
DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

**Endangered and Threatened Wildlife
and Plants; Proposed Endangered
Status for Five Florida Pine Rockland
Plants**

AGENCY: Fish and Wildlife Service,
Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes endangered status for four plants: *Euphorbia deltoidea* ssp. *deltoidea* (spurge), *Galactia smallii* (Small's milkpea), *Polygala smallii* (tiny polygala), and *Amorpha crenulata* (crenulate lead-plant). The Service proposes threatened status for one plant species, *Euphorbia garberi* (Garber's spurge). The four species recommended for endangered status are restricted to pine rockland habitat in Dade and Monroe Counties, Florida. They are

endangered by the continuing destruction of pine rockland habitat for residential and commercial purposes. South Florida pine rocklands, a unique habitat type, are now mainly restricted to small fragmented stands. Pine rockland plants also depend on periodic fire to maintain the habitat and prevent succession to hardwoods.

Euphorbia garberi, proposed as threatened, formerly occurred widely in Dade and Monroe Counties, Florida. Its range has been reduced by commercial and residential development in these counties. This species is now restricted to five known sites, four in Everglades National Park and one in the Florida Keys. Critical habitat is not being proposed for any of these species. A final determination that these are endangered and threatened species would provide them the protection of the Endangered Species Act, as amended.

DATES: Comments from all interested parties must be received by January 7, 1985. Public hearing requests must be received by December 24, 1984.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Endangered Species Field Station, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207. Comments and materials received will be available for public inspection, by appointment, during normal business hours (7 am-4:30 pm) at the above address.

FOR FURTHER INFORMATION CONTACT: Mr. David J. Wesley, Endangered Species Field Supervisor, at the above address (904/791-2580 or FTS 946-2580).

SUPPLEMENTARY INFORMATION:

Background

Euphorbia deltoidea was originally described by Engelman, and published in Chapman (1883). Small (1903) transferred the species to the genus *Chamaesyce*. For the sake of consistency with the Service's previous treatment of the segregate genus *Chamaesyce*, the species proposed in this rule are referred to the genus *Euphorbia*. This agrees with the nomenclature used in the Service's December 15, 1980, plant notice of review (45 FR 82480). Small (1913, 1927) later described *Chamaesyce serpyllum* and *C. adherens* as species distinct from *C. Deltoidea*. Burch (1966) considered *E. deltoidea* to have two subspecies, *deltoidea* and *Serpyllum*, the former including the varieties *deltoidea* and *adhaerens*. Herndon, (1984a), however, believes that *deltoidea*, *adhaerens*, and *serpyllum* should be considered distinct species. This proposed rule applies to

the taxa *deltoidea* and *adhaerens*, which are restricted to Dade County, Florida. *Euphorbia deltoidea* subspecies is restricted to Big Pine Key, Monroe County, Florida, and is also a candidate for Federal listing. There is no known overlap in range between these three taxa. *Euphorbia deltoidea* ssp. *deltoidea* occurs in the Coral Gables—South Miami—Perrine area, while variety *adhaerens* occurs in the Homestead—Goulds area. These two varieties are both covered by the listing of the subspecies *Euphorbia deltoidea* ssp. *deltoidea*.

Euphorbia deltoidea is a herbaceous, prostrate to barely ascending plant forming small mats to a few decimeters in diameter. The thin, wiry stems extend from a central woody tap root. Leaves are deltoide to ovate in shape, opposite, and up to 5 millimeters long. The flowers are unisexual; male and female flowers are arranged in a cuplike structure (cyathium). The 3-seeded fruits are 1-2 millimeters wide; seeds measure about 1 millimeter. The density and distribution of hairs on the stems, leaves, and capsules distinguish varieties *deltoidea* and *adhaerens*. Var. *deltoidea* is essentially hairless; *adhaerens* is fairly hairy.

Galactia smallii was first described as *Galactia prostrata* by Small (1933). Herndon (1981) published H.J. Rodger's finding that this specific name was preoccupied by another species of *Galactia*. He also published Hollis' suggestion of the new specific name *smallii*, and clarified the characters separating this species from the related *Galactia pinetorium*. *Galactia smallii* is a small vine with compound leaves, usually with 3 elliptical leaflets 1.5-3 centimeters long. The pinkish flowers have a calyx 8-9 millimeters long and a standard petal 15-17 millimeters long. This species is currently known from only two sites near Homestead.

