect of the Rulemaking

Section 7(a) of the Act as amended in 1978 provides:

The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act. Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded or carried out by such agency (hereinafter in this section referred to as an 'agency action') does not jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of section 7 of the Endangered Species Act Amendments of 1978.

Provisions for Interagency Cooperation are codified at 50 CFR Part 402. These regulations are intended to assist Federal agencies in complying with Section 7(a) of the Act. This rulemaking requires Federal agencies to satisfy these statutory and regulatory obligations with respect to this species.

Endangered species regulations in Title 50 of the Code of Federal Regulations set forth a series of general prohibitions and exceptions which apply to all Endangered species. The regulations which pertain to Endangered plant species, are found at §§ 17.61-17.63 (42 FR 32378-32381).

Section 9(a)(2) of the Act, as implemented by § 17.61 would apply to activities related to this plant. With respect to any species of plant listed as endangered, it is, in general, illegal for any person subject to the jurisdiction of the United States to import or export such species; deliver, receive, carry, transport or ship such species in interstate or foreign commerce by any means and in the course of a commercial activity; or sell or offer such species for sale in interstate or foreign

commerce. Certain exceptions apply to agents of the Service and State conservation agencies.

Section 10 of the Act and regulations published in the **Federal Register** of June 24, 1977 (42 FR 32373-32381, 50 CFR Part 17), also provide for the issuance of permits under certain circumstances to carry out otherwise prohibited activities involving Endangered plants.

Effect Internationally

In addition to the protection provided by the Act, all native cacti are on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora which requires a permit for export of the taxon. The Service will review whether it should be considered under the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere or other appropriate international agreements.

National Environmental Policy Act

An Environmental Assessment has been prepared and is on file in the Service's Washington Office of Endangered Species. The assessment is the basis for a decision that this determination is not a major Federal action which significantly affects the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969.

Critical Habitat

The Endangered Species Act Amendments of 1978 added the

following provision to subsection 4(a)(1) of the Endangered Species Act of 1973:

At the time any such regulation (to determine a species to be an Endangered or Threatened species) is proposed, the Secretary shall by regulation, to the maximum extent prudent, specify any habitat of such species which is then considered to be critical habitat.

Echinocactus horizonthalonius var. *nicholii* is threatened by taking (see discussion under Factors 2 and 4 in the conclusion section of this rule) and such taking of plants is not prohibited by the Endangered Species Act of 1973. Publication of critical habitat maps would make this species more vulnerable and therefore it would not be prudent to determine critical habitat. Federal agencies will be notified of the locations of these plants for protection purposes. BLM, the principal Federal agency involved, is aware of the location of this plant.

The Service now proceeds with this

final rulemaking to determine this species to be endangered under the authority contained in the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531-1543).

The primary author of this rule is Ms. E. La Verne Smith, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240, (703-235-1975). Status information for this species was compiled by Dr. A. M. Phillips, III, Dr. B. G. Phillips, Mr. L. T. Green, Ms. J. Mazzone, and Ms. Elaine Peterson (Museum of Northern Arizona, Flagstaff, Arizona).

Regulation Promulgation

Accordingly, § 17.12 of Part 17 of Chapter I of Title 50 of the U.S. Code of Federal Regulations is amended as follows:

1. Section 17.12 is amended by adding, in alphabetical order by family, genus, species, the following plant:

§ 17.12 Endangered and threatened plants.

Species		Range		Status	When listed	Special rules
Scientific name	Common name	Known distribution	Portion endangered			
Cactaceae—Cactus family:						
<i>Echinocactus horizonthalonius</i> var. <i>nicholii</i>	Nichols Turks head cactus	U.S.A. (AZ)	Entire	E	NA

Dated: October 22, 1979.

Robert S. Cook,
Acting Director, Fish and Wildlife Service.

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