50 CFR Part 17

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

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service finds four plants to be endangered: *Euphorbia deltoidea* ssp. *deltoidea* (spurge), *Galactia smallii* (Small's milkpea), *Polygala smallii* (tiny polygala), and *Amorpha crenulata* (crenulate lead-plant). The Service finds one plant, *Euphorbia garberi* (Garber's spurge), to be a threatened species. The four endangered species are restricted to pine rockland habitats in Dade County, Florida. They are endangered by the continuing destruction of pine rocklands for residential and commercial purposes. *Euphorbia garberi* formerly occurred widely in Dade and Monroe Counties, Florida, at the edges of pinelands and hammocks, and in coastal areas. Its range has been reduced by commercial and residential development to four sites in Everglades National Park and one site in the Florida Keys. Critical habitat has not been designated for any of these species. This action provides the protection of the Endangered Species Act to the five plant species.

DATE: The effective date of this rule is August 19, 1985.

ADDRESS: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Endangered Species Field Station, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207.

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 Engelmann, 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 affected by 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 (1903, 1927) later described *Chamaesyce serpyllum* and *Chamaesyce adhaerens* as species distinct from *Chamaesyce deltoidea*. Burch (1966) considered *Euphorbia deltoidea* to have two subspecies, *deltoidea* and *serpyllum*, the former including the varieties *deltoidea* and *adhaerens*. Herndon, however, believes that *deltoidea*, *adhaerens*, and *serpyllum* should be considered distinct species (Herndon, Florida International University, pers. comm., 1984). This final rule applies to the taxa *deltoidea* and *adhaerens*, which are restricted to Dade County, Florida. *Euphorbia deltoidea* subspecies *serpyllum* is restricted to Big Pine Key, Monroe County, Florida, and is a candidate for Federal listing. There is no known overlap in range among these three taxa. *Euphorbia deltoidea* s p. *deltoidea* variety *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 taproot. Leaves are deltoid to ovate in shape, opposite, and up to 5 millimeters (0.2 inch) long. The flowers are unisexual; male and female flowers are arranged in a cuplike structure (cyathium). The 3-seeded fruits are 1–2 millimeters (0.04–0.08 inch) wide; seeds measure about 1 millimeter (0.04 inch) wide. The density and distribution of hairs on the stems, leaves, and capsules distinguish varieties *deltoidea* and *adhaerens*. Variety *deltoidea* is essentially hairless; *adhaerens* is fairly hairy.

Galactia smallii was described as *Galactia prostrata* by Small (1933). Herndon (1981) published H.J. Roger'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 pinetorum*. *Galactia smallii* is a small vine with compound leaves, usually with 3 elliptic leaflets 1.5–3 centimeters (0.6–1.2 inches) long. The pinkish flowers have a calyx 8–9 millimeters (0.34 inch) long and a standard petal 15–17 millimeters (0.59–0.67 inch) 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 populations 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 (0.47–1.97 inches) long, crowded, and oblanceolate to linear-lanceolate, and often form a basal rosette. The small yellow-green flowers are clustered at the ends of stems. The oblong seeds are 1.9–2.3 millimeters (0.08–0.09 inch) long.

Amorpha crenulata was described by Rydberg (1919) based on material from near Coconut Grove, Dade County, Florida. Wilbur (1975) confirmed the taxonomic validity of this species. The plant is presently restricted to a few sites in the South Miami area (Herndon, 1984a). *Amorpha crenulata* is a shrub to 1.5 meters (4.92 feet) in height. The compound leaves bear 25–33 leaflets. The flowers bear a single petal (the standard) 6 millimeters (0.24 inch) long and are arranged in loosely clustered racemes 9–20 centimeters (3.5–7.9 inches) long. The seed pod is 6–7 millimeters (0.24–0.27 inch) long and is conspicuously glandular.

Pine rockland plants formerly were more widely distributed along the south Florida limestone ridge, an area about 105 kilometers (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 (10–16 feet) 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 elliottii* var. *densa*). An understory of saw palmetto (*Serenoa repens*), silver palm (*Coccothrinax argentata*), poisonwood (*Metopium toxiferum*), rough velvetseed (*Guettarda*

scabra), and wax myrtle (*Myrica cerifera*) is typical. Large numbers of endemic pine rockland plants are 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 152,000 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 pineland had decreased to 4,558 acres (Anonymous, 1978). Only 1,710 acres of pineland remained in good condition; the remainder suffered from lack of burning and/or invasion of exotic plants. The Dade County Department of Resources 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 (1984b) and Duever (1984). *Linum carteri* var. *carteri* (Carter's flax), an endemic to Dade County pinelands, is a candidate species for Federal listing but could not be located in a 1980 search and may now be extinct (Austin *et al.*, 1980a).