Polygala smallii was originally described by Small (1905) as *Polygala arenicola*. Smith and Ward (1976), realizing that the specific name *arenicola* was preoccupied in the genus *Polygala*, proposed a new name, *Polygala smallii*. The plant was originally known from pine rocklands in Broward and Dade Counties, Florida, but attempts to locate this species in 1979 (Austin et al., 1980b) found all historic sites to have been extirpated. The species is now known only from two sites in Dade County. *Polygala smallii* is an erect biennial herb with short, branched or unbranched stems. Leaves are 12-50 millimeters long, crowded, oblanceolate to linear lanceolate, and often form a basal rosette. The small yellow-green flowers

are clustered at the end of stems. The oblong seeds are 1.9-2.3 millimeters long.

Amorpha crenulata was described by Rydberg (1919) based on material from near Coconut Grove, Dade County, Florida. Wilbur (1975) confirmed the status of this species. The plant is presently restricted to two sites in the South Miami area (Herndon, 1984). *Amorpha crenulata* is a shrub to 1.5 meters in height. The compound leaves bear 25-33 leaflets. The flowers bear a single petal (the standard) 6 millimeters long and are arranged in loosely clustered racemes 9-20 centimeters long. The seed pod is 6-7 millimeters long and is conspicuously glandular.

Pine rockland plants formerly were more widely distributed along the south Florida limestone ridge, an area about 65 miles long, extending more or less continuously from southeastern Broward County to Long Pine Key in Everglades National Park. The ridge reaches 3-5 meters in elevation and provides a markedly different habitat for plants and animals than the marshes and wet prairies that dominate the surrounding areas. The substrate consists of porous limestone known as Miami oolite. Soils are poorly developed, consisting mainly of a thin layer of sand. Erosion of the limestone results in frequent solution holes and jagged surface features. Many plants are rooted in crevices in the limestone. The predominant canopy vegetation on the ridge is southern slash pine (*Pinus elliotii* var. *densa*). An understory of saw palmetto (*Serenoa repens*), silver palm (*Cocthrinax argentata*), poisonwood (*Metopium toxiferum*), rough velvetseed (*Guettarda elliptica*), and wax myrtle (*Myrica cerifera*) is typical. A large number of endemic pine rockland plants is present in the understory. Lack of fire results in succession to tropical hardwood hammock vegetation, characterized by oaks (*Quercus virginiana*, gumbo-limbo (*Bursera simaruba*), strangler fig (*Ficus aurea*), poisonwood (*Metopium toxiferum*), wild tamarind (*Lysiloma latisiliqua*), and other species.

Burning at 3 to 10-year intervals may be necessary to maintain the pine rockland community; without fire the community may develop into rockland hammock in about 25 years (Duever, 1984).

The pine rocklands have been extensively developed for residential, commercial, and agricultural purposes. Shaw (1975) estimated that the historic area of pinelands and hammocks in Dade County, exclusive of Everglades National Park, was about 152 thousand acres. In 1975, these forests were

estimated to have been reduced to 8,149 acres; 7,370 acres were pinelands. Only 5,268 acres of pinelands were of sufficient size to be considered viable. In 1978, these 5,268 acres of viable pinelands had decreased to 4,558 acres (Anonymous, 1978). Only 1,710 acres of pinelands remained in good condition; the remainder suffered from lack of burning and/or invasion of exotic plants. The Dade County Department of Resource Management is currently updating the forest survey, since the pinelands have continued to decline rapidly since 1978. Summaries of the unique botanical features of the Miami rock ridge pineland and the threats facing the remnants of this habitat type were recently provided by Herndon (1984c) and Duever (1984). One plant species, *Linum carteri* var. *carteri* (Carter's flax), is endemic to Dade County pinelands and may now be extinct (Austin *et al.*, 1980a). *Linum carteri* var. *carteri* is a candidate species for listing but could not be located in a 1980 search.

Euphorbia garberi was originally described by Engelman in 1883. Small (1903) transferred the species to the genus *Chamaesyce*. *Euphorbia garberi* is a prostrate herb with hairy stems, ovate leaves 4–9 millimeters long, and inconspicuous flowers. The species formerly occurred in Dade and Monroe Counties, Florida, from the Miami area to the Lower Florida Keys. An April, 1981, status survey (Austin *et al.*, 1980a) was unable to locate this species over much of the historic range. The only known remaining populations occur at four sites in Everglades National Park, Dade County, Florida, and one site on Big Pine Key, Monroe County, Florida. *Euphorbia garberi* occurs in transitional areas between hammocks and rock pinelands, and on beach ridges in saline coastal areas. This species occurs in open areas on dry, sandy soils. *Euphorbia garberi* has been extirpated from the Miami area and from most of the Florida Keys in Monroe County where it was formerly found.

