

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Plants; Determination of Two New Mexico Plants To Be Endangered Species and Threatened Species, With Critical Habitat

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines *Eriogonum gypsophilum* (gypsum wild buckwheat) to be a Threatened species and *Hedeoma todsenii* (Todsens pennyroyal) to be an Endangered species and determines their Critical Habitat under the authority contained in the Endangered Species Act. These plants occur in New Mexico on public lands administered by the Bureau of Land Management and the U.S. Army. The plants are threatened by a number of factors, including: possible habitat disturbance, grazing, off-road vehicle use, and the lack of protection planning. This rule will implement the protection provided by the Endangered Species Act of 1973, as amended for these two plants.

DATES: This rule becomes effective on February 18, 1981.

ADDRESSES: Questions concerning this action may be addressed to the Director (FWS/OES), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240.

FOR FURTHER INFORMATION CONTACT: Mr. John L. Spinks, Jr., Chief, Office of Endangered Species, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240, (703/235-2771).

SUPPLEMENTARY INFORMATION:

Eriogonum gypsophilum (gypsum wild buckwheat) was first collected by Wooten and Standley in 1909 on a hill southwest of Lakewood, New Mexico (Wooten and Standley, 1913). This member of the knotweed family is a small, erect, herbaceous perennial, which measures about 8 inches high, and is restricted to gypsum soils. This plant's entire range is limited to a 0.2 square mile area (130 acres) in the Seven Rivers Hills of Eddy County at elevations from 3,290 to 3,450 feet. The area occupied by *Eriogonum gypsophilum* and the Critical Habitat area is public land administered by the Bureau of Land Management. This area is semi-arid with an average annual precipitation of 14 inches. The continued existence of this plant and the fragile

habitat in which it occurs are being threatened by off-road vehicles, grazing, and by the Brantley Dam Project, particularly if proper protection planning for the plant does not continue to occur.

Hedeoma todsenii was first discovered in August 1978, by Dr. Thomas K. Todsens, and was described in 1979 by Dr. Robert S. Irving (1979). *Hedeoma todsenii*, a member of the mint family, is a perennial herb which measures 4-8 inches in height and is somewhat woody at the base. Its leaves are opposite, small, and measure .3-.6 inches long, .1-.2 inches wide. Its flowers are solitary along the stem and measure about 2 inches long and are orange-red. *Hedeoma todsenii* occurs on steep, gravelly-gypsum limestones on the White Sands Missile Range, in Sierra County, New Mexico on public lands administered by the Department of the Army.

This rule will implement the protection provided by the Endangered Species Act of 1973 for both of these plants. The following paragraphs further discuss the actions to date involving these plants, the threats to their continued existence, and the effects of the action.

Background

Section 12 of the Endangered Species Act of 1973 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 Director published a notice in the *Federal Register* (40 FR 27823) of his acceptance of the report of the Smithsonian Institution as a petition within the context of Section 4(c)(2) of the Act, and of his intention thereby to review the status of the plant taxa named within. On June 16, 1976, the Service published a proposal 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. *Eriogonum gypsophilum* was included in the Smithsonian's report, the 1975 notice of review, and the 1976 proposal. General comments received in relation to the 1976 proposal were 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 Endangered Species Act Amendments of 1978 required that all proposals over two years old be withdrawn. A one year grace period was given to proposals already over two years old. On December 10, 1979, the Service published a notice (44 FR 70796) withdrawing the June 16, 1976, proposal along with four other proposals which had expired.

Based on sufficient new information the Service repropoed *Eriogonum gypsophilum* on July 25, 1980, and proposed its Critical Habitat for the first time (45 FR 49853). Additional field visits conducted by the Fish and Wildlife Service in the summer of 1980 provided additional economic data and biological evidence verifying the precarious status of the species. A public meeting was held on this proposal in Carlsbad, New Mexico, on August 27, 1980.

Hedeoma todsenii and its Critical Habitat were proposed on July 25, 1980, (45 FR 49857) for the first time. A public meeting was held on this proposal on August 26, 1980, in Alamogordo, New Mexico.

The regulations to protect Endangered and Threatened plants appear at 50 CFR 17 and establish the prohibitions and a permit procedure to grant exceptions, under certain circumstances, to the prohibitions.

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 43 CFR 14.

