
DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service**50 CFR Part 17**
Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Lesquerella pallida* (White Bladderpod)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service has determined that a plant, *Lesquerella pallida* (white bladderpod), is an endangered species. This plant occurs on both public and private land in San Augustine County, Texas. Its three known populations are threatened by herbicide use, county road maintenance or improvement, grazing, and encroachment of shrubby vegetation into the species' habitat. This determination of endangered status for *Lesquerella pallida* implements protection provided by the Endangered Species Act of 1973 (Act), as amended.

DATES: The effective date of this rule is April 10, 1987.

ADDRESSES: The complete file for this rule is available for 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, Endangered Species Office, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972 or FTS 474-3972).

SUPPLEMENTARY INFORMATION:*Background*

Lesquerella pallida was discovered in the 1830's by M.C. Leavenworth on small prairies near San Augustine, Texas. It was recognized first as a

variety of *Vesicaria grandiflora* (Torrey and Gray 1838) and soon elevated to species rank in that genus (Torrey and Gray 1840). Watson (1888) erected the genus *Lesquerella* and placed *Lesquerella pallida* within the group. Because no plants had been found since the initial collection in the 1830's and because the flower color of the only specimen was questionable, Rollins and Shaw (1973) considered *Lesquerella pallida* to be a slightly anomalous form of *Lesquerella gracilis*. In 1981, a population of *Lesquerella pallida* was discovered by Nixon and Ward. Upon this discovery and based on new information indicating the plant's distinctness, Nixon *et al.* (1983) proposed the reinstatement of *Lesquerella pallida* as a species. With these new findings, Dr. Reed C. Rollins, an expert on this group of plants, fully agrees that *Lesquerella pallida* is a distinct species in its own right (Rollins, Harvard University, pers. comm., 1984).

Lesquerella pallida is an erect to spreading annual in the mustard family (Brassicaceae). Plants range from 5 to 60 centimeters (2 to 23.6 inches) tall. The leaves are linear to oblanceolate with entire to dentate margins. Basal leaves are up to 10 centimeters (3.9 inches) long and 2 centimeters (0.8 inch) wide with petioles up to 4 centimeters (1.6 inches) long; stem leaves are gradually reduced upward, becoming sessile and extending into the inflorescence. The flowers are arranged in racemes up to 16 centimeters (6.3 inches) long and containing up to 24 flowers; the pedicels are up to 18 millimeters (0.7 inch) long and slightly recurved at maturity. The flowers have four white petals, each with a yellow base. The petals are up to 12 millimeters (0.5 inch) long and 8.5 millimeters (0.3 inch) wide. The fruits are globose to ellipsoid, up to 5.5 millimeters (0.2 inch) long, and 6 millimeters (0.2 inch) wide.

Lesquerella pallida occurs in the oak-hickory-pine vegetation type (Küchler 1964) of the gently rolling Coastal Plain (Hunt 1967) of eastern Texas. Specifically, it occurs in open areas associated with rock outcrops of the Weches geologic formation. This formation usually consists of calcareous marine sediments underlain by a grayish-green layer of glauconite. Because of the impermeability of the glauconite layer, Weches outcrops are seepy and wet much of the year. Soils around Weches outcrops are basic in pH due to the high levels of calcium and magnesium in the rocks. These soils are in sharp contrast to the acid, sandy, and leached soils usually encountered in eastern Texas.

Presently, three populations of *Lesquerella pallida* exist. The largest, discovered in 1981, is located approximately 8 miles west of San Augustine, Texas, on private land used for pasture. The population covers approximately 2 hectares (5 acres). It contained about 3,300 individuals in 1982, but had far fewer in the dry spring of 1984 (Nixon 1984). In 1985, which was again a wet year, the number of individuals equaled or exceeded that of 1982 (Mahler 1985). The other two populations were discovered in 1985 (Mahler 1985). One population is located approximately 10 miles west of San Augustine, Texas, on private land. It is confined to a single opening about 4 x 15 meters (13 x 49 feet) and contains about 50 plants. The area nearby is used to some extent as a garbage dump. The site is also being invaded by Macartney rose (*Rosa bracteata*) and other shrubs and trees. The other population is located approximately 6 miles southeast of San Augustine, Texas, on a county road right-of-way and in adjacent private pasture. The population occupies an area approximately 30 x 75 meters (98 x 243 feet) and contains about 160 plants. The right-of-way is quite brushy and the remaining open habitat is being invaded by shrubs and trees.

Federal action involving this species began when *Lesquerella pallida* was included as a category 2 species in a November 28, 1983, supplement (48 FR 53640) to the 1980 notice (45 FR 82480) of plants that were under review for threatened or endangered classification. Category 2 includes taxa for which the Service has insufficient biological information to determine the appropriateness of proposing the species as endangered or threatened. Status reports on *Lesquerella pallida* were completed in 1984 and 1985. These reports provided sufficient biological information to support the appropriateness of proposing *Lesquerella pallida* for listing as endangered. *Lesquerella pallida* was included in category 1 (those species for which the Service has substantial information indicating that they should be proposed for endangered or threatened status) in the September 27, 1985, revision (50 FR 39526) of the 1980 notice and 1983 update. On April 9, 1986 (51 FR 12184), the Service proposed *Lesquerella pallida* as an endangered species. With the publication of this final rule, the Service now determines that this plant is an endangered species.