Federal Government actions on these species began with Section 12 of the Endangered Species Act of 1973, which directed the Secretary of the Smithsonian Institution to prepare a report on 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. In this report *Euphorbia deltoidea* ssp. *deltoidea* was listed as threatened, and *E. garberi* was listed as endangered. On July 1, 1975 (40 FR 27823), the Service published a notice in the *Federal Register* of its acceptance of

the report of the Smithsonian Institution as a petition within the context of section 4(c)(2) (now section 4(b)(3)) of the Act, and of its intention thereby to review the status of the plant taxa named within. The above two taxa were included in the 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 species pursuant to section 4 of the Act. The 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. *Euphorbia garberi* was included in the proposed rule. General comments received in relation to the 1976 proposal were summarized in an April 26, 1976, *Federal Register* publication, which also determined 13 plant species to be endangered or threatened (43 FR 17909). On December 10, 1979, the Service published a notice of withdrawal of the June 16, 1976, proposal along with four other proposals that had expired due to a procedural requirement of the 1978 Amendments. On December 15, 1980, the Service published a revised notice of review for native plants in the *Federal Register* (45 FR 82479); *Euphorbia deltoidea*, *Polygala smallii*, and *Euphorbia garberi* were included as category-1 species (species for which data in the Service's possession indicate listing is warranted).

Section 4(b)(3)(B) of the Endangered Species Act, as amended in 1982, requires the Secretary to make certain findings on pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 Amendments further requires that all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. This was the case for *Euphorbia deltoidea* ssp. *deltoidea* and *E. garberi* because of the acceptance of the 1975 Smithsonian report as a petition. On October 13, 1983, the Service found that the petitioned listing of these two taxa was warranted, and that although other pending proposals had precluded their proposal, expeditious progress was being made to add species to the list. Notice of this finding was published in the *Federal Register* on January 20, 1984 (49 FR 2485). Publication of this proposal constitutes the next 1-year finding requirement for these species, which must be made by October 13, 1985.

On March 22, 1984, the Service received a petition from Mr. Alan Herndon of the Department of Biology, Florida International University, Miami,

Florida, to list *Amorpha crenulata* and *Galactia smallii* pursuant to the Endangered Species Act. On June 4, 1984, an administrative decision was made that the petition presented substantial information indicating that petition action might be warranted. Notice to this effect was published in the *Federal Register* on July 13, 1984 (49 FR 28583). By publishing this proposed rule, the Service finds that the petitioned action is warranted 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 provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate the 1982 Amendments—see proposal at 48 FR 36062, August 8, 1983) 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). These factors and their application to *Euphorbia deltoidea* Engelm. ex Chapman ssp. *deltoidea* Burch (spurge), *Galactia smallii* H.J. Rogers ex Herndon (synonym: *G. prostrata* Small) (Small's milkpea), *Polygala smallii* Smith and Ward (synonym: *P. arenicola* Small) (tiny polygala), *Amorpha crenulata* Rydberg (crenulate lead-plant), and *Euphorbia* (*Chamaesyce*) *garberi* Englm. ex Chapm. (Garber's spurge) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* *Euphorbia deltoidea* ssp. *deltoidea*, *Galactia smallii*, *Polygala smallii*, and *Amorpha crenulata* are restricted to pinelands of the Miami rock ridge in Dade County, Florida. Conversion of pine rocklands for commercial and residential purposes began early in the twentieth century and accelerated after 1930. It has been estimated that 90 percent of Dade County's pine rocklands (exclusive of the pine rocklands within Everglades National Park, where these species do not occur) present in 1940 had been destroyed by 1972 (Robertson and Kushlan, 1974). The pinelands outside of Everglades National Park have been even further reduced since that time, and are now restricted to small isolated stands. Herndon (1984) estimated that 98 percent of the Dade County pinelands outside of Everglades National Park had been destroyed by 1984. The largest of these remnants are in county ownership; a few significant parcels are in private or Federal ownership. These plant

species were probably originally fairly widely distributed throughout the pinelands, but apparently did not occur west of the Homestead area. The species occurring in Dade County parks (*Euphorbia deltoidea* ssp. *deltoidea* and *Amorpha crenulata*) are vulnerable to ongoing and potential future development for recreational purposes and the establishment of service roads, parking, and picnic areas.

Euphorbia deltoidea ssp. *deltoidea* var. *deltoidea* formerly occurred throughout the pinelands from Miami southwest to Cutler Ridge. It is now restricted to eight known sites in the vicinity of Cutler Ridge and Perrine. *Euphorbia deltoidea* ssp. *deltoidea* var. *adhaerens* formerly occurred at several sites in the Homestead-Goulds area; this species is now restricted to two sites near Homestead (Austin *et al.*, 1980a).

