

**SUPPLEMENTARY INFORMATION:****Background**

*Hymenoxys texana* was collected by F.W. Thurow in 1889 and 1890 in the vicinity of Hockley, Texas. Coulter and Rose (1891) described it as *Actinella texana*. The species was transferred to the genus *Picradenia* by Greene (1898) and was later transferred to the genus *Hymenoxys* by Cockerell (1904). A then-identified specimen was collected by Palmer around 1879-1880 from southwest Texas, between the Nueces and Frio Rivers on the Old San Antonio Road. However, recent field research has been unsuccessful in relocating this population (Mahler, pers. comm., 1984). The only currently known population of *Hymenoxys texana* is located near Houston in Harris County, Texas (Mahler, 1982). The population occurs on private land, and is located in an area of active residential development.

*Hymenoxys texana* is a member of the aster family (Asteraceae). It is a small, single-stemmed or branching annual reaching up to 10 centimeters (3.9 inches) tall. The basal leaves are 4 to 5 millimeters (0.16-0.20 inches) broad with entire to toothed margins; the upper stem leaves are linear with entire margins. The flower heads are 4 to 6 millimeters (0.16-0.24 inches) tall, yellowish, with phyllaries partially indurate and keeled, in two series which are basally united. Flowering usually occurs in late March to early April. The one population of *Hymenoxys texana* occurs in the northern part of the Gulf Coastal Prairie. It is found in poorly drained swales or depressions in open grasslands with few other plants. The surrounding prairie vegetation is composed of plants measuring about 10 centimeters (3.9 inches), with none over 15 centimeters (5.9 inches). These largely barren areas are sparsely vegetated with scattered individuals of a member of the carrot family (*Limnoscium pumilum*) and the soil is covered with a blue-green alga (*Nostoc* sp.). The population biology and ecology of *Hymenoxys texana* are unknown and additional studies are needed.

Federal action involving this species began with section 12 of the Endangered Species Act of 1973 which directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened, or extinct. This report, designated as House Document No. 94-51, was presented to Congress on January 9, 1975. On July 1, 1975, the Service published a notice in the **Federal Register** (40 FR 27823) of its acceptance of the report as a petition within the

context of Section 4(c)(2), now Section 4(b)(3)(A) of the Act, and of its intention thereby to review the status of those plants. On June 16, 1976, the Service published a proposed rule in the **Federal Register** (41 FR 24523) to determine approximately 1,700 vascular plant taxa to be endangered species pursuant to Section 4 of the Act. *Hymenoxys texana* was included in the Smithsonian petition and the 1976 proposal.

The Endangered Species Act Amendments of 1978 required that all proposals over 2 years old be withdrawn. A 1-year grace period was given to proposals already over 2 years old. In the December 10, 1979, **Federal Register** (44 FR 70796), the Service published a notice of the withdrawal of that portion of the June 16, 1976, proposal that had expired, along with four other proposals that had expired. A revised list of plants under review for listing as endangered or threatened species was published in the December 15, 1980, **Federal Register** (45 FR 82480), and it included *Hymenoxys texana* as a category 1 species. Category 1 comprises taxa for which the Service presently has sufficient biological information to support the appropriateness of their being listed as endangered or threatened species.

The Endangered Species Act Amendments of 1982 required that all petitions pending as of October 13, 1982, be treated as having been newly submitted on that date. The species covered in the December 15, 1980, notice of review were considered to be petitioned, and the deadline for a finding on those species, including *Hymenoxys texana*, was October 13, 1983. On October 13, 1983, and again on October 12, 1984, the petition finding was made that listing *Hymenoxys texana* was warranted but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act. Such a finding requires a recycling of the petition, pursuant to section 4(b)(3)(C)(i) of the Act. A proposed rule published March 6, 1985 (50 FR 9095), constituted the next required finding that the petitioned action was warranted in accordance with Section 4(b)(3)(B)(ii) of the Act.

**Summary of Comments and Recommendations**

In the March 6, 1985, proposed rule (50 FR 9095) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted

**DEPARTMENT OF INTERIOR****Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Hymenoxys Texana***

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** The Service determines a plant, *Hymenoxys texana*, to be an endangered species under the authority contained in the Endangered Species Act of 1973 (Act), as amended. This plant occurs on private land in Harris County, Texas. The one remaining population is currently threatened by destruction of habitat due to residential development. This action implements the protection provided by the Act.

**EFFECTIVE DATE:** The effective date of this rule is April 14, 1986.

**ADDRESSES:** The complete file for this rule is available for public inspection, by appointment, during normal business hours at the Service's Regional Office of Endangered Species, 500 Gold Avenue SW., Room 4000, Albuquerque, New Mexico.

**FOR FURTHER INFORMATION CONTACT:** Charles McDonald, Botanist, Region 2, Office of Endangered Species, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972 or FTS 474-3972).

and requested to comment. A newspaper notice was published in the *Houston Chronicle* on Wednesday, March 27, 1985, which invited general public comment. Seven comments were received and are discussed below. No public hearing was requested or held.

