
DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Proposal To Determine *Astragalus Humillimus* (Mancos milk-vetch) To Be an Endangered Species**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service proposes to list a plant, *Astragalus humillimus* (Mancos milk-vetch), as an endangered species under the authority contained in the Endangered Species Act of 1973, as amended. *Astragalus humillimus* is presently known from three populations west of Waterflow, New Mexico (San Juan County). The Mancos milk-vetch was also collected in Montezuma County, Colorado, in 1875; however, the species has not been recollected there since that time.

This species is vulnerable due to a low number of plants, restricted

distribution, a low tolerance for disturbance, and close proximity to powerline corridors, roads, and oil wells. A final determination of *Astragalus humillimus* to be an endangered species will implement the protection provided by the Endangered Species Act of 1973, as amended. Critical habitat is not being proposed at this time. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by August 27, 1984. Public hearing requests must be received by August 13, 1984.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103. Comments and materials received will be available for public inspection during normal business hours, by appointment, at the Service's Regional Office of Endangered Species, 421 Gold Avenue, S.W., Albuquerque, New Mexico.

FOR FURTHER INFORMATION CONTACT: Dr. Russell L. Kologiski, Botanist, Region 2 Endangered Species staff (See **ADDRESSES** above) (505/766-3972).

SUPPLEMENTARY INFORMATION:
Background

Astragalus humillimus Gray ex Brandegee is in the pea family. The species was collected once by Brandegee in 1875 and was described by Asa Gray in 1876. Kuntze named this plant *Tragacantha humilima* in 1891. Rydberg changed the name to *Phaca humilima* (1905), and Barneby placed it in the genus *Astragalus* in 1964 (Barneby, 1964; Knight, 1981).

Astragalus humillimus has short stems measuring 0.5 to 1 centimeter tall. It is a perennial species with compound leaves (having many leaflets) measuring 8 to 15 millimeters long. The leaflets are pubescent, 0.7 to 2 millimeters long, light green, and oval shaped. The flowers are lavender with white veins, are about 1 centimeter long, and have a sweet pungent smell. The fruit is an oblong pod about 5 millimeters long. This species grows in low, tufted mats 31-45 centimeters in diameter. These clumps are often covered with butterflies, and *Vanessa cardui* (painted lady butterfly) has been identified as a pollinator of *Astragalus humillimus* (Knight, pers. comm. 1983). Flowering occurs only for a short time, between late April and early May. Most fruits have ripened by early June.

Astragalus humillimus is known only from a ridge west of Waterflow, New Mexico. The 3 known populations occur

on Navajo Indian Reservation land and contain approximately 7,000 plants. The plants are restricted to Point Lookout sandstone, a tan cretaceous sandstone of the Mesa Verde series, at an elevation of 1,545 to 1,645 meters. The *Astragalus* forms rings in depressed pockets of sandy soil. Two of the populations are on Point Lookout sandstone mesas and one is on island outcrops of Point Lookout sandstone. Dominant associated plants are *Oryzopsis hymenoides*, *Gutierrezia sarothrae*, *Yucca angustissima*, and *Artemesia tridentata*. The plants occur in the vicinity of utility corridors, drilling pads, oil wells, pipelines, and roads; additional construction and maintenance of these could destroy or severely impact the populations.

Astragalus humillimus was first collected in 1875 in Montezuma County, Colorado, but the type population has never been relocated. The first Federal action involving *Astragalus humillimus* was on June 16, 1976, when the Service published a proposed rule in the **Federal Register** (41 FR 24524) to determine approximately 1,700 vascular plant species to be endangered pursuant to Section 4 of the Act. *Astragalus Humillimus* was included in the June 16, 1976, proposal. General comments received in relation to the 1976 proposal were summarized in the April 26, 1978, **Federal Register** (43 FR 17910).

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. On December 10, 1979, the Service published a notice of withdrawal of the June 16, 1976, proposal, along with four other proposals which had expired (44 FR 70796).

