

Dated: July 12, 1993.

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

[FR Doc. 93-18640 Filed 8-4-93; 8:45am]

BILLING CODE 4310-56-P

50 CFR Part 17

RIN 1018-AC01

Endangered and Threatened Wildlife and Plants; Proposed Rule To List the Plants *Ayenia limitaris* (Texas Ayenia) and *Ambrosia cheiranthifolia* (South Texas Ambrosia) as Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Fish and Wildlife Service (Service) proposes to list the plants *Ayenia limitaris* (Texas ayenia) and *Ambrosia cheiranthifolia* (South Texas ambrosia) as endangered species under the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*). This proposal, if made final, will implement Federal protection provided by the Act for Texas ayenia and South Texas ambrosia. Critical habitat is not being proposed.

Texas ayenia is known from a single site in Hidalgo County, Texas. South Texas ambrosia has been verified recently from seven sites, four in Nueces County and three in Kleberg County, Texas. These species are threatened by habitat destruction and fragmentation through alteration and conversion of native plant communities to agricultural fields, improved pastures, and urban areas. They are also threatened with displacement by invasive non-native grasses, and possible vulnerability from lowered genetic diversity due to their present low population numbers.

DATES: Comments from all interested parties must be received by October 4, 1993. Public hearing requests must be received by September 20, 1993.

ADDRESSES: Comments and materials concerning this proposal should be sent to Field Supervisor, U.S. Fish and Wildlife Service, Ecological Services Field Office, 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: Angela Brooks, at the above address (Telephone 512/994-9005).

SUPPLEMENTARY INFORMATION:

Background

Texas ayenia, a member of the cacao family, was first collected in Hidalgo County, Texas, by C.G. Pringle in 1888, and was named *Nephropetalum pringlei* by B.L. Robinson and J.M. Greenman in 1896. In 1960, Carmen Cristóbal revised the genus *Ayenia* and described *Ayenia limitaris* as a new species. The previously described *Nephropetalum pringlei* was not mentioned in the revision. Prior to Cristóbal's description of *Ayenia limitaris* in 1960, South Texas specimens of this species had been identified as *A. berlandieri*, a species of tropical Mexico. In 1986, Laurence Dorr and Lisa Barnett transferred *Nephropetalum pringlei* to the genus *Ayenia* and reduced it to synonymy with *Ayenia limitaris*.

Texas ayenia is a pubescent, suffrutescent shrub approximately 60-150 cm (2-5 ft) tall, with alternate, simple leaves. The cordate-based leaves are approximately 8 cm (3 in.) long and 3.5 cm (1.4 in.) wide. The inflorescences are axillary, up to 4 per node, with each inflorescence supporting two or more perfect flowers. Flower color has been reported as green, pink, or cream. The fruit is a 5-celled, pubescent capsule approximately 8 mm (0.3 in.) long, with short, curved prickles (Damude and Poole 1990).

Texas ayenia occurs at low elevations in dense subtropical woodland communities that are found on alluvial sandy clay-loam soils of Rio Grande floodplains and terraces. Although the present population occurs in the shaded understory of a remnant brush tract, previous collectors have found the plant in openings within chaparral and along the edges of thickets (Correll and Johnston 1979). The present site is a Texas Ebony-Anacua (*Pithocellobium flexicaule-Ehretia anacua*) plant community located within the Arroyo Colorado drainage. This area was once an active floodplain; however, the extent to which past flooding affected Texas ayenia is unknown.

The Texas Ebony-Anacua plant community once covered much of the Rio Grande delta. The community occurs on well drained, but heavy, soils on riparian terraces (Diamond 1990). The canopy cover in this climax community type is close to 95 percent (Damude and Poole 1990). Associated species within the community include la coma (*Bumelia celastrina*), brasil (*Condalia hookeri*), granjeno (*Celtis pallida*), and snake-eyes (*Phaulothamnus spinescens*). The Texas Ebony-Anacua community grades into the Texas Ebony-Snake-eyes community

in the drier portions of the woodland habitat (Diamond 1990). Both plant communities have been reduced to discontinuous fragments, often surrounded by agricultural fields, pastures, or urban development, and now cover less than 5 percent of their original area (Jahrsdoerfer and Leslie 1988).

