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DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
50 CFR Part 17 #67-90
RIN 1018-AB42
Endangered and Threatened Wildlife and Plants; Proposed Rule to List the plant *Phlox Nivalis* ssp. *Texensis* (Texas Trailing Phlox) as Endangered
AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Fish and Wildlife Service (Service) proposes to list *Phlox nivalis* ssp. *texensis* as an endangered species under the authority of the Endangered Species Act of 1973 (Act), as amended. This plant presently is known from only 2 sites in east Texas, out of 17 sites that were known previously. The species is threatened by habitat loss from housing development, clearing for pine plantations, highway and pipeline construction, and fire suppression. This proposal, if made final, would implement Federal protection provided by the Act for Texas trailing phlox.

The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by July 30, 1990. Public hearing requests must be received by July 16, 1990.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Field Supervisor, Ecological Services Field Office, U.S. Fish and Wildlife Service, c/o Corpus Christi State University, Campus Box 338, 6300 Ocean Drive, Corpus Christi, Texas 78412. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Phillip Clayton (See **ADDRESSES**) at (512) 888-3346 or FTS 529-3346.

SUPPLEMENTARY INFORMATION:
Background

Phlox nivalis ssp. *Texensis* is a trailing phlox that is known from only two sites in east Texas. The species is endemic to the Big Ticket Forest of

Texas, which includes *Fagus grandiflora* (American beech), *Quercus* spp. (oak), *Magnolia* spp. (magnolia), *Pinus* ssp. (pine), and *Liquidambar styraciflua* (American sweetgum). Soils are sandy loam to deep sand. *Phlox nivalis* ssp. *texensis* historically occurred in open, grassy, frequently burned, longleaf pine (*Pinus palustris*) savanna in sandy soil, and in association with *Bothriochloa* sp., *Carya* spp. (hickory), and *Ilex vomitoria* (yaupon) (Mahler 1980, Poole *in litt.*).

Phlox nivalis ssp. *Texensis* is a short (30 cm.; 12 in.) clump-forming, perennial species with spreading, evergreen shoots. Sterile shoots have crowded, subulate and needle-like leaves; fertile shoots have short, lanceolate leaves. The flowers occur in a three-to-six flowered cyme; herbage is pubescent with gland-tipped hairs. Flowers are purple-lavender, deep rose, pink, or white, and appear from late March to early April. Fruit is a trilocular capsule and contains one seed per locule. The reproductive biology of the species is unknown.

Historically, *Phlox nivalis* ssp. *texensis* was known from Hardin, Tyler, and Polk Counties in east Texas. Seven collection localities were documented in the 1940's in Tyler County, five of which were sites of multiple collections. Lundell (1942) stated that the species " * * * is abundant in the pine lands * * * between Woodville and Warren in Tyler County." Populations previously documented from the Big Thicket National Preserve in 1948 were not seen again until relocated by Geyata Ajilvsgi in 1972 (Mahler 1980).

Mahler (1980) documented five sites in Hardin and Tyler Counties during his status survey. Three groups of plants, each comprising only a few clumps, were located within a short distance of each other in Tyler County. In Hardin County, two sites on and near Texas Nature Conservancy (TNC) land supported *Phlox nivalis* ssp. *texensis*. The populations in Polk County were not located during the status survey (Mahler 1980).

Field work by a Texas Natural Heritage Program botanist in 1989 located only 2 extant sites out of 17 in the Heritage Program data base. The largest population occurs on TNC land in Hardin County, where a few hundred plants are scattered across a former slashpine plantation in a sandy soil, fire-maintained pine savanna. A small population of only six clumps of flowering plants occurs at the edge of a pine plantation in Tyler County (Poole, *in litt.*).

