

**50 CFR Part 17**

RIN 1018-AB52

**Endangered and Threatened Wildlife and Plants; Proposed Threatened Status for Three Florida Plants****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

**SUMMARY:** The Service proposes to list three plants from the Florida panhandle as threatened species pursuant to the Endangered Species Act of 1973 (Act), as amended. They are: *Euphorbia telephioides* (Telephus spurge, spurge family), *Macbridea alba* (white birds-in-a-nest, mint family), and *Scutellaria floridana* (Florida skullcap, mint family). The plants occur in four counties in the Florida panhandle. All three species are threatened by habitat degradation due to forestry practices, including shading by planted pine trees, mechanical site preparation for tree planting, and drainage improvement. *Euphorbia telephioides* is also threatened by destruction of its habitat by real estate development. This proposal, if made final, would implement the protection and recovery provisions afforded by the Act for the three plants. The Service seeks data and comments from the public on this proposal.

**DATES:** Comments from all interested parties must be received by February 19, 1991. Public hearing requests must be received by February 1, 1990.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to the Field Supervisor, Jacksonville Field Office, U.S. Fish and Wildlife Service, 3100 University Boulevard South, Suite 120, Jacksonville, Florida 32216. Comments and materials received will be available for public inspection,

by appointment, during normal business hours at the above address.

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

**SUPPLEMENTARY INFORMATION:****Background**

These three plant species were described by A.W. Chapman (1860), a physician and distinguished botanist of Apalachicola, Florida.

*Euphorbia telephioides* is a member of the spurge family (Euphorbiaceae). Small (1933) split the huge genus *Euphorbia* into smaller genera, renaming this species *Galarhoeus telephioides*. Webster (1967) established a new subsection of the genus *Euphorbia*, *Inundatae*, that includes *Euphorbia telephioides* and two other species native to the Florida panhandle: *Euphorbia floridana* and *E. inundata*.

*Euphorbia telephioides* is a perennial herb with a stout storage root. Stems are numerous, giving the plant a bushy appearance, up to 30 centimeters (1 foot) tall. Stems and leaves are smooth and have latex (milky sap). The largest leaves are 3-6 centimeters (1-2 inches) long, elliptic or oblanceolate, with the midrib and margins usually maroon. The inflorescence is a cyathium (a structure resembling a flower, containing several male flowers, each reduced to a single stamen, plus a single stalked female flower). Flowering is from April through July (Kral 1983). Clewell (1985) and Kral (1983) provide guidance for distinguishing this species from the most similar species, *Euphorbia inundata*, a taller plant of moister habitats.

*Euphorbia telephioides* is known from only 22 sites (Florida Natural Areas Inventory (FNAI) 1989; D. White, FNAI, pers. comm. 1990), all within 4 miles of the Gulf of Mexico (FNAI 1989; D. White, *in litt.* 1990). The plant occurs in Bay, Gulf, and Franklin Counties from Panama City Beach to east of Apalachicola.

The genus *Macbridea* belongs to the mint family (Lamiaceae or Labiatae). The earliest specimens were collected about 1860 by A.W. Chapman and a

friend named Gausman (Roger Sanders, Fairchild Tropical Garden, *in litt.* 1977).

The genus consists of two species, *Macbridea alba* and *Macbridea caroliniana* (Kral 1983, Godfrey and Wooten 1981). *Macbridea alba* is an upright, usually single-stemmed, odorless perennial herb with fleshy rhizomes. It is about 30-40 centimeters (1 foot) tall with opposite leaves up to 10 centimeters (4 inches) long, 1-2 centimeters (0.5-1 inches) broad, with winged petioles. With one exception, all the plants at a site are either smooth or hairy (L. Anderson, Florida State University, pers. comm. 1990; Anderson *in* FNAI 1989). The flowers are clustered at the top of the plant in a short spike with bracts. Each flower has a green calyx about 1 centimeter (0.5 inch) long and a brilliant white corolla 3 centimeters (1 inch) long. The corolla is two-lipped, the upper lip hoodlike. Flowering is from May into July (Kral 1983, Godfrey and Wooten 1981). In flower, *Macbridea alba* is conspicuous and unmistakable. The other species of *Macbridea*, *M. caroliniana*, has rose-purple flowers (Kral 1983) and is a candidate for Federal listing (55 FR 6184).

