

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination That the Purple-Spined Hedgehog Cactus and Wright Fishhook Cactus Are Endangered Species

AGENCY: Fish and Wildlife Service, Interior

ACTION: Final rule.

SUMMARY: The Service determines that the purple-spined hedgehog cactus (*Echinocereus engelmannii* var. *purpureus*) and Wright fishhook cactus (*Sclerocactus wrightiae*) are endangered species pursuant to the Endangered Species Act of 1973, as amended. Both of these taxa are confined to very restricted areas in Utah and are threatened by habitat disruption and modification. In addition, both are eagerly sought by collectors for horticultural purposes to the extent that they have experienced declines. Listing them will provide the protection afforded by the Act as well as mechanisms to assist in management and recovery of surviving populations.

EFFECTIVE DATE: This rulemaking becomes effective on October 11, 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**

The Secretary of the Smithsonian Institution, in response to Section 12 of the Endangered Species Act of 1973, submitted a report (House Document No. 94-51) to Congress on January 9, 1975, in which were listed over 3,100 U.S. vascular plants considered by the Smithsonian as endangered, threatened or extinct. On July 1, 1975, the Director of the Service published a notice in the Federal Register (40 FR 27823-27924) of his acceptance of the Smithsonian's report as a petition under Section 4(c)(2) of the Act, and of his intention thereby to review their status for possible listing.

On June 16, 1976, the Service published a proposed rulemaking in the Federal Register (41 FR 24523-24572) to determine approximately 1,700 vascular plants as 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 notice. Both the purple-spined hedgehog cactus and Wright fishhook cactus were included in the July 1, 1975 notice 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.

In the Federal Register of June 24, 1977 (42 FR 32373-32381), the Service published a final rule detailing the permit regulations to protect endangered and threatened plant species. These rules establish certain prohibitions and a permit procedure to grant exceptions to the prohibitions under certain circumstances.

Note.—The Department has determined that this listing 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

In keeping with the intent of Section 4(b)(1)(c) of the Act, a summary of all comments and recommendations received are published in the Federal Register prior to adding any species to the list of Endangered and Threatened Wildlife and Plants.

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 had addressed the conservation of cacti. One comment was received specifically pertaining to the purple-spined hedgehog cactus and to Wright fishhook cactus. In a letter dated February 17, 1977, Dr. Lyman Benson of Pomona College commented that all species of *Sclerocactus* are rare and known from only a few localities and that the species is really endangered. He had described the fishhook cactus as a new species in 1966. He also indicated that the hedgehog cactus is really endangered. He had described this variety in 1969. The Governor of Utah was informed of the contemplated action on these two taxa, but submitted no comments or recommendations concerning the proposal to list them.

Conclusion

After a thorough review and consideration of all the information available, the Director has determined that *Echinocereus engelmannii* (Parry) Lamaire var. *purpureus* L. Benson (purple-spined hedgehog cactus) and *Sclerocactus wrightiae* L. Benson (Wright fishhook cactus; synonym: *Pediocactus wrightiae*) are in danger of becoming extinct throughout all or a significant portion of their ranges due to one or more of the factors described in Section 4(a) of the Act.

These factors, and their application to the purple-spined hedgehog cactus and Wright fishhook cactus are as follows:

(1) *The present or threatened destruction, modification, or curtailment of its habitat or range.*

Purple-spined hedgehog cactus.—This cactus is known only from the type locality, Mojave Desert, north of St. George, Washington County, Utah, at an elevation of 2,900 feet. There is only a single population of the plant and the number of individuals comprising the population, although small, is not precisely known. Urban sprawl from the city of St. George has greatly reduced the amount of habitat available in the area and this urban sprawl shows no sign of decreasing in the future. One authority reports that at present the "habitat is subject to trampling of every kind." Off-road vehicle activity is one example of this kind of threat.

Wright fishhook cactus.—This species has been found at the type locality near San Rafael Ridge, Navajoan Desert, Emery County, Utah, at an elevation of 5,000 feet. It also is known to occur in Wayne County, Utah, in the vicinity of the Fremont River. In these regions, there are five populations which are scattered, but nowhere is the plant abundant. The land on which populations are known to occur are under the jurisdiction of the Bureau of Land Management, or are State-owned, and are subject to exploration for mineral resources. Such exploration often involves the use of off-road vehicles which can destroy the individual plants themselves and are detrimental to the necessary habitat for the species. Also, one of the proposed sites for the Intermountain Power Project generating station involves one of the localities of this species.

(2) *Overutilization for commercial, sporting, scientific, or educational purposes.*

Purple-spined hedgehog cactus.—Many taxa in *Echinocereus* are popular horticultural plants and widely sought by professional and amateur cactus growers; such cactus fanciers will often

go to extreme lengths to obtain specimens for sale or for their personal collections. The purple-spined hedgehog cactus, being very rare, and highly endemic, has been, and will continue to be, a particular prize among collectors and therefore is very threatened by unregulated commercial trade in specimens of wild origin.

Wright fishhook cactus.—One of the major factors in the decline of this species at present is field collection by amateur and professional cactus fanciers for commercial and hobby purposes. These fanciers could quickly reduce known populations if protective measures are not instituted.

(3) *Disease and predation* (including grazing). Not applicable to either species.

(4) *The inadequacy of existing regulatory mechanisms.* There are no laws in the State of Utah which afford protection to these species. All native cacti are on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. However, this Convention only regulates export of the species, and therefore, does not help regarding internal trade in the cacti, or habitat destruction. Bureau of Land Management regulations (43 CFR 6010.2) offer some protection to vegetative resources, but do not address Wright fishhook cactus directly, and they are difficult to enforce.

