

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for *Bonamia grandiflora* (Florida Bonamia)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines *Bonamia grandiflora*, a plant in the family Convolvulaceae (morning glories), to be a threatened species pursuant to the Endangered Species Act of 1973 (Act), as amended. Critical habitat is not determined. This plant is endemic to sand pine scrub vegetation in the Florida peninsula, with a historic distribution from Volusia and Marion Counties south to Sarasota and Highlands Counties. The known populations of this plant are on private land and in the Ocala National Forest. *Bonamia grandiflora* is threatened by

residential and commercial development of its habitat and by successional changes. This rule will implement the Federal protection and recovery provisions afforded by the Act for *Bonamia grandiflora*.

DATE: The effective date of this rule is December 2, 1987.

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:

David J. Wesley, Endangered Species Field Supervisor, at the above address (904/791-2580 or FTS 946-2580).

SUPPLEMENTARY INFORMATION:**Background**

Bonamia grandiflora was first collected in Florida by Ferdinand Rugel between 1842 and 1849. Specimens collected by A. P. Garber from Manatee and Sarasota Counties, Florida in 1878 were assigned by Asa Gray (1880) to a new species, *Breweria grandiflora*. The genus *Breweria* has since been merged into *Bonamia*. Hans Hallier transferred the plant to the genus *Bonamia* in 1897 (Myint and Ward 1968; D. Austin, Florida Atlantic Univ., pers. comm., 1986), but Small (1933) attributed the transfer to A. Heller, apparently in error. The plant is endemic to peninsular Florida. It is a perennial vine with sturdy prostrate stems about a meter (3 feet) long. The leathery oval or ovate leaves, up to about 4 centimeters (1.6 inches) long, are either upright or spreading. The flowers are solitary in the leaf axils. The funnel-shaped corolla is 7-10 centimeters (2.7-3.9 inches) long and 7-8 centimeters (2.7-3.1 inches) across, and pale but vivid blue with a paler center, similar to the cultivated "Heavenly Blue" morning glory. The fruit is a capsule. This plant is the only morning glory vine of the scrub with large blue flowers (Wunderlin *et al.* 1980) and can be readily identified even when not in flower. *Bonamia grandiflora* is restricted to sand pine scrub vegetation consisting of evergreen scrub oaks and sand pine (*Pinus clausa*), with openings between the trees and shrubs occupied by lichens and herbs. The sandy openings are created by infrequent, severe fires or by mechanical disturbance. The openings eventually disappear as oaks regrow from their roots and as sand pines grow from seed. In Highlands and Polk Counties, *Bonamia grandiflora* occupies sandy openings along with other scrub endemic plants, including three that are federally listed: Highlands scrub hypericum (*Hypericum cumulicola*), papery whitlow-wort (*Paronychia chartacea*), and scrub plum (*Prunus geniculata*). In Orange County, *Bonamia grandiflora* occurs with scrub lupine (*Lupinus aridorum*), which is federally listed as endangered. The historic range of *Bonamia grandiflora* was from central Highlands County northward through Polk, northwestern Osceola, western Orange, Lake, eastern Marion and northwestern Volusia Counties on ridges and uplands of the central peninsula. An isolated site was found by

Johnson (1981) in Hardee County, and collections were made in Manatee and Sarasota Counties in 1878 and 1916 (Wunderlin *et al.* 1980). The plant has been extirpated from much of its former range by urban and agricultural development, especially citrus groves. In the Ocala National Forest, *Bonamia grandiflora* is restricted to bare, sunny sand at the margins of sand pine stands on road rights of way, fire lanes, and other places that are kept clear of trees and shrubs.

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 Congress on January 9, 1975. In this report, *Bonamia grandiflora* was listed as threatened. On July 1, 1975, the Service published a notice in the *Federal Register* (40 FR 27823) that accepted the report as a petition in the context of former section 4(c)(2) of the Act (petition acceptance is now covered by section 4(b)(3)(A) of the Act, as amended). On December 15, 1980, the Service published a notice of review for plants (45 FR 82480), which included *Bonamia grandiflora* as a category-2 candidate (a species for which data in the Service's possession indicate listing is possibly appropriate, but for which additional biological information is needed to support a proposed rule). A supplement to the 1980 notice of review, published on November 28, 1983 (48 FR 53640), treated *Bonamia grandiflora* as a category-1 candidate (a species for which data in the Service's possession indicate listing is warranted), based on a status report by Wunderlin *et al.* (1980). An updated notice of review published on September 27, 1985 (50 FR 39525), maintained the plant as a category-1 candidate. 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 all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. This was the case for *Bonamia grandiflora* because the Service had accepted the 1975 Smithsonian report as a petition. On October 13, 1983, October 12, 1984, October 11, 1985, and October 10, 1986, the Service found that the petitioned listing of this species was warranted, and that, although pending proposals had precluded its proposal, expeditious progress was being made to list this species. The proposed rule to list

Bonamia grandiflora as a threatened species was published in the *Federal Register* (51 FR 40044) on November 4, 1986.