The former range of *Galactia smallii* is poorly known, but this species is presently restricted to two known sites near Homestead.

Polygala smallii formerly ranged from southeastern Broward County (near Fort Lauderdale) to the Cutler area in Dade County. This species is now restricted to two sites in the Cutler area. (Austin *et al.*, 1980b).

Amorpha crenulata formerly occurred throughout pinelands in the Miami—Coral Gables area; it is now known only from two highly restricted sites within the Miami City limits (Herndon, 1984).

Habitat destruction or modification threatening *Euphorbia garberi* includes residential and commercial development, lack of fire, resulting in increased competition and shading out by other plant species, and natural risk from destruction by storms or hurricanes. *Euphorbia garberi* was formerly found from the Miami area southwest to Everglades National Park (ENP) and the Lower Florida Keys. Currently, the species is known from only four sites in ENP and one site on Big Pine Key, Monroe County. The species has apparently been extirpated from eight of the Florida Keys where it formerly occurred (Austin, *et al.* 1980a). It has not been located in the Miami area since 1949. Three of the ENP populations are located in coastal areas where storm overwash could eliminate them. Another population is in a pineland area where periodic burning may be required to prevent overshadowing by shrubs. The Big Pine Key site is vulnerable to overshadowing and storm damage.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* *Euphorbia deltoidea* ssp. *deltoidea*, *Galactia smallii*, *Polygala smallii*, and *Amorpha crenulata* are so

limited in distribution and population size that indiscriminate scientific or other collecting could adversely affect these species if it were to occur. This is not known to occur at this time, but caution will be necessary to ensure that increased publicity does not spark such collecting.

C. *Disease or predation.* Not applicable to these species.

D. *The inadequacy of existing regulatory mechanisms.* *Polygala smallii* is considered endangered by the Florida Committee on Rare and Endangered Plants and Animals, but this recognition provides no protection to the plant or its habitat. *Euphorbia deltoidea* ssp. *deltoidea* and *Amorpha crenulata* occur in Dade County parks, but are not accorded any specific protection in park planning or development. *Euphorbia garberi* is provided some protection by its inclusion in ENP, but is unprotected outside the Park. National Park Service regulations prohibit the removal of plants from parks; these regulations will be further strengthened by prohibitions of the Act which restrict the removal and reduction to possession of endangered plants from lands under Federal jurisdiction (proposed to be implemented for threatened plants at 48 FR 31417, July 8, 1983).

Dade County sponsors an Environmentally Endangered Lands (EEL) program which provides property tax benefits to landowners who agree to maintain healthy forestlands. The program includes prescribed burning for pinelands. Over 20 tracts of land supporting pinelands are now included in the EEL program, but these lands do not include any of the currently known sites for the species in this proposed regulation.

E. *Other natural or manmade factors affecting its continued existence.* Pine rockland habitat in Dade County succeeds to hardwood hammock in the absence of periodic burning. Pine rockland plants are gradually shaded out as succession takes place. As Dade County becomes increasingly developed and pinelands smaller and more fragmented, fire suppression is more apt to occur. Invasion of exotic plants is also affecting the pinelands. Two species currently invading this habitat are *Schinus terebinthifolia* (Brazilian pepper) and a large reed (*Neyraudia* sp.). Other exotic plants, which are extremely widespread in south Florida, may also invade pine rocklands in the future. The orchid tree (*Bauhinia variegata*) is currently present in some pinelands. Most of the remaining pinelands are surrounded with suburban landscaping dominated by exotic plants. Fire suppression and exotic plant

competition affect *Euphorbia deltoidea* ssp. *deltoidea*, *Galactia smallii*, *Polygala smallii*, and *Amorpha crenulata*.

The Service has carefully assessed the best scientific 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 *Euphorbia deltoidea* ssp. *deltoidea*, *Galactia smallii*, *Polygala smallii*, and *Amorpha crenulata* as endangered species and to list *Euphorbia garberi* as a threatened species. The former four species have already been extirpated over most of their historic range and could become extinct in the near future. *Euphorbia garberi* has been largely extirpated over its former range and is threatened at one or more of the remaining sites. The reasons for not proposing critical habitat for these species are discussed below in the "Critical Habitat" section.