Texas ayenia occurred historically in Cameron and Hidalgo counties in the U.S., and the states of Coahuila, Nuevo Leon, and Tamaulipas in Mexico. The only recent collection in Mexico was from a Tamaulipan population in 1981; however, the present status of this population is unknown (Damude and Poole 1990). Texas ayenia has not been relocated at any of the historic Cameron County locations since the early 1960's. The status report by Damude and Poole (1990) noted an observation in 1988 of six spindly individuals at the Hidalgo County site. The following year this population was noted as being reduced to one individual. Searches were undertaken in 1990 and 1991 by a number of personnel from the Service and the Texas Parks and Wildlife Department; however, no Texas ayenia individuals were relocated. In 1992, Jim Everitt of the U.S. Department of Agriculture and Service personnel relocated the remaining individual at the Hidalgo County site. This location on private property is the only recently verified site for the species.

South Texas ambrosia was first collected in San Fernando, Tamaulipas, Mexico, by Luis Berlandier in 1835, and was named *Ambrosia cheiranthifolia* by A. Gray in 1859. The first U.S. collection was made in 1932 by Robert Runyon from an area near Barrera (now Russelltown) in Cameron County, Texas (Turner 1983).

South Texas ambrosia, a member of the aster family, is a herbaceous, erect, silvery to grayish-green, rhizomatous perennial, 10-30 cm (0.3-1.0 ft) tall. Its simple leaves are usually opposite on the lower portion of the plant and alternate above. The male flower heads are arranged in inconspicuous terminal racemes 5-10 cm (2-4 in.) long. The female flower heads are in small clusters in the leaf axils just below the male racemes (Turner 1983). Due to its rhizomatous growth, a single plant may be represented by hundreds of clonal stems.

South Texas ambrosia grows at low elevations in open prairies and savannas of South Texas on soils varying from clay-loams to sandy-loams. Much of the original native habitat for South Texas ambrosia has been converted to agricultural fields, improved pastures, or urban areas. Many savanna areas

have been cleared and planted to non-native grasses, such as buffelgrass (*Cenchrus ciliaris*), which outcompete the native vegetation. South Texas ambrosia does not appear to survive plowing, blading, or disking. Other potential prairie habitat may now be invaded by thorny shrub and tree species as a result of fire suppression or overgrazing. Associated native grasses found at the existing sites include Texas grama (*Bouteloua rigidisetata*), buffalo grass (*Buchloe dactyloides*), Texas speargrass (*Stipa leucotricha*), and tobosa (*Hilaria mutica*). Invading non-native grasses found at the sites include buffelgrass, King Ranch bluestem (*Bothriochloa ischaemum* var. *songarical*), bermuda grass (*Cynodon dactylon*), and St. Augustine grass (*Stenotaphrum secundatum*) (U.S. Fish and Wildlife Service 1988). Associated native woody species found scattered throughout the existing sites include mesquite (*Prosopis glandulosa*), huisache (*Acacia smallii*), huisachillo (*Acacia schaffneri*), brasil (*Condalia hockeri*), granjeno (*Celtis pallida*), and lotebush (*Ziziphus obtusifolia*).

Historically, South Texas ambrosia occurred in Cameron, Jim Wells, Kleberg, and Nueces counties in South Texas, and the state of Tamaulipas in Mexico. The current status of any Mexican populations is unknown. The historic populations in Cameron and Jim Wells counties have not been relocated. Only one location noted in the status report (Turner 1983) is known to still be extant. Three populations, two in Nueces County, and one in Kleberg County, were discovered by Ruth O'Brien (Corpus Christi State University, Corpus Christi, Texas, pers. comm. 1993). Two Nueces County populations were discovered in 1992 and 1993 by William Carr (Texas Parks and Wildlife Department, Austin, Texas, pers. comm. 1993). The extant populations occur on private land, highway and railroad rights-of-way, and the Kingsville Naval Air Station. Four known locations for South Texas ambrosia, one extirpated and three extant, also support the endangered slender rush-pea (*Hoffmannseggia tenella*), which was federally listed as endangered (50 CFR 45624; November 1, 1985) because of threats similar to those affecting South Texas ambrosia.

Federal action involving these species began with section 12 of the Act, which 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

Service published a notice in the **Federal Register** (40 FR 27823) accepting the Smithsonian report as a petition within the context of section 4(c)(2) of the Act, now section 4(b)(3)(A), and of its intention thereby to review the status of the plants named therein. *Ambrosia cheiranthifolia* was included as endangered, and *Ayenia limitaris*, then under the name *Nephropetalum pringlei*, was included as extinct in the Smithsonian report and Service notice.

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. *Ambrosia cheiranthifolia* was included in the June 16, 1976, proposal.

The 1978 amendments to the Act required that all proposals over two years old be withdrawn, although a one year grace period was given to proposals already over two years old. In the December 10, 1979, **Federal Register** (44 FR 70796), the Service published a notice withdrawing the June 16, 1976 proposal, along with four other proposals which had expired.