*Macbridea alba* occurs in Bay, Gulf, Franklin, and Liberty counties, Florida. The Apalachicola National Forest has 41 of the 63 known sites for this species, including the sites with the largest numbers of individuals (FNAI 1989; D. White, *in litt.* 1990).

*Scutellaria floridana* is a member of the mint family. Chapman's (1860) treatment of this plant was upheld by Epling (1942). It is a perennial herb, with swollen storage roots. Its stems are quadrangular and sparingly branched, solitary or in small groups. The leaves are opposite, 2-4 centimeters (1-1.5 inches) long, linear, with the margins strongly inrolled and a blunt, purplish tip. The flowers are solitary in the axils of short leafy bracts. Flower stalks are 5 mm (.20 inches) or less long. The flower has a bell shaped calyx with a cap or "scutellum" on its upper side. The corolla is bright lavender-blue, at least 2.5 cm (1 inch) long, with a throat and an

upper and lower lip. The lower lip is white in the middle. Flowering is in May and June (Kral 1983). The Florida panhandle has eight other species of *Scutellaria* (Clewell 1985).

*Scutellaria floridana* is presently known to occur at 11 sites in Gulf, Franklin, and Liberty counties, Florida, including 5 sites in Apalachicola National Forest (FNAI 1989; D. White, *in litt.* 1990). The plant is not nearly as widespread in Apalachicola National Forest as *Macbridea alba* (J. Walker, USDA Forest Service, Tallahassee, pers. comm. 1990).

These three plant species are restricted to the Gulf coastal lowlands near the mouth of the Apalachicola River, roughly from the southwestern part of Apalachicola National Forest west to the vicinity of Panama City. The three plant species inhabit grassy vegetation on poorly drained, infertile sandy soils. The wettest sites occupied by these plants are grassy seepage bogs on gentle slopes at the edges of forested or shrubby wetlands. Less permanently wet sites are savannahs (also spelled savanna; also called grass-sedge bogs or wet prairies) (Frost et al. 1986), which are nearly treeless and shrubless but have rich floras of grasses, sedges, and herbs. All three species occur in seepage bogs and savannahs. *Macbridea alba* also occurs sparingly on drier sites with longleaf pine and runner oaks (mesic flatwoods) (J. Walker, USDA Forest Service, pers. comm. 1990). *Euphorbia telephioides* also occurs in scrubby oak vegetation near the shoreline of the Gulf of Mexico (FNAI 1989).

The grassy understory of flatwoods (largely wiregrass, *Aristida stricta*) and the grassy vegetation of savannahs and seepage bogs is maintained by frequent fires. Lightning fires tend to occur during the growing season, but the region has a long and complex history of fire-setting by humans, and in the twentieth century, there has also been fire suppression. The frequency and season of fire is very important to the plant species that make up the vegetation, but fire effects can be subtle and considerably more research is needed if fire management is to be applied scientifically to conserving the native flora (Robbins and Myers in preparation, Clewell 1986). Growing season fire can serve to stimulate and/or synchronize flowering in many species (Platt et al. 1988), including *Macbridea alba* (J. Walker, pers. comm. 1990).

The Apalachicola region has many endemic (locally distributed) plant species including *Liatris provincialis*, whose coastal distribution parallels that of *Euphorbia telephioides*. Savannah

plants include *Cuphea aspera*, *Justicia crassifolia*, *Verbesina chapmanii* and *Lythrum curtissii* (Anderson 1989); and *Pinguicula ionantha* (violet butterwort) inhabits wet areas. Other areas in the Southeast have savannahs with rich floras, including the Cape Fear region of North Carolina (Walker and Peet 1985) and coastal Mississippi (Norquist 1984).