Euphorbia garberi was originally described by Engelmann 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 (0.16–0.35 inch) long, and conspicuous flowers. The species formerly occurred in Dade and Monroe Counties, Florida, from the Miami area to the lower Florida Keys. Researchers conducted a status survey and were unable to locate this species over much of the historic range (Austin *et al.*, 1980a). The only known remaining populations occur at four sites in Everglades National Park, one in Dade County and three in Monroe County, Florida, and one site on Big Pine Key, Monroe County, Florida. *Euphorbia garberi* occurs in transitional areas between hammocks and pine rocklands, and on beach ridges in saline coastal areas. This species occurs in open areas on dry, sandy soil. *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 *Euphorbia 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 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, 1978, **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 that portion of the June 16, 1976, proposal that had not been made final, 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 82480); *Euphorbia deltoidea*, *Polygala smallii*, and *Euphorbia garberi* were included as category-1 species. Category 1 comprises taxa for which the Service presently has sufficient biological information to support their being proposed to be listed as endangered or threatened species.

The Endangered Species Act Amendments of 1982 required that all petitions pending as of October 13, 1982, be treated as having been newly submitted on that date. The species covered by the December 15, 1980, notice of review were considered to be petitioned and the deadline for a finding on those species, including *Polygala smallii*, *Euphorbia deltoidea* ssp. *deltoidea* and *Euphorbia garberi*, was October 13, 1983. On October 13, 1983, and October 12, 1984, the Service found that the petitioned listing of these three taxa was warranted, and that although other pending proposals had precluded their proposal, expeditious progress was being made to list the species.

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 the petitioned action might be warranted. Notice to this effect was published in the **Federal Register** on July 13, 1984 (49 FR 28583).

On November 7, 1984 (49 FR 44507), the Service proposed 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. That proposal incorporated findings, pursuant to section 4(b)(3)(B) of the Act and due by March 22 and October 13, 1985, that the actions requested by the two petitions referred to above were warranted.

Summary of Comments and Recommendations

In the November 7, 1984, proposed rule (49 FR 44507) 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. Newspaper notices were published in the *Miami Herald* and the *Key West Citizen* on November 26, 1984, which invited general public comment. No public hearing was requested or held.

Six comments were received. The proposed listings were supported by the Florida Game and Fresh Water Fish

Commission, the Florida Department of Natural Resources (Division of Recreation and Parks), the Florida Natural Areas Inventory (FNAI), and the State organization and a local chapter of the Florida Native Plant Society. The FNAI indicated that another site for *Amorpha crenulata* might exist; six plants were found on the site (a small cultivated lot) in 1982. A botanist supported the listing of *Euphorbia garberi*, noting that the single known remaining site for this species in the Florida Keys was vulnerable to storms.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Euphorbia deltoidea* ssp. *deltoidea, Galactia smallii, Pollygala smallii,* and *Amorpha crenulata* should be classified as endangered species, and that *Euphorbia garberi* should be classified as a threatened species. Procedures found at 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 (50 CFR Part 424) were followed. 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* (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 garberi* Engelm. *ex* Chapm. (Garber's spurge) are as follows:

A. *The present or threatened destruction, modification, or curtailment of their 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 (1984b) 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. Originally, these plant species were probably distributed fairly widely 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 (Herndon, 1984a).

Polygala smallii formerly existed 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 a few highly restricted sites within the Miama City limits (Herndon, 1984a).

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, one in Dade County and three in Monroe County, 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 found in the Miami area since 1949. Three of the ENP populations are located in coastal areas where storm overwash could eliminate them. *Euphorbia garberi* was considered a "species of highest concern" in a rare plant report prepared by the Everglades National Park South Florida Research Center (Loope and Avery, 1979). Another population is in a pineland area where periodic burning may be required to prevent overshading by shrubs. The Big Pine Key site is vulnerable to overshading 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. Collecting 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 (Ward, 1979), 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 presence 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 that 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, 1983).

Dade County sponsors an Environmentally Endangered Lands (EEL) program which provides property tax benefits to landowners who agree to maintain healthly forestlands. The program includes prescribed burning for pineland. 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 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 the 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 terebinthifolius* (Brazilian pepper) and a large reed (*Neyraudia reynaudiana*). 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 deltiodea* ssp. *deltiodea, Galactia smallii, Polygala smallii,* and *Amorpha crenulata.*

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 make this rule final. 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 scientific collecting or vandalism could seriously damage the remaining populations of these species. Publication of critical habitat descriptions and maps in the **Federal Register** would increase the likelihood of such activities. Similarly, it would not be prudent to publish descriptions and 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 benefit in designation of 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 prohibitions against taking 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 and are now under revision (see proposal at 48 FR 29990; June 29, 1983). 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.

Euphorbia deltoidea ssp. *deltoidea* occurs on land under the jurisdiction of the U.S. Army. The Army is currently conferring with the Service regarding the development of Reserve facilities on the pineland site. This process is anticipated to become a consultation, with determination of *Euphorbia deltoidea* ssp. *deltoidea* to be an endangered species.