Summary of Comments and Recommendations

In the July 25, 1980, *Federal Register* proposed rules (45 FR 49857 and 45 FR 49853) and associated notifications and press releases, all interested parties were requested to submit factual reports or information which might contribute to the development of a final rule. Letters were sent to the Governor of New Mexico, the U.S. Army, the Bureau of Land Management, the Water and Power Resources Service, and local governments notifying them of the proposed action and soliciting their comments and suggestions. All comments received during the period from July 25, 1980, through November 3, 1980, were considered and are discussed below.

The Governor of New Mexico commented on the *Eriogonum gypsophilum* proposal and stated that the protection of *Eriogonum gypsophilum* appeared appropriate and warranted. No comment was received

from the New Mexico Governor on *Hedeoma todsenii*.

The U.S. Water and Power Resources Service provided both preliminary comments and further recommendations on the *Eriogonum gypsophilum* proposal. They noted that they would continue to include consideration of this plant in their planning process.

The U.S. Department of the Army also offered preliminary input and further comments on the *Hedeoma todsenii* proposal. Their comment on the proposal stated that they would work with the Service in an effort to protect *Hedeoma todsenii*.

A New Mexico botanist commented that he agreed with the *Hedeoma todsenii* as Endangered proposal and that the *Eriogonum gypsophilum* as Threatened proposal is reasonable. The Garden Clubs of America and the New Mexico Garden Club offered their support for both proposals.

A public meeting was held on the *Hedeoma todsenii* proposal on August 26, 1980, in Alamogordo, New Mexico. The Service made presentations on the proposal. Two individuals attended the meeting, asked questions about the plant, and offered their assistance in protecting *Hedeoma todsenii*.

A public meeting was held on the *Eriogonum gypsophilum* proposal on August 27, 1980. The Service made presentations on the *Eriogonum gypsophilum* proposal, as well as on *Hedeoma apiculatum* (another proposed plant). Three individuals attended the meeting—2 from the National Park Service and 1 from the Water and Power Resources Service. No comments or questions from the audience addressed *Eriogonum gypsophilum*.

Conclusion

After a thorough review and consideration of all information available, the Director has determined that *Eriogonum gypsophilum* Wooten and Standley (gypsum wild buckwheat) is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range; and that *Hedeoma todsenii* Irving (Todsens pennyroyal) is in danger of extinction throughout all or a significant portion of its range due to one or more of the factors described in Section 4(a) of the Act.

These factors and their application to these two plants are as follows:

(1) *Present or threatened destruction, modification, or curtailment of their habitat or range.*

Eriogonum gypsophilum

Historically, *Eriogonum gypsophilum* has been known for nearly 70 years

from only one locality in Eddy County, New Mexico. The eastern portion of this plant's range has been reduced in size due to the construction of a major highway (US 285). Present stocking rates of cattle seem to have little effect on the species, but long term records are not available. Increased grazing pressure could possibly prove detrimental to this species. Off-road vehicles such as motorcycles account for some mortality of the *Eriogonum gypsophilum* and this type of use should be restricted from the small area occupied by this species.

The proposed Brantley Dam Project which was authorized on October 20, 1972 (Public Law 92-514) is located in the same area as the *Eriogonum gypsophilum* population. A 1977 report contained the following comments on the effect of that dam on *Eriogonum gypsophilum*. The dam itself should have only a minor impact on the *Eriogonum gypsophilum*. The lowest elevation at which the plants occur is estimated to be at 3,290 feet. The 3,280 foot elevation level is the hypothetical project flood level of the impoundment. Thus, the rising water level probably will not affect the plants. If a flood should occur above this level, it should be of a very short duration and is predicted to be harmless unless plants are in flower, then reduced seed set would be expected (Spellenberg, 1977).

The stability of the gypsum may be affected very near the reservoir, as it has on the east side of Lake McMillan where slumping of gypsum bluffs has occurred. If this occurs, up to several hundred plants out of a total estimated population of 2,800 might be affected by new patterns of erosion and changes in microhabitat. Water and Power Resources Service personnel do not expect this to be a problem at the Brantley Dam project. A salt cedar fringe can be expected to develop around the new margin of the conservation pool. At Lake McMillan this salt cedar fringe extends up to as much as 10 vertical feet above the base of the levee. The development of a similar fringe around the Brantley Dam proposed pool might affect *Eriogonum gypsophilum* nearest the 3,290 foot level (Spellenberg, 1977).