Savannahs in this area are economically valueless unless they are planted to pine trees or converted to pasture. Before pines are planted, sites are typically prepared by bedding and other mechanical methods, which is destructive to these plants (Kral 1983). After site preparation, and for the first few years after a new crop of pines is planted, surviving native herbs often prosper. For example, all six sites where *Scutellaria floridana* was found in 1988 are in recently cutover or replanted pine plantations. Understory grasses and herbs on such sites are usually adversely affected by shading as pines grow taller (Kral 1983). Savannah plants often persist on road rights-of-way (for example, the endangered *Harpercallis flava*), power line rights-of-way (*Euphorbia telephioides*), or other areas where infrequent mowing or bush-hogging substitutes for fire.

Section 12 of the Endangered Species Act of 1973 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 the Congress on January 9, 1975. On July 1, 1975, the Service published a notice in the Federal Register (40 FR 27823) of its acceptance of the report as a petition in the context of section 4(c)(2) (now section 4(b)(3)) of the Act, as amended, and of its intention to review the status of the plant taxa contained within. *Euphorbia telephioides* and *Scutellaria floridana* were included in these documents as threatened species; *Macbridea alba* was considered endangered. On June 16, 1976, the Service published a proposed rule (41 FR 24524) to determine some 1,700 U.S. vascular plant species recommended by the Smithsonian report (including *Macbridea alba*) to be endangered species pursuant to section 4 of the Act. This proposal was withdrawn in 1979 (44 FR 12382).

On December 15, 1980, the Service published a notice of review for plants (45 FR 82480), which included *Euphorbia telephioides*, *Macbridea alba*, and *Scutellaria floridana*, as category 1 candidates (taxa for which the Service currently has on file substantial data on biological vulnerability and threats to support proposing to list them as

endangered or threatened species). A supplement to the notice of review published on November 28, 1983 (48 FR 53640) changed all three species to category 2 candidates (taxa for which data in the Service's possession indicate listing is possibly appropriate); the three species retained category 2 status in a notice of review published September 27, 1985 (50 FR 39526). The notice of review published on February 21, 1990 (55 FR 6184) made all three species category 1 candidates, based on field work conducted by Loran Anderson, Wilson Baker, and Angus Gholson in the Apalachicola National Forest in 1987 (D. White, *in litt.* 1990) and outside the National Forest in 1988 (FNAI 1989).

Section 4(b)(3)(B) of the Act, as amended in 1982, requires the Secretary to make findings on certain 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 these three species because the Service had accepted the 1975 Smithsonian report as a petition. In each October of 1983 through 1989, the Service found that the petitioned listing of these species was warranted but precluded by other listing actions of a higher priority, and that additional data on vulnerability and threats were still being gathered. Publication of this proposal constitutes the final petition finding.

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be 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 telephioides* Chapman (Telephus spurge), *Macbridea alba* Chapman (white birds-in-a-nest), and *Scutellaria floridana* Chapman (Florida skullcap) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Destruction of habitat is most important for *Euphorbia telephioides*, which is being affected by road construction and real estate development near Panama City Beach. Because its entire distribution is within four miles of the Gulf coast, this species is highly vulnerable to coastal

residential and resort development in Franklin and Gulf Counties. A coastal golf resort community for Franklin County was proposed in 1989.

All three species occur adjacent to the town of Port St. Joe, so expansion of the town would affect them as well as the endangered Chapman rhododendron, *Rhododendron chapmanii*, which occurs in the same vicinity. Development of improved cattle pasture probably has destroyed habitat of these species (Kral 1983), but documentation of the extent of such habitat loss is not available.

All three species are affected by habitat modification by the forest products industry to plant and harvest slash pine. Site preparation that precedes tree planting may destroy these plants (Kral 1983, FNAI 1989), although populations of these species may recover in the sunny conditions that prevail for several years in young pine stands. Shading of these plants by neighboring grasses and by pine trees after canopy closure probably affects these plants seriously (Kral 1983, FNAI 1989), although long-term data on these species are not available.