Texas trailing phlox was first collected in Hardin County, Texas, by Whitehouse in 1931. In 1942, Lundell described the taxon as a subspecies of *Phlox nivalis*. He then elevated it to the rank of species in 1945. Wherry, in his 1955 monograph on *Phlox* and his treatment of the genus in the *Flora of Texas* (1966), recognized the taxon as a subspecies of *Phlox nivalis* (Mahler 1980). The taxon is disjunct from the other subspecies that occurs about 400 miles eastward in Florida; this marked disjunction is a primary factor in the subspecific segregation (Wherry 1966). The extremely small gland-tipped hairs of *P. nivalis* ssp. *texensis* are a differentiating character (Wheeler 1955). The subspecies may be identified by the pronounced sinus of the corolla lobes. In the typical form of the species, the lobes have an irregularly notched edge or are inconspicuously emarginate (Lundell 1942).

Section 12 of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) directed the Secretary of the Smithsonian Institution to prepare a report of 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 of the Smithsonian Institution as a petition within the context of section 4 of the Act and of its intention to review the status of the plant taxa named within. On June 16, 1976, the Service published a proposed rule in the **Federal Register** (41 FR 24523) 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 July 1, 1975, **Federal Register** publication. *Phlox nivalis* ssp. *texensis* was included in the July 1, 1975, notice of review and in the June 16, 1976, proposal.

The Endangered Species Act Amendments of 1978 required that all proposals over two years old be withdrawn. A one-year grace period was given to those proposals already more than 2 years old. Subsequently, on December 10, 1979, (44 FR 70796), the Service published a notice of the withdrawal of the portion of the June 16, 1976, proposal that had not been made final, along with other proposals that had expired; this notice of withdrawal included *Phlox nivalis* ssp. *texensis*.

On December 15, 1980, (45 FR 82480) and September 27, 1985, (50 FR 39526), the Service published updated notices reviewing the native plants being considered for classification as threatened or endangered. *Phlox nivalis* ssp. *texensis* was included in these notices as a category 1 species. Category 1 comprises taxa for which the Service has sufficient biological data to support proposing them as endangered or threatened.

Section 4(b)(3)(B) of the Endangered Species Act, as amended in 1982, requires the Secretary to make findings on certain pending petitions within one year of their receipt. Section 2(b)(1) of the Act's Amendments of 1982 further requires that all petitions pending on October 12, 1982, be treated as having been newly submitted on that date. Because *Phlox nivalis* ssp. *texensis* was included in the 1980 notice, the petition to list this species was treated as being newly submitted on October 12, 1982. In 1983, 1984, 1985, 1986, 1987, 1988, and 1989, the Service made the required one-year findings that listing of *Phlox nivalis* ssp. *texensis* was warranted, but precluded by other listing actions of higher priority. Biological data, supplied by Mahler (1980), and Poole (*in litt.*), full support listing of *Phlox nivalis* ssp. *texensis*. This proposed rule constitutes the final one-year finding required by section 4(b)(3)(B) of the Act for this species.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal lists. 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 *Phlox nivalis* ssp. *texensis* Lundell (Texas trailing phlox) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Loss of habitat has caused this subspecies to decline within its range during the last 30 years. Because of the small number of plants within a small number of populations in only two general localities, the taxon is vulnerable to further loss of habitat (Mahler 1980). Housing development and large scale land clearing for pine plantations in Tyler County, Texas, have eliminated former populations of Texas trailing phlox. Pipeline construction adjacent to the TNC land recently destroyed a once thriving population.

The population on the TNC land could be negatively affected by aerial drift from herbicide spray that is often applied from low-flying aircraft in timber areas (Mahler 1980). Loss of additional habitat would be detrimental to this plant.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* None known. Because of its rarity and potential use as an ornamental, *Phlox nivalis* ssp. *texensis* is of interest to botanists, plant breeders, and rare plant enthusiasts. Therefore, collection of plants is a potential threat.

C. *Disease of predation.* None apparent.

D. *The inadequacy of existing regulatory mechanisms.* *Phlox nivalis* ssp. *texensis* is not currently protected by either Federal or State law. The Act would provide protection and encourage active management through the "Available Conservation Measures" discussed below.