Water and Power Resources Service personnel believe *Eriogonum gypsophilum* can probably exist with the Brantley Dam Project and they have noted that the plant's well being has been included in the project's planning process. They believe that the problems of slumping and the salt cedar fringe can be dealt with so as to insure the continued existence of the plant. The Water and Power Resources Service

also notes that the Brantley Dam has been relocated downstream of its original location (which was addressed by Spellenberg) and is now 2 miles south-southeast of the closest *Eriogonum gypsophilum* population.

Hedeoma todsenii

Hedeoma todsenii is endemic to loose gravelly limestone slopes in the San Andres Mountains of New Mexico. The populations occur on public lands administered by the U.S. Army. The combined area of its two known populations is approximately 3000 m² and the number of surviving plants is estimated at 750. The reproductive potential, as measured by seed set, is low with an average seed yield of 0.22 seeds per flower (Irving, 1980).

The remoteness of *Hedeoma todsenii*'s population and the restricted nature of the White Sands Missile Range affords *Hedeoma todsenii* considerable protection. Yet, its fragile habitat and the small number of known populations and individuals which comprise them combine to leave the species particularly vulnerable and in need of protection. While there is little likelihood of *Hedeoma todsenii* populations being hit by a missile, even minor changes in the usage of its protected canyon sites could threaten the continued existence of the species. Activities such as large scale troop movements or the construction of storage facilities, missile retrieval roads, or power and communication lines could jeopardize the habitat of *Hedeoma todsenii* without proper planning for its protection. No protection or management plan currently exist for this species.

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

There is no evidence to suggest overutilization of either of these plants for any of the above purposes.

(3) *Disease and predation (including grazing).*

Some light grazing occurs mostly along cattle trails in the habitat of *Eriogonum gypsophilum*. An increase in the intensity of this grazing could be detrimental to *Eriogonum gypsophilum* due to trampling.

(4) *The inadequacy of existing regulatory mechanisms.*

New Mexico State Law, Chapter 45, Article 11, Section 1-4, affords limited protection within 400 yards of any highway to all plants (except noxious weeds). This protection includes limited prohibitions against destruction, mutilation, or removal of living plants (except seeds) on State or private land. For those *Eriogonum gypsophilum*

plants occurring close to US 285 this would apply. No other state law offers these plants any protection.

In the case of *Eriogonum gypsophilum* the Bureau of Land Management and the Water and Power Resources Service do not currently have any regulations dealing with Endangered and Threatened plants. In the case of *Hedeoma todsenii* the Army's regulations dealing with endangered species were published in 1977 (42 FR 16385). The Endangered Species Act will now offer additional needed protection for these species.

(5) *Other natural or man-made factors affecting their continued existence.*

The small size and number of the populations cause these species, especially *Hedeoma todsenii*, to be in greater danger of extinction due to natural fluctuations.

Critical Habitat

The Act defines "Critical Habitat" as "(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of Section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species."

Critical Habitat for *Hedeoma todsenii* is being determined to include the entire area in New Mexico where the species is known to occur. This area encompasses 2 km² of the White Sands Missile Range which is administered by the Department of the Army. Critical Habitat for *Eriogonum gypsophilum* is being determined to include 130 acres in New Mexico where the species currently occurs. This area is public land administered by the Bureau of Land Management. In the future, adjacent suitable habitat may be included as essential to the conservation of these species, because it is necessary to provide areas for proper management, reintroduction, and natural expansion. Modifications of these Critical Habitat designations may be proposed in the future.

Section (f)(4) of the Act requires, to the maximum extent practicable, that any proposal to determine Critical Habitat be accompanied by a brief description and evaluation of those activities which, in the opinion of the

Secretary, may adversely modify such habitat if undertaken, or may be impacted by such designation.

Any activities which would result in increased trampling or disturbance of the extremely fragile areas where *Hedeoma todsenii* occurs would probably adversely modify the Critical Habitat. The long-term solution on how to best protect *Hedeoma todsenii* may be to greatly reduce all traffic in the area where this plant occurs. In this respect, Critical Habitat designation may affect Federal activities within the 2 km² area of *Hedeoma todsenii*'s Critical Habitat, which is administered by the Department of the Army.