Summary of Comments and Recommendations

In the April 9, 1986, proposed rule (51 FR 12184) 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, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice that invited general public comment was published in the *Nacogdoches Daily Sentinel* on April 30, 1986. Four comments were received and are discussed below. A public hearing was not requested.

Comments on the proposal were received from three botanists and the Texas Natural Heritage program. All parties expressed support for the listing and had no further information to add. Dr. Reed Rollins of the Gray Herbarium of Harvard University noted that surveys by himself and other botanists had confirmed the rarity of the species.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Lesquerella pallida* 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 *Lesquerella pallida* (Torrey and Gray) S. Watson (white bladderpod) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Herbicide spraying for pasture brush control is a common practice in the region. Inadvertent application of herbicide to *Lesquerella pallida* could destroy the two smaller populations and seriously reduce the larger one. Although spraying might open new habitat and therefore be beneficial in the longterm, the short-term effect on any population being sprayed would be detrimental. Plants in pastures could be seriously damaged by trampling and overgrazing. Although the pastures where plants occur are presently only moderately grazed, the land is privately owned so there is no control over how intensively the land might be used. The population on county road right-of-way would be damaged by road improvements or right-of-way grading or mowing. The population occurs in a wide portion of right-of-way where the road jogs to go up a small hill. If this road is ever widened or improved, the jog will likely be straightened, running the road directly through the population. This portion of right-of-way

is also large enough to be used to stockpile roadbuilding material or as a dumpsite for excess soil taken from elsewhere. Either of these activities would destroy a major portion of the population.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Commercial trade in this plant is not known to exist; however, because of its restricted range, collecting and vandalism pose a threat to survival of this species. The populations on private land will not be protected from taking by the Act, and all three populations are easily accessible.

C. *Disease or predation.* No threats are known.

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

E. *Other natural or manmade factors affecting its continued existence.* *Lesquerella pallida* grows in openings associated with rock outcrops. These areas are invaded by shrubby species, eliminating *Lesquerella pallida* habitat. Common invaders are Macartney rose (*Rosa bracteata*), blackberry (*Rubus* spp.), and sumac (*Rhus* spp.). Since there has been little study of the species biology or ecology of *Lesquerella pallida*, the appropriate method of maintaining suitable open habitat for the species is not known.

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 *Lesquerella pallida* as endangered without critical habitat. Endangered status seems appropriate because there are only three known populations of this species and they could be eliminated by herbicide spraying, overgrazing, road maintenance or construction, or the loss of open habitat due to the invasion of shrubby species. 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 critical habitat at the time a 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 restricted distribution and easy accessibility. 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 for *Lesquerella pallida*, which occurs on both private and public land, and whose

habitat is easily accessible. Listing of a species, with attendant publicity, highlights its rarity and attractiveness to collectors. Publication of critical habitat descriptions would make this species more vulnerable to taking by collectors or to vandalism. Therefore, it would not be prudent to determine critical habitat for *Lesquerella pallida* at this time.

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. 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 or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. However, *Lesquerella pallida* 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 plants. 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 any endangered plant, transport it in interstate or foreign commerce in the course of a commercial activity, sell or offer it for sale in interstate or foreign commerce, or to remove it from areas under Federal jurisdiction and reduce it to possession. 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 *Lesquerella pallida* is not common in cultivation or in the wild. 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).

References Cited

Hunt, C.B. 1967. Physiography of the United States. W.H. Freeman and Company, San Francisco, California.
 Kuchler, A.W. 1964. Potential natural vegetation of the conterminous United States. American Geographical Society Special Publication 36.
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Nixon, E.S., J.R. Ward, and B.L. Lipscomb. 1983. Rediscovery of *Lesquerella pallida* (Cruciferae). *Sida* 10:167-175.
 Rollins, R.C. and E.A. Shaw. 1973. The genus *Lesquerella* (Cruciferae) in North America. Harvard University Press, Cambridge, Massachusetts.
 Torrey, J. and A. Gray. 1838. A flora of North America. Wiley and Putnam, New York.
 Torrey, J. and A. Gray. 1840. A flora of North America supplement, additions and emendations. Wiley and Putnam, New York.
 Watson, S. 1888. Contributions to American botany. XV. Proceedings of the American Academy of Arts 23:253.

Author

The author of this final rule is Sue Rutman, Endangered Species Office, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972 or FTS 474-3972). The editor is E. LaVerne Smith, Office of Endangered Species, Washington, DC 20240. Status information was provided by Dr. E.S. Nixon, Stephen F. Austin State University, Nacogdoches, Texas 75962, and Dr. W.F. Mahler, Southern Methodist University, Dallas, Texas 75275.

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 Brassicaceae, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

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Species	Scientific name	Common name	Historic range	Status	When listed	Critical habitat	Special rules
Brassicaceae—Mustard family:							
	<i>Lesquerella pallida</i>	White bladderpod	U.S.A. (TX)	E	260	NA	NA

Dated: January 28, 1987.
P. Daniel Smith,
 Deputy Assistant Secretary for Fish and Wildlife and Parks.
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