A list of plants under review for listing as endangered or threatened species was published in the December 15, 1980, **Federal Register** (45 FR 82523). *Ambrosia cheiranthifolia* was included in Category 2 of the candidate list and *Nephropetalum pringlei* was included in Category 1*. Category 2 candidate species are those for which available information indicates listing as endangered or threatened may be appropriate, but for which substantial data are not currently available to support the immediate preparation of proposed rules. Category 1 candidate species are those for which the Service currently has on file substantial biological information to support the appropriateness of proposing to list them as endangered or threatened species, but the immediate publication of proposed rules is precluded by work on other listing actions of higher priority. Category 1* species also include those whose status in the recent past is known to support listing, but that may have already become extinct.

Section 4(b)(3)(B) of the Act, requires the Secretary to make certain findings on pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 amendments to the Act further requires that all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. Because the 1975 Smithsonian report was accepted as a petition, all of the plants contained therein, including *Nephropetalum pringlei* (= *Ayenia*

limitaris) and *Ambrosia cheiranthifolia*, were treated as being newly petitioned on October 13, 1982. In each year from 1983 through 1992, the Service found that the petitioned action was warranted, but listing of *Ayenia limitaris* and *Ambrosia cheiranthifolia* was precluded by other listing actions of higher priority, and that additional data on vulnerability and threats were still being gathered.

A status report on South Texas ambrosia was completed May 20, 1983 (Turner 1983). This report provided sufficient information on biological vulnerability and threats to support preparation of a proposed rule to list South Texas ambrosia as endangered.

Notices revising the 1980 list of plants under review for listing as endangered or threatened species were published in the **Federal Register** on September 27, 1985 (50 FR 38826), and February 21, 1990 (55 FR 6164). *Nephropetalum pringlei* (= *Ayenia limitaris*) was included in Category 2 and *Ambrosia cheiranthifolia* was included in Category 1 of these notices.

A status report on Texas ayenia was completed December 1, 1990 (Damude and Poole 1990). This report provided sufficient information on biological vulnerability and threats to support preparation of a proposed rule to list Texas ayenia as endangered.

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 of endangered and threatened species. A species may be determined to be an endangered or threatened species based on the best scientific and commercial information available regarding one or more of the five factors described in section 4(a)(1). These factors and their application to *Ayenia limitaris* Cristóbal (Texas ayenia) and *Ambrosia cheiranthifolia* Gray (South Texas ambrosia) are as follows:

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

Habitat destruction is the primary threat to Texas ayenia and South Texas ambrosia. The past and current practice of converting native South Texas brush and woodlands to agricultural fields, improved pastures, and urban areas, or clearing brush and woodlands for urban water development or flood control has destroyed 95 percent of this native vegetation (Jahrsdoerfer and Leslie 1988). Most native Texas Gulf Coast

prairies have been converted to agricultural fields or improved pastures. The amount of conversion of these plant communities in Mexico is similar though not quantified. The remaining remnant native prairie, brush, and woodland tracts are often surrounded by agricultural fields, pastures, or urban development. These modified habitats pose potential threats to the native areas through agricultural chemical drift from aerial spraying, chemical runoff following rains, invasion of non-native grasses such as buffelgrass, guineagrass (*Panicum maximum*), King Ranch bluestem, and Angleton bluestem (*Dichanthium aristatum*), and trampling and possible collection pressures due to easy accessibility from nearby urban areas. The few remaining populations of these species are vulnerable to extinction if any of their remaining habitat is modified.

Even roadside remnants of native vegetation in South Texas are often bladed, or plowed and seeded with exotic grasses such as buffelgrass and King Ranch bluestem. Herbicides are often used to control vegetation around signs, guard rails, and bridge abutments, and to kill shrubby vegetation encroaching on the right-of-way. Due to the rarity of Texas *ayenia* and South Texas *ambrosia*, the likelihood of their being directly impacted by roadway maintenance is small, but almost any impact could lead to the extinction of either species.

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

No commercial trade is known to exist for either of these species; however, the potential exists for vandalism and collection. Listing these species, with the resulting publicity, will highlight their rarity and may increase their attractiveness to some collectors. Excessive recreational or scientific use is not known or anticipated for either species.

C. Disease or Predation

Although the Texas *ayenia* population has shown no evidence of disease or predation, Cristóbal (1960) notes the floral buds of *Ayenia* species are often deformed by Hymenopteran larvae. Cristóbal also notes *Ayenia* fruits can be deformed by Dipteran larvae thus inhibiting seed release. No evidence of grazing or browsing has been observed for Texas *ayenia*.