The International Union for Conservation of Nature and Natural Resources (IUCN) supported the proposal. The Texas Parks and Wildlife Department stated that, after a review of the proposal, listing appears to be appropriate. The National Park Service stated that the species does not occur on Big Thicket National Preserve and hopes that listing the plant will guarantee its survival. Mr. Harold E. Beaty, leader of the Texas Plant Recovery Team, commented that it is the team's feeling that the species should be listed as endangered and that additional attention and study should be given to the plant. Two professional botanists responded with no additional substantive information, but one of them made a statement supporting the proposed listing based on his knowledge of Dr. Mahler's previous work. James W. Kessler, who has monitored the status of the plant for the past four years, reported that two populations have been destroyed by bulldozing activities associated with residential development. This information has been incorporated into the final rule. Mr. Kessler also indicated there is local interest in relocating some plants to Mercer Arboretum, a County-owned plant and wildlife sanctuary in northern Harris County. The Service responds that this interest is appreciated and will be helpful in recovery planning.

#### Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Hymenoxys texana* should be classified as an endangered species. Procedures found at Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et. seq.*) and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Hymenoxys texana* (Coulter and Rose) Cockerell are as follows:

**A. The present or threatened destruction, modification, or curtailment of its habitat or range.** The most serious threat to *Hymenoxys texana* is habitat destruction. The plants occur in an area of rapid development at the northern

edge of metropolitan Houston. At the time of the proposal to list the species as endangered, three populations were known. Since then two of these have been destroyed by residential housing development and the remaining population is located on private land adjacent to a residential development. If current development continues, as is anticipated, the one remaining population could be destroyed.

**B. Overutilization for commercial, recreational, scientific, or educational purposes.** Commercial trade in this plant is not known to exist, but potential exists for uncontrolled collecting and vandalism. The population on private land will not be protected from taking by the Endangered Species Act, and it is easily accessible.

**C. Disease or predation.** There is no known threat to this plant from disease or predation.

**D. The inadequacy of existing regulatory mechanisms.** Currently, *Hymenoxys texana* is not protected by either Federal or State laws or regulations.

**E. Other natural or manmade factors affecting its continued existence.** The presence of only one population makes the existence of this species particularly precarious. Because of the low number of plants, there is a small gene pool, possibly reducing the ability of the species to tolerate stress or change.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list *Hymenoxys texana* as endangered without critical habitat.

Endangered status seems appropriate because only one known population remains and is subject to the possibility of destruction by residential development. The reasons for not designating critical habitat are discussed below.

#### Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary designate any habitat of a species that is considered to be critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for this species at this time due to its low numbers and restriction to one population. The Act does not protect endangered plants from taking or vandalism on lands that are not under Federal jurisdiction. This would result in an especially severe

problem, as the habitat of *Hymenoxys texana* is located on private land along a highway and is easily accessible. Listing of a species, with attendant publicity, highlights its rarity and attractiveness to collectors. Publication of critical habitat descriptions for this species would make it more vulnerable to taking or vandalism. Therefore, it would not be prudent to determine critical habitat for *Hymenoxys texana* at this time. The location of publications of this plant will be brought to the attention of appropriate agencies and other involved parties through regular communications. No net benefit would accrue from designating critical habitat for this species.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402, and are now under revision (see proposal at 48 FR 29990; June 29, 1983). Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species, the responsible Federal agency must enter into formal consultation with the Service. However, *Hymenoxys texana* is not known to occur on Federal lands, and no Federal involvement with this species is currently known or expected.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general trade prohibitions and exceptions that

apply to all endangered plant species. With respect to *Hymenoxys texana*, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, or sell or offer for sale this species in interstate or foreign commerce. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued since the species is not common in cultivation or in the wild.

Section 9(a)(2)(B) of the Act, as amended in 1982, prohibits the removal and reduction to possession of endangered plant species from areas under Federal jurisdiction. The prohibition now applies to *Hymenoxys texana*. Permits for exceptions to this prohibition are available through regulations published September 30, 1985 (50 FR 39681; to be codified at 50 CFR 17.62). At present, no populations of *Hymenoxys texana* are known to exist on Federal land. It is expected that few collecting permits for this species will

ever be requested. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, Washington, DC 20240 (703/235-1903).

**National Environmental Policy Act**

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

**Literature Cited**

Cockerell, T.D.A. 1904. The North American species of *Hymenoxys*. Bulletin of Torrey Botanical Club 31(9):461-509.  
 Coulter, J.M., and J.N. Rose. 1891. *Actinella (Hymenoxys) texana*, n. sp. Botanical Gazette 16:27-28.  
 Greene, E.L. 1898. Studies in the Compositae VII. Pittonia 3:264-296.  
 Mahler, W.F. 1982. Status report on *Hymenoxys texana*. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 10 pp.

**Author**

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**List of Subjects in 50 CFR Part 17**

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

**Regulation Promulgation**

**PART 17—[AMENDED]**

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for Part 17 continues to read as follows:

**Authority:** Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*).

2. Amend § 17.12(h) by adding the following, in alphabetical order under the family Asteraceae, to the List of Endangered and Threatened Plants:

**§ 17.12 Endangered and threatened plants.**

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 (h) \* \* \*

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Asteraceae—Aster family						
<i>Hymenoxys texana</i>	None	U.S.A. (TX)	E	218	NA	NA

Dated: February 28, 1986.  
**P. Daniel Smith,**  
*Assistant Secretary for Fish and Wildlife and Parks.*  
 [FR Doc. 86-5531 Filed 3-12-86; 8:45 am]  
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