

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AA10

Endangered and Threatened Wildlife and Plants; Final Rule to Determine *Argemone pleiacantha* ssp. *pinnatisecta* (Sacramento prickly poppy) To Be an Endangered Species

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service determines *Argemone pleiacantha* ssp. *pinnatisecta* (Sacramento prickly poppy) to be an endangered species, under the authority contained in the Endangered Species Act of 1973 (Act), as amended. The Sacramento prickly poppy is endemic to several canyons in the Sacramento Mountains, Otero County, New Mexico. Known populations consist of 1,310 plants, which occur on Bureau of Land Management (BLM), Lincoln National Forest, Oliver Lee State Park, New Mexico and Otero County Highway rights-of-way, and private lands. This species is threatened by livestock grazing, pipeline construction, flooding, and road construction and maintenance. Final determination that *Argemone pleiacantha* ssp. *pinnatisecta* is endangered implements the protection provided by the Act.

EFFECTIVE DATE: September 25, 1989.

ADDRESSES: The complete file for this rule is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service Ecological Services Field Office, 3530 Pan American Highway NE., Suite D, Albuquerque, New Mexico 87107.

FOR FURTHER INFORMATION CONTACT: Charlie McDonald, Endangered Species Botanist, U.S. Fish and Wildlife Service Ecological Services Field Office, Albuquerque, New Mexico (see **ADDRESSES** above) (505/883-7877 or FTS 474-7877).

SUPPLEMENTARY INFORMATION:**Background**

Argemone pleiacantha ssp. *pinnatisecta* (Sacramento prickly poppy) is a robust perennial known from nine canyons in the Sacramento Mountains of Otero County, south-central New Mexico. The Sacramento prickly poppy was first collected in 1953 by Mr. G.B. Ownbey and Mr. Findley on the western slopes of the Sacramento Mountains. Mr. Ownbey described the taxon in a

monograph of the genus *Argemone* for North America and the West Indies (Ownbey 1958).

This member of the Poppy family (Papaveraceae) has 3-12 prickly stems branching from the base, and commonly grows to a height of 5-15 decimeters (20-60 inches) (Soreng 1982). The pale lemon to nearly white milky sap readily distinguishes this subspecies from the typical subspecies, which has yellow-orange sap. The attractive flowers have numerous yellow stamens and six white petals that are 3-4 centimeters (1.2-1.6 inches) long and as wide. Leaves are long, relatively narrow, and have box-shaped sinuses between spine-tipped lobes.

The Sacramento prickly poppy occurs at 1300-2200 meters (4,200-7,100 feet) elevation. At lower elevations, the surrounding vegetation is Semi-Desert Grassland; at the upper elevations the vegetation is Great Basin Conifer Woodland (Brown 1980). The Sacramento prickly poppy occurs in open, disturbed, or relatively undisturbed areas within these plant communities. The species grows in limestone canyons, or roadsides, fields, grassy flats, steep slopes, and floodplain and channel deposits. Populations are usually found where there is enhanced, but not wet, soil moisture conditions. These conditions are met on north-facing slopes, in canyon bottoms, along roadsides, and near leaks in pipelines.

The plants are located on New Mexico State and Otero County highway rights-of-way, on private land, Oliver Lee State Park, Bureau of Land Management lands, and Lincoln National Forest lands.

Soreng (1982) estimated that three populations of *Argemone pleiacantha* ssp. *pinnatisecta* contained fewer than 170 plants in 1982, and suggested that these populations were declining. Flash floods are one of the reasons for this decline: one population decreased from 100 plants to six after a flash flood scoured the canyon in 1978 (Soreng 1982). The probability of such flooding has been increased by overgrazing, which disturbs topsoil and reduces plant cover. Plant recruitment may be low because seedlings and young plants are more palatable to livestock than mature plants (Soreng 1986). Soreng suggested that regeneration was insufficient to maintain population numbers.

Malaby (1987) surveyed eight canyons and found 1,290 plants. A total of 6,330 acres of Federal, State, city, and private land was surveyed. In a 1988 survey, Malaby (1988) found 23 additional plants in two locations. Previous surveys (Hutchins 1974, Spellenberg 1977 and 1978, and Meiji 1979) have

been conducted on both BLM and BIA administered lands and only 1 population was found on BLM land.

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. *Argemone pleiacantha* ssp. *pinnatisecta* 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 *Argemone pleiacantha* ssp. *pinnatisecta*.