E. *Other natural or manmade factors affecting its continued existence.* Fire suppression has reduced the amount of suitable habitat for this species. Much of the former habitat has deteriorated because of aggressive invasion of successional hardwoods into unburned pine savannas. A prescribed burning and slash pine removal program on the TNC land has enhanced habitat for Texas trailing phlox.

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 propose this rule. Based on this evaluation, the preferred action is to list *Phlox nivalis* ssp. *texensis* as endangered. With documented population declines and imminent threats, the species warrants protection under the Act. Critical habitat is not being proposed for the reasons discussed below.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary propose critical habitat at the time the species is proposed to be endangered or threatened. The Service finds that designation of critical habitat is not presently prudent for this species. There are only two sites known for *Phlox nivalis* ssp. *texensis*. Loss of even a few plants to activities such as collection for scientific purposes could extirpate the species. As discussed under Factor B in the Summary of Factors Affecting the Species, *Phlox nivalis* ssp. *texensis* is threatened by taking, an activity

difficult to enforce against and only regulated by the Act with respect to plants in cases of (1) removal and reduction to possession of endangered plants from lands under Federal jurisdiction, or their malicious damage or destruction on such lands; and (2) removal, cutting, digging up, or damaging or destroying in knowing violation of any State law or regulation, including State criminal trespass law. Such provisions are difficult to enforce, and publication of critical habitat descriptions and maps would make *Phlox nivalis* ssp. *texensis* more vulnerable and increase enforcement problems. All involved parties and principal landowners have been notified of the location and importance of protecting this species' habitat. Protection of this species' habitat will be addressed through the recovery process and through the section 7 jeopardy standard. Therefore, it would not now be prudent to determine critical habitat for *Phlox nivalis* ssp. *texensis*.

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. The protection required of Federal agencies and the prohibitions against certain activities involving listed plants 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)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, 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 such a 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. There are no known populations of *Phlox nivalis* ssp. *texensis* that either occur on Federal land and/or would be affected by activities authorized, funded, or carried out by a Federal agency.

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, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale this species in interstate or foreign commerce, or to remove and reduce to possession the species from areas under Federal jurisdiction. In addition, for endangered plants, the 1988 amendments (Pub. L. 199-478) to the Act prohibit the malicious damage or destruction on Federal lands and the removal, cutting, digging up, or damaging or destroying of endangered plants in knowing violation of any State law or regulation, including State criminal trespass law. Certain exceptions 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 because the species 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 Office of Management Authority, U.S. Fish and Wildlife Service, P.O. Box 3507, Arlington, VA 22201 (703/358-2104).

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this species:

(2) The location of any additional populations of this species and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;

(3) Additional information concerning the range, distribution, and population size of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Final promulgation of the regulation on this species will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be received within 45 days of the date of publication of the proposal. Such requests must be made in writing and addressed to the Field Supervisor, Ecological Services Field Office, Corpus Christi, Texas (see **ADDRESSES**).

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

- Lundell, C.L. 1942. Studies of American spermatophytes-III. Contrib. Univ. Mich. Herb. 8:77-79.
- Mahler, W.F. 1980. Status report, *Phlox nivalis* ssp. *texensis*. Lundell. U.S. Fish and Wildlife Service. Albuquerque, NM. 12 pp.
- Wherry, E.T. 1966. Polemoniaceae. in C.L. Lundell (ed.) *Flora of Texas* 1(3):283-321.
- Wherry, E.T. 1955. The genus *Phlox*. Morris Arboretum Monographs III. 174 pp.

Author

The primary author of this proposed rule is Sonja Jahrsdoerfer, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, NM 87103 (505/766-3972 or FTS 474-3972).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

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

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1543; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. It is proposed to amend § 17.12(h) by adding the following, in alphabetical

order under the Family Polemoniaceae, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Polemoniaceae—Phlox family:						
<i>Phlox nivalis</i> ssp. <i>texensis</i>	Texas trailing phlox	(U.S.A.) TX	E		NA	NA

[Proposal: *Phlox nivalis* ssp. *texensis* (Texas trailing phlox)—endangered]

Dated: April 30, 1990.

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

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