Any activity which would result in disturbance of the area where *Eriogonum gypsophilum* occurs would probably adversely modify the Critical Habitat. The long-term solution on how to best protect *Eriogonum gypsophilum* may be to develop a protection plan for the species, which would address and remove present threats. In this respect, Critical Habitat designation may affect Federal activities. The Water and Power Resources Service should include in their planning process for the Brantley Dam Project ways to insure the continued existence of *Eriogonum gypsophilum*. These plans should address the problems of slumping of the gypsum soils and ways to protect the habitat of the *Eriogonum gypsophilum* so that it is not used for any activity which would not be compatible with the plant's continued existence. The Bureau of Land Management may need to limit future stocking rates of cattle and off-road vehicle use in the small area where the *Eriogonum gypsophilum* occurs. This increased planning and the steps required by these agencies should not constitute a large impact or hardship on either agency.

Section 4(b)(4) of the Act requires the Service to consider economic and other impacts of specifying a particular area as Critical Habitat. The Service has prepared an impact analysis and believes at this time that economic and other impacts of this action are not significant in the foreseeable future. The area proposed as Critical Habitat for *Hedeoma todsenii* encompasses 2 km² of a very lightly and not critically used portion of the White Sands Missile Range. If the Army diverted certain activities from the 2 km², it would not greatly affect their operations. The only impact would probably be that additional planning to ensure protection of this site would be required. As stated earlier, efforts to protect the *Eriogonum gypsophilum* would only require

additional planning and only minimal input of resources and manpower.

The Service has notified and is working with these other agencies which have jurisdiction over the land and water under consideration. These agencies were requested to submit information on economic or other impacts of the proposed action and this information was utilized in completing this analysis. The Service's Economic Impact Analysis was used as part of the basis for the Service's decision whether to exclude any area from the Critical Habitats for *Eriogonum gypsophilum* and *Hedeoma todsenii*.

Effects of the Rule

In addition to the effects discussed above, the effects of this rule will include, but will not necessarily be limited to, those mentioned below.

The Act and implementing regulations published in the June 24, 1977, **Federal Register** (42 FR 32373) set forth a series of general prohibitions and exceptions which apply to all Endangered plant species. All of those prohibitions and exceptions also apply to any Threatened species, unless a special rule pertaining to that Threatened species has been published and indicates otherwise. The regulations referred to above, which pertain to Endangered and Threatened plants, are found at §§ 17.61 and 17.71, of 50 CFR and are summarized below.

With respect to *Eriogonum gypsophilum* and *Hedeoma todsenii* all prohibitions of Section 9(a)(2) of the Act, as implemented by § 17.71 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 17.71 also provide for the issuance of permits to carry out otherwise prohibited activities involving Endangered or Threatened species under certain circumstances. International and interstate commercial trade in these plants does not exist. It is anticipated that few permits involving plants of wild origin would ever be issued, since these plants are not common in the wild or in cultivation. Additional paperwork and permits required for the public would be minimal.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species which is listed as Endangered or Threatened. This protection will now

accure to these plants. Provisions for Interagency Cooperation implementing Section 7 are codified at 50 CFR Part 402. These require Federal agencies not only to insure that activities they authorize, fund, or carry out, are not likely to jeopardize the continued existence of these plants, but also to insure that their actions are not likely to result in the destruction or adverse modification of their Critical Habitat which has been determined by the Director. A discussion of the involved Federal agencies appears in the Critical Habitat section of this rule. No other Federal involvement is foreseeable at this time.

National Environmental Policy Act

An environmental assessment has been prepared in conjunction with this rule. It is on file in the Service's Office of Endangered Species, 1000 North Glebe Road, Arlington, Virginia, and may be examined during regular business hours, by appointment. This assessment forms the basis for a decision that this 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.

Author

This rule is being published under the authority contained in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543; 87 Stat. 844). The primary author of this rule is Ms. E. LaVerne Smith, Washington Office of Endangered Species (703/235-1975).