On December 15, 1980 (45 FR 82485), and September 27, 1985 (50 FR 39526), the Service published updated notices reviewing the native plants being considered for classification as threatened or endangered. *Argemone pleiacantha* ssp. *pinnatisecta* 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 *Argemone pleiacantha* ssp. *pinnatisecta* was included in the 1980 notice, the petition to list this species was treated as being newly submitted on October 12, 1982. On October 13, 1983; October 12, 1984; October 11, 1985; and October 10, 1986, the Service made the required one-year findings that listing of *Argemone pleiacantha* ssp. *pinnatisecta* was warranted, but precluded by other listing actions of higher priority. Biological data, supplied by Soreng (1982, 1986), fully support the listing of *Argemone pleiacantha* ssp. *pinnatisecta*. The proposed rule of July 13, 1987 (52 FR 26164) was based primarily on Soreng's biological data and constituted the final one-year finding required by section 4(b)(3)(B) of the Act for this species.

Summary of Comments and Recommendations

In the July 13, 1987, proposed rule 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 and requested to comment. A newspaper notice was published in the *Alamogordo Daily News* on August 2, 1987. No public hearing was requested or held.

Three comments were received. The Nature Conservancy supports the listing, the biologist who prepared the initial status report for the Service supports the listing and provided information on population declines, and the U.S. Forest Service requested that the species not be listed. Specific issues raised in these comments are discussed below.

Comment: The Nature Conservancy agreed with the proposal to list *Argemone pleiacantha* ssp. *pinnatisecta* as endangered and requested that the Service designate critical habitat for this plant. *Response:* As discussed in the rule, the Service has determined that it would not be prudent to determine critical habitat for the plant at this time. The U.S. Forest Service, which administers much of the land on which the plant occurs, has implemented conservation measures such as reduced livestock grazing and plant propagation from seed. The Service notes that, even without critical habitat designation, the habitat of the Sacramento prickly poppy receives protection under Section 7 of the Act whenever a Federal agency is involved.

Comment: The U.S. Forest Service stated that adequate protection measures on Forest land and a greater

abundance of plants than previously thought both may preclude the need for listing. In addition, they recommend additional surveys on BLM and BIA lands. They also suggest formulation of a conservation agreement with the Service. *Response:* The Service recognizes and appreciates the conservation measures enacted by the U.S. Forest Service. However, the Service believes that the plant is still in danger of extinction owing to habitat destruction and modification, scarcity, and limited distribution. Of the plants found in the 1987 Forest Service survey, 74% occurred in the Alamo Canyon System. A 1978 flood destroyed most of the plants in Alamo Canyon, and a future catastrophic event such as this is a potential threat. Of the other canyons surveyed, only two contained more than 100 plants. Soreng (pers. comm., 1987) reported that several populations had declined since his 1982 status report. Surveys have been conducted on both BLM and BIA administered lands and only 12 plants were found on BLM lands in 1988 (Howard pers. comm., 1989). Conservation agreements may be appropriate when only one landowner is involved. However, the Sacramento prickly poppy is found on Federal, State, City, and private land. A conservation agreement is not appropriate in this case.

Summary of Factors Affecting the Species

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 set forth the procedures for adding species to the Federal Lists. A species may be determined to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Argemone pleiacantha* ssp. *pinnatisecta* G.B. Ownbey (Sacramento prickly poppy) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Sacramento prickly poppy habitat has been and continues to be destroyed or modified by livestock grazing, pipeline construction, flooding, and road construction and maintenance. Cattle grazing has both direct and indirect effects on the Sacramento prickly poppy. When cattle stocking rates are high, plants of this species are trampled and others are eaten (Soreng 1982). While trampling or grazing may not kill mature plants with an established tap root, these actions may kill seedlings and affect the reproduction of mature

plants. Overgrazing has caused disturbance of topsoil and a reduction in plant cover throughout the range of the Sacramento prickly poppy (Soreng 1982). The poor condition of the watershed could increase the probability of flash floods. The Sacramento prickly poppy is particularly vulnerable to flooding because many plants occur on floodplain and channel deposits. Forest Service personnel noted that one population was nearly eliminated during a flash flood in 1978 (Soreng 1982).

The diversion of permanent spring water from drainages in the Sacramento Mountains to pipelines for human and livestock use has created artificially dry conditions in the areas where the Sacramento prickly poppies occur. Fletcher (pers. comm., 1986) believes the installation of a pipeline in one canyon and subsequent drying was the cause of the greatest reduction in the numbers of Sacramento prickly poppy.

Road construction, widening, and maintenance pose a threat to the Sacramento prickly poppy because a number of plants occur along roadsides. These plants are subject to destruction by mechanical disturbance, herbicide application, and soil and gravel dumping.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Alkaloids present in the seeds and juices of other species of *Argemone* have been used in the past as purgatives and as treatments for a wide variety of ailments including ophthalmia. However, no medicinal use of the Sacramento prickly poppy is known.