(5) *Other natural or man-made factors affecting its continued existence.* Both of these cacti are extremely limited in range. The purple-spined hedgehog cactus is known from only a single population at the type locality; Wright fishhook cactus occurs at two localities and only five populations are known. Thus, both are extremely vulnerable to any sort of disturbance and could be completely extirpated by even the most trivial mishap.

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 this section.

Provisions for Interagency Cooperation were published on January 4, 1978, in the Federal Register (43 FR 870-876) and codified at 50 CFR Part 402. These regulations are intended to assist Federal agencies in complying with Section 7 of the Act. This rulemaking requires Federal agencies to satisfy these statutory and regulatory obligations with respect to this species. New rules implementing the 1978 Amendments to Section 7 of the Act are being prepared now by the Service.

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

All provisions of Section 9(a)(2) of the Act, as implemented by § 17.61, would apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, or to deliver, receive, carry, transport, or ship in interstate or foreign commerce in the course of a commercial activity, or to sell or offer for sale in interstate or foreign commerce, these plants. Certain exceptions would 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, such as trade in specimens of cultivated origin.

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 species. The Service will review these two taxa to determine whether they should be considered under the Convention on Native 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 would significantly affect 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 specify that the following be added at the end of 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 also by regulation, to the maximum extent prudent, specify any habitat of such species which is then considered to be critical habitat.

The purple-spined hedgehog cactus and Wright fishhook cactus both are severely threatened by taking, an activity not directly prohibited by the Endangered Species Act of 1973. Publication of critical habitat maps would make these species more vulnerable and therefore it would not be prudent to determine critical habitat for either of them. The enforcement burden for the Bureau of Land Management would increase if locales of Wright fishhook cactus were more generally publicized.

Echinocereus engelmannii var. *purpureus* and *Sclerocactus wrightiae* were proposed for listing as endangered species on June 16, 1976 (41 FR 24536). Since it has been determined to be imprudent to designate critical habitat for these taxa at this time and all other listing requirements of the Act have been satisfied, the Service now proceeds with this final rulemaking to determine these species to be endangered under the authority contained in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543; 87 Stat. 884).

The primary authors of this rule are John L. Paradiso and Bruce MacBryde, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-1975). The status reports used as major sources in support of this listing were prepared by Dr. Stanley L. Welsh, Brigham Young University, Provo, Utah.

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, and species, the following plants:

§ 17.12 Endangered and threatened plants.

* * * * *

Species		Range		Status	When listed	Special rules
Scientific name	Common name	Known distribution	Portion of range where threatened or endangered			
Cactaceae, Cactus family:						
<i>Echinocereus engelmannii</i> var. <i>purpureus</i>	Purple-spined hedgehog cactus	U.S.A. (UT)	Entire	E		NA
<i>Sclerocactus wrightii</i>	Wright fishhook cactus	U.S.A. (UT)	Entire	E		NA

Dated: October 3, 1979.

Robert S. Cook,
Deputy Director, Fish and Wildlife Service.
[FR Doc. 79-31315 Filed 10-10-79; 8:45 am]
BILLING CODE 4310-55-M

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination That *Sclerocactus glaucus* is a Threatened Species

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The service determines *Sclerocactus glaucus* (Uinta Basin hookless cactus) to be a Threatened species. This plant occurs in Utah and Colorado. *Sclerocactus glaucus* is being commercially exploited by nurserymen and private collectors. Approximately 15,000 individuals are found on eight sites. A determination that *Sclerocactus glaucus* is a Threatened species implements the protection provided by the Endangered Species Act of 1973 as amended.

EFFECTIVE DATE: This rulemaking becomes effective on November 13, 1979.

FOR FURTHER INFORMATION CONTACT: Mr. Harold J. O'Connor, Acting Associate Director—Federal Assistance, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C. 20240, 202/343-4646.

SUPPLEMENTARY INFORMATION:

Background

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 hearing on the June 16, 1976 proposal was held on July 22, 1976, in El Segundo, California. In the June 24, 1977, Federal Register, the Service published a final rulemaking (42 FR 32373-32381, codified at 50 CFR) detailing the permit regulations to protect Endangered and Threatened plant species. These rules establish certain prohibitions and a permit procedure to grant exceptions to the prohibitions under certain circumstances. The Department has determined that this is not a significant rule and does not require the preparation of a regulatory analysis under Executive Order 12044 and CFR 14.

Summary of Comments and Recommendations

Section 4(b)(1)(C) of the Act requires that a summary of all comments and recommendations received be published in the Federal Register prior to adding any species to the List of Endangered and Threatened Wildlife and Plants.

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). The Governors of Utah and Colorado were both notified of the proposed action. The Governors themselves submitted no comments on

the proposed action, nor did the conservation agencies of either State. Two comments were received concerning *Sclerocactus glaucus*. In a letter dated February 17, 1977, Dr. Lyman Benson of Pomona College commented that all species of *Sclerocactus* are rare and known from only a few localities, and that the species is really endangered.

The other comment was from Gary Lyons, chairman of the Cactus and Succulent Society of America Conservation Committee, who wrote concerning distribution of the cactus and possible threats to its habitat.

After a thorough review and consideration of all the information available, the Director has determined that *Sclerocactus glaucus* (K. Schum) L. Benson (Uinta Basin hookless cactus; synonyms: *Echinocactus glaucus*, *E. subglaucus*, *E. whipplei* var. *glaucus*, *Sclerocactus franklinii*, *Pediocactus* 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 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.

Sclerocactus glaucus was included in both the July 1, 1975, notice of review and the June 16, 1976, proposal. A public