Literature Cited

Irving, R. S. 1979. *Hedeoma todsenii* (Labiatae), a new and rare species from New Mexico. *Madroño* 26(4): 184-187.
 Irving, R. S. 1980. *Hedeoma todsenii* Status Report. Submitted to the U.S. Fish and Wildlife Service, Albuquerque, New Mexico. February 1, 1980.
 Spellenberg, R. 1977. A report on the investigation of *Eriogonum gypsophilum* and *Haplopappus spinulosus* ssp. *laevis* in the vicinity of the Brantley Reservoir, Eddy County, New Mexico. Report prepared for the Bureau of Reclamation, Amarillo, Texas. 140 pp.
 Wootton, E. O. and P. C. Standley. 1913. Descriptions of new plants preliminary to a report upon the flora of New Mexico. *Contr. U.S. Nat. Herb.* 16: 109-196.

Regulations Promulgation

Accordingly, § 17.12 of Part 17 of chapter I of Title 50 of the U.S. Code of Federal Regulations is amended, as set forth below.

1. Section 17.12 is amended by adding, in alphabetical order, the following plants:

§ 17.12 Endangered and threatened plants.

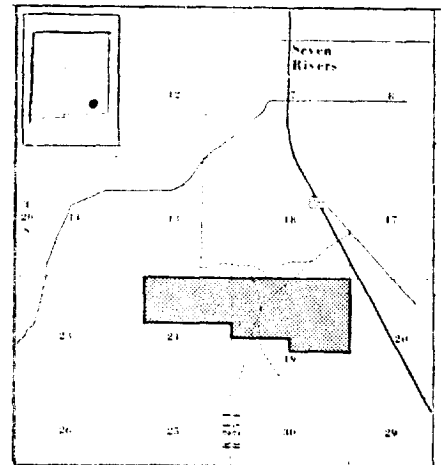
Species		Historic range	Status	When listed	Critical habitat	Special rule
Scientific	Common name					
Lamiaceae—Mint family: <i>Hedeoma todsenii</i> .	Todsens pennyroyal.	USA(NM).....	E	17.96(a)	NA
Polygonaceae—Knotweed family: <i>Eriogonum gypsophilum</i> .	Gypsum wild buckwheat.	USA(NM).....	T	17.96(a)	N/A

2. Also the Service § 17.96(a) by adding the Critical Habitat of *Hedeoma todsenii* after that of the *Hudsonia Montana*, family Cistaceae and the Critical Habitat of *Eriogonum gypsophilum* after that of *Zizania Texana*, family Poaceae as follows:

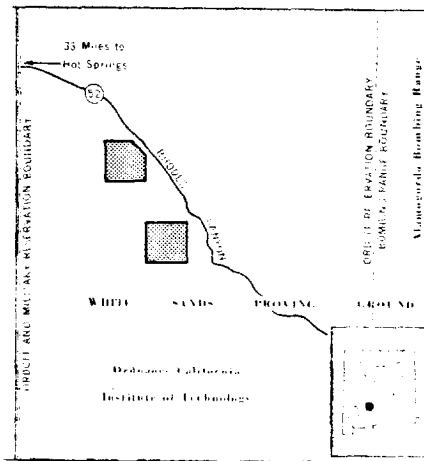
Family Lamiaceae: Todsens pennyroyal (*Hedeoma todsenii*). New Mexico; Sierra County; the Critical Habitat of *Hedeoma todsenii* is best defined by two one-square kilometer sections on the 1000 m² Universal Transverse Mercator Grid, Zone 13. The more northern critical habitat lies between 76 and 77,000 m N and 39 and 40,000 m E. The southern area lies between 74 and 75,000 m N and 40 and 41,000 m E. Gypsum limestone soils.

Family Polygonaceae: gypsum wild buckwheat (*Eriogonum gypsophilum*) New Mexico; Eddy County; T20S, R25E, Section 19: N½, N½ NE¼ SE¼, N½ NW¼ SE¼; and T20S, R26E, Section 24: N½ NE¼, N½ S½ NE¼, NE¼ NW¼, N½ SE¼ NW¼; gypsum soils.

Gypsum Wild Buckwheat Eddy Co., N. Mex.



TODSENS PENNE ROYAL
Sierra County, NEW MEXICO



and,

Dated: January 9, 1981.

Lynn A. Greenwalt,
Director, Fish and Wildlife Service.

[FR Doc. 81-1800 Filed 1-16-81, 8:45 am]
BILLING CODE 4310-55-M