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. The Service finds that designation of critical habitat is not prudent for these species at this time. *Euphorbia deltoidea* ssp. *deltoidea*, *Galactia smallii*, *Polygala smallii*, and *Amorpha crenulata* are sufficiently restricted that excessive scientific collecting or vandalism could seriously damage the remaining populations of these species. Publication of critical habitat maps in the **Federal Register** would increase the likelihood of such activities. Similarly, it would not be prudent to publish maps of the few known sites of *Euphorbia garberi*. While collecting is generally prohibited in Monroe County Parks and in Everglades National Park, these prohibitions are difficult to enforce. The Service believes that Federal involvement in the areas where these plants occur can be identified without the designation of critical habitat. Therefore, there is no net benefit of designating critical habitat for these plants.

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 following listing. The protection required of Federal agencies and the Act's 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 that 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 29990; 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 or result in destruction or adverse modification of proposed critical habitat. When a species is listed, Section 7 requires Federal agencies to insure that activities they authorize, fund or carry out are not likely to jeopardize the continued existence of such a species or destroy or adversely modify critical habitat. If a Federal action may affect a listed species or critical habitat, the responsible Federal agency must enter into consultation with the Service.

Federal involvement is presently known for two species, *Euphorbia deltoidea* ssp. *deltoidea* and *Euphorbia garberi*. The former species occurs on or near lands under the jurisdiction of the Federal Bureau of Prisons and the U.S. Army. Future activities of these agencies involving modification or removal of pine-lands in Dade County could affect *Euphorbia deltoidea* ssp. *deltoidea*.

Euphorbia garberi occurs in Everglades National Park. Park management includes prescribed burning of pine-lands in areas where *E. garberi* is located. The present burning schedules, aimed at maintaining pine-lands, should benefit this species. No monitoring of this plant species could focus increased attention on its status.

The Act and its implementing regulations (found at 50 CFR 17.61, 17.62, and 17.63 for endangered, and 17.71 and 17.72 for threatened plants) set forth a series of general trade prohibitions that apply to endangered and threatened plant species. With respect to *Euphorbia deltoidea* ssp. *deltoidea*, *Galactia smallii*, *Polygala smallii*, *Amorpha crenulata*, and *Euphorbia garberi*, all trade prohibitions of Section 9(a)(2) of the Act, implemented by 50 CFR 17.61 and 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 these species in interstate or foreign commerce. Seeds from cultivated specimens of threatened plant species are exempt from these prohibitions provided that a statement of "cultivated origin" appears on their containers. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62, 17.63 and 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered and threatened species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued since the species are virtually unknown in cultivation and are uncommon in the wild.

Section 9(a)(2)(B) of the Act, as amended in 1982, prohibits the removal and reduction to possession of endangered plant species from areas under Federal jurisdiction. The new prohibition would apply to *Euphorbia deltoidea* ssp. *deltoidea* on Federal lands in Dade County, if the species is listed. Section 4(d) allows for the provision of such protection to threatened plants through regulations. This new protection would apply to *Euphorbia garberi* in Everglades National Park (ENP) once revised regulations are promulgated. However, ENP regulations already prohibit collecting, except under permit, so the existing situation will be unchanged. The remaining plants considered in the rulemaking would be given similar protection to the extent they are located on land subject to Federal jurisdiction. Permits for exceptions to this prohibition are available through section 10(a) and 4(d) of the Act, until revised regulations are promulgated to incorporate the 1982 Amendments. Proposed regulations implementing this new prohibition were published on July 8, 1983 (48 FR 31417). It is likely that few collecting 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).

Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of endangered or threatened species. Therefore, any comments or suggestions

from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *Euphorbia deltoidea* ssp. *deltoidea*, *Galactia smallii*, *Polygala smallii*, *Amorpha crenulata*, and *Euphorbia garberi*;

(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 and distribution 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 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 Endangered Species Supervisor, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under 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).

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Author

The primary author of this proposed rule is Dr. Michael M. Bentzien, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207 (904/791-2580; FTS 946-2580).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation(s) 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 § 17.12(h) by adding the following, in alphabetical order, 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					
Euphorbiaceae—Spurge family:						
<i>Euphorbia (Chamaesyce) deltoidea</i> ssp. <i>deltoidea</i>	Spurge	U.S.A. (FL)	E		NA	NA
<i>Euphorbia (Chamaesyce) garberi</i>	Garber's spurge	U.S.A. (FL)	T		NA	NA
Fabaceae—Pea family:						
<i>Amorpha crenulata</i>	Crenulate lead—plant	U.S.A. (FL)	E		NA	NA
<i>Galactia smallii</i>	Small's milk—pea	U.S.A. (FL)	E		NA	NA
Polygalaceae—Milkwort family:						
<i>Polygala smallii</i>	Tiny polygala	U.S.A. (FL)	E		NA	NA

Dated: October 23, 1984.
J. Craig Potter,
 Acting Assistant Secretary for Fish and Wildlife and Parks.
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