Astragalus humillimus was included as a category 1 species in a list of plants under review for threatened or endangered classification published in the December 15, 1980, **Federal Register** (42 FR 82480). Category 1 is comprised of taxa for which the Service presently has sufficient biological information to support 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 listed in the December 15, 1980, notice of review were considered to have been petitioned, and the deadline for a finding on those species, including *Astragalus humillimus*, was October 13, 1983.

On October 13, 1983, the petition finding was made that listing *Astragalus humillimus* was warranted but

precluded by other pending listing actions, in accordance with Section 4(b)(3)(B)(iii) of the Act; notification of the finding was published in the January 20, 1984, **Federal Register** (49 FR 2485). Such a finding requires a recycling of the petition, pursuant to Section 4(b)(3)(C)(i) of the Act. Therefore, a new finding must be made: this proposed rule constitutes the finding that the petitioned action is warranted and proposes to implement the action in accordance with Section 4(b)(3)(B)(ii) of the Act.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provision of the Act (codified at 50 CFR Part 424; under revision to accommodate the 1982 amendments) set forth the procedures for adding species to the Federal list. 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) of the Act. These factors and their application to *Astragalus humillimus* Gray ex Brandegee (Mancos milk-vetch) are follows:

A. The Present or Threatened Destruction, Modification or Curtailment of its Habitat or Range

Astragalus humillimus was collected in 1875 in Montezuma County, Colorado, near Mancos Canyon; however, it has not been collected there since 1875. Rupert O. Barneby, the authority on *Astragalus*, has searched for the species in the Four Corners area and was unable to locate the type locality or any other populations of the plant. William C. Weber and S. L. Welsh also conducted extensive searches for this species (Knight, 1981).

Astragalus humillimus had not been seen or collected since 1875 when Betty Kramp collected it on the Hogback in 1980. Paul Knight surveyed similar habitat from Mancos Canyon, Colorado, south to the southern end of the Hogback. He discovered two more populations north of Kramp's population. The plant is restricted to the Point Lookout sandstone, although it is not known what chemical or physical properties of this substrate the species is responding to (Knight, pers. Comm. 1983).

Presently, *Astragalus humillimus* occurs along a 10-mile section of the Hogback, west of Waterflow, New Mexico. The Northernmost population is the largest with approximately 5,000 plants. The species is located on an

extensive mesa top of Point Lookout sandstone in an area being actively explored and drilled for energy-related minerals. The estimated acreage of this population is approximately 21 acres. The Navajo Indian Tribe owns the land and the surface rights to it; the leasable mineral rights are privately owned. The population is situated in an oil field and is flanked on three sides by active oil wells. The number of roads, oil wells, and pipelines is increasing. The entire area is dissected by an unorganized assemblage of roads associated with the oil development.

A second population occurs on the west side of the Hogback about 2 miles south of the first population. There are approximately 1,000 plants scattered throughout this population, which is situated on island outcrops of Point Lookout sandstone. This population is bisected by the Glen Canyon-Shiprock 230kV and the Curicanti-Shiprock 230kV transmission lines which were constructed in 1962 and 1963, respectively. The U.S. Bureau of Reclamation contracted the construction of both lines and transferred ownership, operation, and maintenance responsibilities to Western Area Power Administration in 1977 when the Department of Energy was organized (Gabiola, pers. comm. 1983).

During construction of these two transmission lines, the National Environmental Policy Act (NEPA) was not in effect, and impacts to the environment were mitigated only as deemed prudent during construction (Gabiola, pers. comm. 1983). *Astragalus humillimus* is a very localized species and it does not tolerate disturbance very well. The land directly under the powerline towers was extensively disturbed during the original construction, and in the 20 years since the plant has not repopulated the disturbed areas of suitable habitat.