Lack of prescribed fire or prescribed fire in the dormant season is detrimental for much of the pineland flora (Robbins and Myers in prep.; Platt et al. 1988). Landowner liability for prescribed fire has recently discouraged prescribed burning of pinelands in Florida, but the problem was addressed by the Florida legislature in 1990.

Power line rights-of-way provide valuable habitat for these three species, especially for *Euphorbia telephioides* in Franklin County (FNAI 1989). On such right-of-way, use of herbicides to control the vegetation, rather than bush-hogging or mowing, could adversely affect *Euphorbia telephioides* and the other species.

The recorded occurrences of *Macbridea alba* (FNAI 1989; D. White, *in litt*, 1990) provide evidence that this species has declined in most of its range. Although the plant occurs in 4 counties, 41 of its 63 known localities are in the Post Office Bay area of Apalachicola National Forest, within 15 miles of each other. Ten of the 13 sites with at least 100 *Macbridea alba* plants are in the National Forest, including the largest site with an estimated 1500 plants. The distribution data for this plant are relatively complete and very reliable because the species is conspicuous and nearly all of the locality data were gathered by the same botanists whose 1988 field work outside the Forest provided reports on 171 sites with endemic plant species in 4 counties. Their data show that Gulf County has a richer flora of endemic plants than the

National Forest, and that the National Forest is at the edge of the distribution of *Macbridea alba*. It is unlikely that the land that was included in the National Forest originally had the most, or the largest populations of *Macbridea alba*. The present distribution and abundance of *Macbridea alba* is consistent with Godfrey's (1979) assertion that "modern forestry practices are destroying this species," and Kral's (1983) opinion that drainage, lack of fire, and mechanical site preparation for tree planting reduces or eliminates this and other species, such as *Verbesina chapmanii*, *Justicia crassifolia*, *Scutellaria floridana*, and *Cuphea aspera*. *Scutellaria floridana* is a rarer plant than *Macbridea alba*, so forestry activities would seem to affect it more seriously.

The Forest Service conducts some prescribed burns during the growing season to reduce the incidence of brown-spot infection of longleaf pine seedlings (Robbins and Myers in preparation). This practice may favor *Macbridea alba* and other herbs. Most private land is planted with slash pine. Forest Service management practices are intended to benefit *Macbridea alba*, *Scutellaria floridana*, and other sensitive species including the endangered *Harperocallis flava*, but management to date has been based on casual observation rather than scientific monitoring to observe whether practices actually benefit the plants (J. Walker and D. White, pers. comm. 1990).

**B. Overutilization for commercial, recreational, scientific, or educational purposes.** None known. *Macbridea alba* has handsome flowers, but it is apparently not cultivated, nor is it known to be taken in the Apalachicola National Forest (where taking of spider lilies has recently been observed in the same habitat) (J. Walker, Forest Service, pers. comm. 1990).

**C. Disease or predation.** Not applicable.

**D. The inadequacy of existing regulatory mechanisms.** All three species are listed as endangered species under the Preservation of Native Flora of Florida law (section 581.185-187, Florida Statutes), which regulates taking, transport, and sale of plants but does not provide habitat protection. The Endangered Species Act will provide additional protection through sections 7 and 9, and through recovery planning.

**E. Other natural or manmade factors affecting its continued existence.** The limited geographic distributions of these plants, and the consistent habitat alteration through most of the ranges of these plants exacerbate the risks posed to the three species by the preceding

four factors, making it possible that unless conservation measures are taken, each species might become extinct in a significant portion of its range in the foreseeable future.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose the rule. Based on this evaluation, the preferred action is to list *Euphorbia telephioides*, *Macbridea alba*, and *Scutellaria floridana* as threatened. As discussed under Factor E., each of these species is likely to become extinct in a significant portion of its range within the foreseeable future, fitting the Act's definition of a threatened species. Endangered classification would not be appropriate, as none of the species are in imminent danger of extinction, having at least short-term security due to the number of populations and their distribution over several counties. Additionally, two of the species receive some protection by their occurrence in the Apalachicola National Forest.

#### Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary propose critical habitat at the time the species is proposed to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for these species. Most of the populations of these species are small and localized. Although none of the plants is presently known to be affected by take (as discussed for *Macbridea alba* under Factor B in the Summary of Factors Affecting the Species), the proposal to list these species as threatened could lead to collecting or deliberate destruction of populations. Listing as threatened would protect *Euphorbia telephioides*, *Macbridea alba* and *Scutellaria floridana* from removal and reduction to possession from lands under Federal jurisdiction; however, since the Act does not otherwise protect threatened plants on either Federal or private lands, publication of critical habitat descriptions and maps would only add to the threats faced by these species. Furthermore, although the removal and possession of listed plants from Federal lands is prohibited, such provisions are difficult to enforce. The Forest Service is aware of the locations of all populations of *Macbridea alba* and *Scutellaria floridana* on its lands, and other involved parties and principal landowners can be notified of the location and importance of protecting this species' habitat through several

mechanism, including Florida's system for protecting endangered and threatened species from pesticide application, as well as Florida's regional and local planning procedures.

Protection of these species' habitat will be addressed through the recovery process and through the Section 7 consultation process. For these reasons, it would not be prudent to determine critical habitat for *Euphorbia telephioides*, *Macbridea alba*, or *Scutellaria floridana*.

#### 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. 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.

The populations of *Macbridea alba* and *Scutellaria floridana* in Apalachicola National Forest are already managed with the intention of benefitting these and other sensitive plant species. Listing will encourage further research and management efforts by the Forest Service. On private lands,

listing of these species will probably result in measures to ensure that they are not adversely affected by pesticide (especially herbicide) use under a state program approved by the Environmental Protection Agency. Listing of these plants will also encourage their conservation through Florida's planning procedures, supervised by the Florida Department of Community Affairs.

The Act and its implementing regulations found at 50 CFR 17.71 and 17.72 for threatened plants, set forth a series of general trade prohibitions and exceptions for all threatened plants. All trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.71, 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 these species in interstate or foreign commerce, or to remove and reduce to possession these species from areas under Federal jurisdiction. Seeds from cultivated specimens of threatened plant species are exempt from these prohibitions provided that a statement of "cultivated origin" appears on their containers. 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. Section 4(d) of the Act allows for the provision of such protection to threatened species through regulations. This protection may apply to threatened plants once revised regulations are promulgated. Certain exceptions apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving threatened species under certain circumstances.

It is anticipated that few trade permits will be sought or issued because the three species are not cultivated. 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 432, Arlington, VA 22203 (703/358-2104).

#### Public Comments Solicited

The Service intends that any final rule 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 ranges, distributions, and population sizes of these species; and
- (4) Current or planned activities in the subject area and their possible impacts on these species.

Final promulgation of the regulation on these species will take into consideration the comments and any additional information received by the Service, and such communications may lead to 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 received within 45 days of the date of publication of the proposal. Such requests must be made in writing and addressed to the Jacksonville, Florida, Field Office (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).

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**Author**

The primary author of this proposed rule is Mr. David Martin (see "ADDRESSES" section).

**List of Subjects in 50 CFR Part 17**

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

**Proposed Regulation 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 continues to read as follows:

**Authority:** 16 U.S.C. 1361-1407; 18 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, 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 telephioides</i>	Telephus spurge	U.S.A. (FL)	T		NA	NA
Lamiaceae—Mint family:						
<i>Macbridea alba</i>	White birds-in-a-nest	U.S.A. (FL)	T		NA	NA
<i>Scutellaria floridana</i>	Florida skullcap	U.S.A. (FL)	T		NA	NA

Dated: November 21, 1990.  
**Richard N. Smith,**  
 Acting Director, Fish and Wildlife Service.  
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