C. *Disease or predation.* Although Soreng (1982) noted that the stems of some plants had been chewed by insects, and Fletcher (1978) reported insect larvae boring into the stems, such damage to Sacramento prickly poppy plants appears to be insignificant. As indicated above, grazing by cattle may be causing reduction in recruitment rates.

D. *The inadequacy of existing regulatory mechanisms.* The taxon is protected by the New Mexico Native Plant Law. This law prohibits the collection of this species unless a permit is granted by the New Mexico Department of Energy, Minerals and Natural Resources. The Forest Service has included *Argemone pleiacantha* ssp. *pinnatisecta* on its Sensitive Plant Species List. As a matter of policy, the Forest Service and BLM consider Federal candidate species in their environmental assessments and planning.

E. *Other natural or manmade factors affecting its continued existence.*

Scarcity and limited distribution make this species vulnerable to both natural and man-caused threats. Any further reduction in plant numbers could reduce the reproductive capabilities and genetic potential of the species.

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 *Argemone pleiacantha* ssp. *pinnatisecta* as endangered without critical habitat. This status seems appropriate because the habitat of the few remaining populations is threatened by overgrazing, pipeline construction, flooding, and road construction and maintenance. 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 the Sacramento prickly poppy at this time. Plants are vulnerable to taking or vandalism because of their immobility and accessibility. Any reduction in the small number of plants would be significant. Publication of critical habitat descriptions and maps would be detrimental, highlighting the easy accessibility of the plants. No benefit can be identified that would outweigh the threats of vandalism or taking that might result from such a publication. The Forest Service and BLM are aware of the locations of the Sacramento prickly poppy, have acknowledged the threats to these populations, and are considering the species during planning. All other involved parties and landowners will be notified of the location and importance of protecting this species and its habitat. Protection of this species' habitat will be addressed through the recovery process and through the section 7 jeopardy standard. Therefore, it would not be prudent to determine critical habitat for *Argemone pleiacantha* ssp. *pinnatisecta* at this time. No net benefit would accrue from designating critical habitat for the conservation of 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 at the earliest opportunity. 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)(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.

Most populations of the Sacramento prickly poppy have been found on U.S. Forest Service lands. In the past, Forest Service actions such as trail and road construction and maintenance, and designation of water rights and grazing allotments have impacted known populations. Future management activities can be planned to avoid adverse impacts on populations and potential habitat of the Sacramento prickly poppy. A 1988 field survey identified 12 plants occurring on BLM land in San Andreas Canyon. There is an existing water pipeline and grazing allotment in the area; however, BLM anticipates no future increase in the grazing allotment and BLM will coordinate with the Service and the pipeline right-of-way owner to minimize impacts from potential future pipeline improvements (Mike Howard pers. comm., 1989). Section 7(a) of the Act requires the Forest Service and BLM to consult with the U.S. Fish and Wildlife Service prior to the initiation of planned activities that may affect this listed plant. Road construction or maintenance that is done by the State or County with Federal funds and that may affect the Sacramento prickly poppy would require

the Federal Highways Administration to consult with the Service.

The Act and its implementing regulations found at 50 CFR 17.61 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 remove it from areas under Federal jurisdiction and reduce it to possession. In addition, for listed plants, the 1988 amendments (Pub. L. 100-478) to the Act prohibit the malicious damage or destruction on Federal lands and the removal, cutting, digging up, or damaging or destroying of listed 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. With regard to the subject of this final rule, 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 27329, Washington, DC 20238-7329 (202/343-4955).

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

- Brown, D.E. 1980. Great Basin Conifer Woodland and Semidesert Grassland. In Brown, D.E. (ed.), *Biotic Communities of the American Southwest—United States and Mexico*. Desert Plants 4:52-57, 123-131.
- Fletcher, R. 1978. Forest Service status report for *Argemone pleiacantha* ssp.

pinnatisecta. U.S. Forest Service, Region 3, Albuquerque, NM. 7 pp.

Hutchins, C.R. 1974. A Flora of the White Mountain Area, southern Lincoln and northern Otero Counties, New Mexico. Albuquerque, NM. 583 pp.

Malaby, S. 1987. *Argemone pleiacantha* ssp. *pinnatisecta* Survey, U.S. Forest Service, Region 3, Albuquerque, NM. 13 pp.

Malaby, S. 1988. Report on *Argemone pleiacantha* ssp. *pinnatisecta*. U.S. Forest Service, Region 3, Albuquerque, NM. 12 pp.