No threats of disease or predation are known for South Texas *ambrosia*; however, damage to stems and rhizomes is possible in situations of severe trampling or grazing.

D. The Inadequacy of Existing Regulatory Mechanisms

Presently, neither species is protected by Federal or state law.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

With only one known verified population, Texas *ayenia* may have low genetic variability, which could limit its ability to adapt to environmental changes. It is unknown whether past flooding created or maintained habitat for Texas *ayenia*. However, since the present population occurs within a previously active drainage of the Arroyo Colorado (Damude and Poole 1990), a flood could negatively impact the species. Observers have noted that the population declined during the recent drought in the Lower Rio Grande Valley (J. Everitt, U.S.D.A. Agricultural Research Station, Weslaco, Texas, pers. comm. 1992). The extreme rareness of this species makes it vulnerable to extinction from any number of chance events.

South Texas *ambrosia* may also be vulnerable to extinction due to lowered genetic variability. Populations are clonal, so despite having many stems, the populations may actually represent very few genetically different individuals. It has been noted that species like South Texas *ambrosia* that were once more widespread, but are now reduced to low numbers, may be more vulnerable to the detrimental effects of lowered genetic diversity than species that were always rare (Huenneke 1991).

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to propose this rule. Based on this evaluation, the preferred action is to list Texas *ayenia* and South Texas *ambrosia* as endangered. The status of endangered is appropriate because of these species' limited distribution, low population numbers, and imminent threats of habitat destruction.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time a species is determined to be endangered or threatened. Pursuant to 50 CFR 424.12(a)(1), designation of critical habitat is not prudent when one or both of the following situations exist: (i) The species is threatened by taking or other human activity, and identification of critical habitat can be

expected to increase the degree of such threat to the species, or (ii) such designation of critical habitat would not be beneficial to the species. The Service finds that designation of critical habitat is not presently prudent for this species. As discussed under Factor B in the "Summary of Factors Affecting the Species" section of this rule, Texas *ayenia* and South Texas *ambrosia* are potentially threatened by taking or vandalism. These activities are difficult to enforce against and are only regulated by the Act with respect to plants in cases of (1) removal and reduction to possession of listed 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 Texas *ayenia* and South Texas *ambrosia* more vulnerable to collecting or vandalism and increase enforcement problems. All involved parties and principal landowners have been notified of the location and importance of protecting the habitat of these species. Protection of the habitat for these species 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 Texas *ayenia* and South Texas *ambrosia*.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the 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 Act provides for possible land acquisition and cooperation with the states and authorizes recovery plans 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.

Some Federal actions that may affect Texas *ayenia* or South Texas ambrosia include brush clearing for flood control by the International Boundary and Water Commission, management recommendations to landowners by the Soil Conservation Service for activities funded by the Agricultural Stabilization and Conservation Service, and agricultural pesticide registration by the Environmental Protection Agency. Additionally, a population of South Texas ambrosia occurs on Kingsville Naval Air Station and may be affected by maintenance or construction activities at this facility.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general prohibitions and exceptions that apply to all endangered plants. All 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. 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 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 these species are not common in cultivation or in the wild. Requests for copies of the regulations on listed plants and inquiries regarding prohibitions and permits may be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, room 420C, Arlington, Virginia 22203 (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 these species;

(2) The location of any additional populations of these 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 these species; and

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

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

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be received by 45 days from the date of publication of the proposal in the **Federal Register**. Such requests must be made in writing and addressed to Field Supervisor (see **ADDRESSES** section).

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

- Cristóbal, C.L. 1960. Revision del género *Ayenia* L. (Sterculiaceae). *Opera Lilloana* 4:1-230.
- Damude, N. and J. Poole. 1990. Status Report on *Ayenia limitaris*. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
- Diamond, D. 1990. Plant Communities of Texas (series level). Texas Parks and Wildlife Department, Austin, Texas.
- Dorr, L.J. and L.C. Barnett. 1986. The identity of *Nephropetalum* (Sterculiaceae). *Taxon* 35(1):163-164.
- Huenneke, L.F. 1991. Ecological implications of genetic variation in plant populations. In D. Falk and K. Holsinger, eds. *Genetics and Conservation of Rare Plants*. Oxford University Press, New York.
- Jahrsdoerfer, S.E. and D.M. Leslie, Jr. 1988. Tamaulipan brushland of the Lower Rio Grande Valley of south Texas: description, human impacts, and management options. U.S. Fish and Wildlife Service, Biol. Rep. 88(36). 63 pp.
- Turner, B.L. 1983. Status Report on *Ambrosia cheiranthifolia*. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
- U.S. Fish and Wildlife Service. 1988. Slender Rush-pea (*Hoffmannseggia tenella*) Recovery Plan. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 38 pp.