The plants underneath the powerline have been driven over by either maintenance vehicles or off-road recreational vehicles. The damage caused by the vehicles is not yet extensive, but could become so in the future. An upgrade of the transmission line is scheduled to be in service by 1987. This would involve the addition of two more legs for each tower along the line and reconducting of the entire line. Work will probably begin in 1985 (McBride, pers. comm. 1983). The Western Area Power Administration is aware of the presence of *Astragalus humillimus* in the right-of-way and is considering the species in its planning process.

The land is owned by the Navajo Indian Tribe. The Bureau of Land

Management (BLM) is the managing agency and is leasing the mineral estate. At present, there are no existing oil wells.

The smallest population of *Astragalus humillimus* is on the east side of the Hogback south of Highway 550. This population occurs on sandstone ledges on the Navajo Reservation. Some of the mineral rights in the area in which this population occurs are under the jurisdiction of the BLM; however, there are currently no oil wells in the area. It is possible that the area will be explored within the next year prior to the expiration date of the leases that have been granted by BLM.

The Bureau of Land Management must be notified before exploration, drilling, or construction occurs on lands leased by them. Most of the land around the *Astragalus* populations is leased; thus, the possibility of future exploration and drilling is high (Knight, 1981 and pers. comm. 1983; Moore, pers. comm. 1983).

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Astragalus humillimus is not currently sought for commercial, recreational or educational purposes. However, it is sought for scientific purposes. This species has eluded the repeated searches of many botanists and there are very few good specimens in herbaria throughout the country. The species' existence is very vulnerable because of the low number of plants and any taking would be detrimental to the populations. The plants are easily accessible by road to takers and vandals.

C. Disease or Predation

There is no evidence that disease, predation, or grazing have adverse impacts on *Astragalus humillimus*. Sheep are grazed in the vicinity of two of the populations, but grazing of the plants themselves probably does not occur because of the spinescent nature of the petioles (Knight, pers. comm. 1983).

D. The Inadequacy of Existing Regulatory Mechanisms

Astragalus humillimus is not protected by Federal law or New Mexico law. A permit, however, is needed from the Navajo Tribe for plant study or collection on the Reservation. Tribal protection is not enough to ensure survival since it offers no habitat protection.

E. Other Natural or Manmade Factors Affecting its Continued Existence

The low number of plants in only three known populations increases the possibility that one catastrophic disturbance could destroy a significant portion of the species. The disturbance could result from natural or manmade causes, such as a construction project (Knight, 1981).

The proposed action has been chosen after the careful assessment of the best scientific and commercial information available, as well as the best assessment of past, present, and future threats faced by this species. Based on this evaluation, the proposed action is to list *Astragalus humillimus* as endangered without critical habitat. Endangered status seems appropriate because there are only three populations of this species and they exist in an area being developed intensively for energy resources (Knight, pers. comm. 1983). Also, *Astragalus humillimus* is not afforded any protection from the State of New Mexico. Not to propose *Astragalus humillimus* is unacceptable because of the low number of plants and the threats to its existence; threatened status does not sufficiently emphasize the situation of this species. Therefore, no action or listing as threatened would be a violation of the Act's intent.

Critical Habitat

The Endangered Species Act in section 4(a)(3), as amended, requires that to the maximum extent prudent and determinable the Secretary must designate any habitat of a species which is considered to be critical habitat at the time the species is determined to be endangered or threatened. The designation of critical habitat is not considered to be prudent when such designation would not be of net benefit to the species involved. In the present case, the Service finds that designation of critical habitat is not prudent because no benefit to the species can be identified that would outweigh the threats of taking or vandalism that might be exacerbated by the required publication of detailed critical habitat maps. The Navajo Indian Tribe, BLM, and the Western Power Administration have been informed of this proposed action, are aware of the locations of the populations, have acknowledged the threats to the Mancos milk-vetch, and are actively considering the species during planning. Therefore, no further benefits would accrue to *Astragalus humillimus* by critical habitat designation. Because of the low number of plants, the easily accessible

populations, and the scientific curiosity regarding *Astragalus humillimus*, it would be detrimental to the species to publish critical habitat maps.