Meiji Resource Consultants. 1979. A Collection of rare, threatened, and endangered plant species data in the Sacramento Range EIS area, New Mexico. Bureau of Land Management, Las Cruces, NM. 63 pp.

Ownbey, G.B. 1958. Monograph of the *Argemone* for North America and the West Indies. Memoirs of Torrey Botanical Club. 21:1-159.

Soreng, R.J. 1982. Status report on *Argemone pleiacantha* ssp. *pinnatisecta*. U.S. Fish and Wildlife Service, Albuquerque, NM. 24 pp.

Soreng, R.J. 1986. Fresno Canyon Preserve for *Argemone pleiacantha* ssp. *pinnatisecta*. The Nature Conservancy, Albuquerque, NM. 18 pp.

Spellenberg, R. 1977. Final report on the survey for threatened and endangered plant species on the East Side Socorro area, central New Mexico, 1976-1977. Bureau of Land Management, Socorro District, NM. 221 pp.

Spellenberg, R. 1978. Review of federally "threatened" or "endangered" plant species in the Las Cruces District of the Bureau of Land Management, U.S. Department of the Interior. Bureau of Land Management, Las Cruces, NM. 160 pp.

Author

The primary authors of this final rule are Sonja E. Jahrsdoerfer and Sue Rutman, Endangered Species Biologists, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972 or FTS 474-3972). Status information was provided by Dr. Robert Soreng, New Mexico State University, Las Cruces, New Mexico.

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

PART 17—[AMENDED]

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; Pub. L. 100-478, 102 Stat. 2306; Pub. L. 100-653, 102 Stat. 3825 (16 U.S.C. 1531 *et seq.*); Pub. L. 99-625, 100 Stat. 3500, unless otherwise noted.

2. Amend § 17.12 (h) by adding the following, in alphabetical order under the family Papaveraceae, 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				
Papaveraceae—Poppy family:					
<i>Argemone pleiacantha</i> ssp. <i>pinnatisecta</i>	Sacramento prickly poppy	U.S.A. (NM).....	E	359 NA	NA

Dated: July 18, 1989.

Susan Recce Lamson,
Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 89-19901 Filed 8-23-89; 8:45 am]
BILLING CODE 4310-55-M

50 CFR Part 17

RIN 1018-ABOZ

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Virgin River Chub

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines the Virgin River chub (*Gila robusta seminuda*) to be an endangered species under the provisions of the Endangered Species Act (Act) of 1973, as amended. This species occurs in the Virgin River in Arizona, Nevada, and Utah. Threats to the Virgin River chub include habitat changes, disease, floods, toxic spills, and competition with exotic fishes. The

species is particularly vulnerable to these threats because of its very limited distribution. In accordance with 4(b)(6)(C) of the Act, the final designation of critical habitat included in the proposed rule is postponed. This rule implements the full protection provided by the Act for the Virgin River chub.

EFFECTIVE DATE: September 25, 1989.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Service's Fish and Wildlife Enhancement Office, 1745 West, 1700 South, Salt Lake City, Utah 84104.

FOR FURTHER INFORMATION CONTACT: Mr. Donald L. Archer, Salt Lake City, Utah (see ADDRESSES above) (801/524-4430 or FTS 588-4430).

SUPPLEMENTARY INFORMATION:

Background

Gila robusta seminuda was first collected from the Virgin River near Washington, Utah, by members of the Wheeler Survey and described as a species intermediate between *Gila robusta* and *Gila elegans* (Cope and Yarrow 1875). Later authors have treated this chub as a subspecies of

robusta along with other chubs from various stream systems in the Colorado River basin (Ellis 1914, Miller 1946, LaRivers and Trelease 1952). Holden and Stalnaker (1970) showed that the subspecific name *seminuda* should refer only to the chub in the Virgin River, and that specimens from other localities represent other subspecies of *Gila robusta*. Holden and Stalnaker (1970) and Minckley (1973) indicated that the Virgin River population is a valid subspecies, and Smith et al. (1977) supported this conclusion with extensive taxonomic analyses.

The Virgin River chub is a very silvery medium-sized minnow that averages about 20 centimeters (cm) or 8 inches (in) in total length but can grow to a length of 45 cm (18 in). *Gila robusta seminuda* can be distinguished from other subspecies by the number of rays (9 to 10) in the dorsal, anal, and pelvic fins, and the number of gill rakers (24 to 31). The back, breast, and part of the belly have small, deeply embedded scales that are difficult to see and may be absent in some individuals. This characteristic is the basis for the subspecific name *seminuda*.

A closely related form of *Gila robusta*, which appears to be an undescribed