Author

The primary author of this proposed rule is Angela Brooks, U.S. Fish and Wildlife Service, Corpus Christi Ecological Services Field Office (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Proposed Regulations Promulgation

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:

PART 17—[AMENDED]

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

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 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 plant families indicated, 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					
Asteraceae—Aster family:						
<i>Ambrosia cheiranthifolia</i>	South Texas ambrosia	U.S.A. (TX), Mexico	E	—	NA	NA
Sterculiaceae—Cacao family:						
<i>Ayenia limitaris</i>	Texas ayenia	U.S.A. (TX), Mexico	E	—	NA	NA

Dated: July 12, 1993.

Richard N. Smith,
Acting Director, Fish and Wildlife Service.
[FR Doc. 93-18639 Filed 8-4-93; 8:45 am]
BILLING CODE 4310-55-P

50 CFR Part 17

RIN 1018-AC00

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for Four Plants and Proposed Threatened Status for Four Plants From Vernal Pools in the Central Valley of California

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Fish and Wildlife Service (Service) proposes to list *Orcuttia inaequalis* (San Joaquin Valley Orcutt grass), *Orcuttia pilosa* (hairy Orcutt grass), *Orcuttia viscida* (Sacramento Orcutt grass), and *Tuctoria greenei* (Green's tuctoria) as endangered and *Castilleja campestris* ssp. *succulenta* (fleshy owl's-clover), *Chamaesyce hooveri* (Hoover's spurge), *Neostapfia colusana* (Colusa grass), and *Orcuttia tenuis* (slender Orcutt grass) as threatened pursuant to the Endangered Species Act of 1973, as amended (Act). These species grow in the basins and margins of vernal pools of the Central Valley of California. Habitat loss and degradation due to urbanization, agricultural land conversion, livestock overgrazing, off-highway vehicle use, flood control projects, highway projects, landfills, and competition from weedy nonnative plants imperil the continued existence of these species. This proposal, if made final, would extend

the Act's protection to these plants. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by November 3, 1993. Public hearing requests must be received by September 20, 1993.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Field Supervisor, U.S. Fish and Wildlife Service, Sacramento Field Office, 2800 Cottage Way, room E-1803, Sacramento, California 95825-1846. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Ken Fuller at the above address or at 916-978-4866.

SUPPLEMENTARY INFORMATION:

Background

Vernal pools in the Central Valley of California were a common and widespread feature in pre-European times (Holland and Jain 1977). Holland (1978 and *in litt.*, September 18, 1992) estimated that urbanization and other factors have eliminated up to 90 percent of the vernal pools in the Central Valley. Since the plants discussed herein grow only in vernal pools in California, they have experienced minor to major population reductions via the loss of vernal pool habitat throughout their respective ranges. California vernal pools are generally small, seasonally aquatic ecosystems that are inundated in the winter and dry slowly in the spring and summer. Cyclical wetting and drying create an unusual ecological situation supporting a unique biota. Many plants and animals are specifically adapted to this environment

and cannot survive outside these temporary pools.

The Central Valley of California consists of the Sacramento Valley in the north and the San Joaquin Valley in the southern half of the State. Within the Central Valley, vernal pools are found in four physiographic settings, each possessing an impervious soil layer relatively close to the surface. These four settings include high terraces with iron-silicate or volcanic substrates, old alluvial terraces, basin rims with claypan soils, and low valley terraces supporting silica-carbonate hardpans. Vernal pool habitats and the eight plants discussed herein are found over a very limited, discontinuous, fragmented area within the Central Valley.

Orcuttia, *Neostapfia*, and *Tuctoria* are the three genera of the grass tribe Orcuttieae, within the subfamily Chloridoideae, in the grass family (Poaceae). All three genera consist of small-statured annual grasses that produce a viscid (sticky), odoriferous, acid-tasting exudate and are covered with small glandular hairs. Plants typically have few to many slender stems terminating in a spike-like inflorescence. The leaves lack ligules (small membranous flaps at the base of the leaf blade), and little or no distinction exists between the leaf blade and the leaf sheath. Members of *Orcuttia* have long, thin, floating, juvenile leaves, two vertical rows of ranks of spikelets on the axis of the inflorescence, and five-toothed lemmas (the lower bract enclosing the grass floret). Spikelets are retained when the plants mature. Members of *Neostapfia* lack the ribbon-like, juvenile leaves of the *Orcuttia* species. In addition, spikelets are spirally arranged on the axis of the