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 other Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species following listing. The protection required by Federal agencies, and the taking prohibitions 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 which is proposed or listed as endangered or threatened. 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 29989; June 29, 1983). Section 7(a)(4) requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a proposed species. If this listing is published as a final rule, section 7 would require Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of *Astragalus humillimus*. If an effect is expected, the responsible Federal agency must enter into consultation with the Service.

Astragalus humillimus is known to occur only on Navajo Indian Reservation lands. Known Federal activities that may be affected by this proposal are maintenance of existing transmission lines and authorization of the planned upgrade of the existing 230 kV transmission lines by the Western Area Power Administration, Department of Energy. The Bureau of Land Management controls leasing of minerals in much of the area and such activities would be subject to section 7 consultation.

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 which apply to all endangered plant species. With respect to *Astragalus humillimus*, all trade prohibitions of section 9(a)(2) of the Act, as implemented by § 17.61,

would apply. These prohibitions, in part, would 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 would 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. International and interstate commerce in *Astragalus humillimus* is not known to exist. It is anticipated that few trade permits would ever be sought or issued, since this plant is not common in cultivation or in the wild.

Section 9(a)(2)(B) of the Act, as amended in 1982, states that it is unlawful to remove and reduce to possession endangered plant species from areas under Federal jurisdiction. This prohibition would apply to *Astragalus humillimus*. Permits for exceptions to this prohibition are available through section 10(a) of the Act, until revised regulations are promulgated to incorporate the 1982 amendments. Proposed regulations implementing this prohibition were published July 8, 1983 (48 FR 31417) and these will be finalized following public comment. *Astragalus humillimus* is known only from the Navajo Indian Reservation. It is anticipated that few taking permits for the 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, D.C. 20240 (703/235-1903).

If this species is listed under the Act, the Service will review it to determine whether it should be considered for placement upon the Annex of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, which is implemented through section 8A(e) of the Act, and whether it should be considered for other appropriate international agreements.

Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of each endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other interested party

concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

- (1) Biological or other relevant data concerning any threat (or the lack thereof) to *Astragalus humillimus*;
- (2) The location of any additional populations of *Astragalus humillimus* and the reasons why any habitat of this species should or should not be determined to be critical habitat as provided by Section 4 of the Act;
- (3) Additional information concerning the range and distribution of this species; and
- (4) Current or planned activities in the subject area and their possible impacts on *Astragalus humillimus*.

Final promulgation of the regulation on *Astragalus humillimus* will take into consideration the comments and any additional information received by the Service, and such communications may lead to the adoption of 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 filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined by 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

- Barneby, R. C. 1964. *Atlas of North American Astragalus*. Memoirs of the New York Botanical Garden. Vol 13. Part II.
- Knight, P. J. 1981. Rare, Threatened, endangered, and other plants of concern in the BLM Chaco-San Juan Planning area of northwestern New Mexico. Department of Natural Resources, Heritage Program, Santa Fe, New Mexico.
- Rydberg, 1905. *Astragalus* and its segregates in Colorado. *Bulletin of the Torrey Botanical Club*. 32: 657-665.

Authors

The primary authors of this proposed rule are Sandra Limerick and Margaret Olwell, Endangered Species staff, U.S. Fish and Wildlife Service, Department of the Interior, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972). The editor is E. LaVerne

Smith, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-1975). Status information was provided by Mr. P. J. Knight, New Mexico Department of Natural Resources, Heritage Program, Santa Fe, New Mexico 87501.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, 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 reads 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. It is proposed to amend Section 17.12(h) by adding the following, in alphabetical order, under the family Fabaceae, 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 | | | | | |
| Fabaceae—Pea family: | | | | | | |
| <i>Astragalus humilimus</i> | Mancos milk-vetch | U.S.A. (NM, CO) | E | | NA | NA |

Dated: June 7, 1984.

G. Ray Arnett,
Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 84-17161 Filed 6-27-84; 8:45 am]

BILLING CODE 4310-55-M