Euphorbia garberi occurs in Everglades National Park. Park management includes prescribed burning of pinelands in areas where *Euphorbia garberi* is located. The present burning schedules, aimed at maintaining pinelands, should benefit this species. This activity will be subject to consultation under section 7 of the Endangered Species Act. No monitoring of this plant species is currently being done in the Park; the listing 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 plants and 17.71 and 17.72 for threatened plants set forth a series of general trade prohibitions that apply to all 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, 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. This prohibition now applies to *Euphorbia deltoidea* ssp. *deltoidea* of Federal lands. Section 4(d) allows for the provision of such protection to threatened species through regulations. This protection will apply to *Euphorbia garberi* in ENP once revised regulations are promulgated. Everglades National Park 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 sections 10(a) and 4(d) of the Act, until revised regulations are promulgated to incorporate the 1982 Amendments. Proposed regulations implementing this prohibition were published on July 8, 1983 (48 FR 31417), and it is anticipated that these will be made final following

public comment. It is likely that few collecting permits for these 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).

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).

Literature Cited

Anonymous. 1978. The pine and hammock forestlands of Dade County: 1978 review. Report to Dade Co., Florida, Planning Department. 21 pp.

Austin, D.F., C.E. Nauman, and B.E. Tatje. 1980a. Endangered and threatened plant species survey in southern Florida and the National Key Deer and Great White Heron National Wildlife Refuges, Monroe County, Florida. Report submitted to U.S. Fish and Wildlife Service, Atlanta, Georgia under contract no. 14–16–004–78–105.

Austin, D.F., P. Krauss, J. Jones, B.E. Tatje, and C.E. Nauman. 1980b. Endangered and threatened plant species survey in southern Florida. Report submitted to the U.S. Fish and Wildlife Service under contract no. 14–16–0084–79–106.

Burch, D. 1966. Two new species of *Chamaesyce* (Euphorbiaceae). New combinations and a key to the Caribbean members of the genus. Annals of the Missouri Botanical Garden 53:90–99.

Chapman, A.W. 1883. Flora of the Southern United States with Supplement. Ivison, Blakeman, Taylor, and Company, New York. 698 pp.

Duever, L.C. 1984. Natural communities of Florida's rocklands. Palmetto 4(2):8–11.

Herndon, A. 1981. *Galactia smallii*: a new name for *Galactia prostrata* Small. Rhodora 83:471–472.

Herndon, A. 1984a. March 17, 1984, petition to U.S. Fish and Wildlife Service to list *Amorpha crenulata* and *Galactia smallii* under the Endangered Species Act.

Herndon, A. 1984b. Dade County pinelands. Palmetto 4(2):3–11.

Loope, L.L., and G. Avery. 1979. A preliminary report on rare plant species in the flora of National Park Service areas of South Florida. South Florida Research Center Report M–548. 42 pp.

Robertson, W.B., and J.A. Kushlan. 1974. The southern Florida avifauna, pp. 414–452 *in* Environments of South Florida: Present and Past, P.J. Gleason (ed.). Memoir 2, Miami Geol. Soc. 452 pp.

Rydberg, P.A. 1919. *Amorpha*. North American Flora 24:26–34.

Shaw, C. 1975. The pine and hammock forestlands of Dade County. Report to Dade Co., Florida, county manager. 80 pp.

Small, J.K. 1903. Flora of the Southeastern United States. Published by author, New York. xii + 1370 pp.

Small, J.K. 1905. *Polygala arenicola* sp. nov. Bull. N.Y. Bot. Gard. 3:426–427.

Small, J.K. 1927. A new *Chamaesyce* from tropical Florida. Torreya 27:104.

Small, J.K. 1933. Manual of the southeastern flora. University of North Carolina Press. 1544 pp.

Smith, R.R., and D.B. Ward. 1976. Taxonomy of *Polygala* series *Decurrentes* (Polygalaceae). Sida 6(4):284–310.

Ward, D.B. 1979. Rare and endangered biota of Florida. Vol. 5: Plants. University Presses of Florida. 175 pp.

Wilbur, R.L. 1975. A revision of the North American genus *Amorpha* (Leguminosae-Psoraleae). Rhodora 77:337–409.

Author

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List of Subjects in 50 CFR Part 17

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

Regulations Promulgation

PART 17—[AMENDED]

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, in amended 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. Amend § 17.12(h) by adding the following, in alphabetical order under family names 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					
Euphorbiaceae—Spurge family:						
* * * * * * *						
Euphorbia (Chamaesyce) deltoidea ssp. *deltoidea*	Spurge	U.S.A. (FL)	E	190	NA	NA
Euphorbia (Chamaesyce) garberi	None	U.S.A. (FL)	T	190	NA	NA
* * * * * * *						
Fabaceae—Pea family:						
* * * * * * *						
Amorpha crenulata	Crenulate lead-plant	U.S.A. (FL)	E	190	NA	NA
Galactia smallii	Small's milkpea	U.S.A. (FL)	E	190	NA	NA
* * * * * * *						
Polygalaceae—Milkwort family:						
Polygala smallii	Tiny polygal a ELS	U.S.A. (FL)	E	190	NA	NA
* * * * * * *						

Dated: June 27, 1985.

J. Craig Potter,

Acting Assistant Secretary for Fish and Wildlife and Parks.

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