Summary of Comments and Recommendations

In the November 4, 1986, proposed rule (51 FR 40044) 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 that invited general public comment were published in the *Ocala Star Banner* (November 26, 1986), the *Orlando Sentinel* (November 23, 1986), the *Polk County Democrat* (November 24, 1986), the *Sebring News-Sun* (November 23, 1986), and the *Wauchula Herald-Advocate* (November 27, 1986). Seven written comments were received on the proposal and are discussed below. The Office of the Governor noted that "the proposed action is in accord with State plans, programs, procedures, and objectives." The Florida Department of Agriculture and Consumer Services and the Florida Game and Fresh Water Fish Commission supported the listing proposal as published. The Florida Department of Environmental Regulation determined the listing to be consistent with the Florida Coastal Management Program and, in a separate comment, had no objection to the listing. The Florida Department of State, Division of Historical Resources, determined that the proposal had no effect on historic sites. A Florida botanist noted that the Service "had already consulted the best experts."

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Bonamia grandiflora* 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 (50 CFR Part 424) promulgated to implement the listing provisions of the Act 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 *Bonamia grandiflora* (A. Gray) H. Hallier, (Florida *Bonamia*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* *Bonamia grandiflora* is currently known from a number of sites in Ocala National Forest in Marion County and from 18 sites south of the Forest: Hardee County, one site; Highlands County, 2 sites; Polk County, 10 sites; and Orange County, 5 sites. Habitat destruction is the principal threat. In Highlands County, 64.2 percent of the xeric vegetation (scrub, scrubby flatwoods, and southern ridge sandhills) present before settlement was destroyed by 1981, and an additional 10.3 percent of the xeric vegetation was moderately disturbed, primarily by construction of roads for housing subdivisions (Peroni and Abrahamson 1985). Remaining tracts of scrub are rapidly being developed for citrus groves and housing (Fred Lohrer, Archbold Biological Station, pers. comm. 1985). Habitat destruction is similar in Polk County, the leading county in the state for citrus production (Fernald 1981). A careful survey of scrub vegetation by the Florida Natural Areas Inventory found *Bonamia grandiflora* at only 12 sites in these two counties. Farther north, most of the former habitat of the plant in northwest Osceola, western Orange, and central Lake Counties has been converted to agricultural or urban uses. The five known sites for the plant in Orange County are all on small remnants of scrub vegetation or vacant lots surrounded by houses or orange groves west and southwest of Orlando, one of the fastest growing urban areas in the United States. Current management of the Ocala National Forest seems compatible with the protection of *Bonamia*. The 1985 Land and Resource Management Plan for the National Forests in Florida appears to be beneficial for *Bonamia grandiflora*. Practices that limit off-road vehicles and that maintain the early successional habitat of this plant (see Factor E) will contribute to this species' continued existence in the Forest.

Bonamia grandiflora is protected on The Nature Conservancy's Tiger Creek Preserve in Polk County, but land acquisition has not yet been completed. Land acquisition by The Nature Conservancy or the Florida State government in the Saddle Blanket Lakes area of Polk County may preserve more habitat for this species.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* *Bonamia grandiflora* is conspicuous and distinctive when in flower, and tends to grow in accessible areas, and so it is vulnerable to excessive scientific collecting and to

vandalism. Because of its flowers, the plant may be of interest as an ornamental.

C. *Disease or predation.* Not applicable.

D. *The inadequacy of existing regulatory mechanisms.* *Bonamia grandiflora* is listed as endangered under the Preservation of Native Flora of Florida Act (Section 581.185-187, Florida Statutes), which regulates the harvest, destruction, transport, and sale of plants but does not provide habitat protection. The populations in Ocala National Forest are included on the "Regional Forester's Proposed Sensitive List;" species on this list are provided protection and management as outlined in 36 CFR Part 261. Listing under the Act will augment the Forest Service protective measures by providing for a recovery plan and other conservation measures throughout its range.

E. *Other natural or manmade factors affecting its continued existence.* In Hardee, Highlands, Polk, and Orange Counties, *Bonamia grandiflora* is restricted to remnant tracts of scrub. These tracts are surrounded by residential and agricultural areas and are vulnerable to trash dumping, invasion by exotic plants and weeds, and damage from off-road vehicles. *Bonamia* depends on occasional fires (see "Background" section) or equivalent mechanical land disturbance to renew the sunny openings that it inhabits. The Tiger Creek Preserve will probably develop a prescribed burning program. *Bonamia grandiflora* does not occur within the dense managed sand pine forests of Ocala National Forest. The plant inhabits the edges of such forests, road rights-of-way, and fire lanes. The sites are created and maintained by human activity, therefore the plant is vulnerable to changes in the management of such areas which would allow succession to progress. The plant's spotty distribution and small geographic range make it especially susceptible to any adverse management practices.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by *Bonamia grandiflora* in determining to make this rule final. Based on this evaluation, the preferred action is to list *Bonamia grandiflora* as threatened. The plant has already been extirpated from part of its historic range (Volusia County, Lake County outside the Ocala National Forest, most of western Orange County, and Manatee and Sarasota Counties). In the Ocala National Forest, in Lake and Marion Counties, existing

forest management practices and the new Land and Resource Management Plan satisfactorily accommodate the habitat requirements of *Bonamia grandiflora*. However, in the National Forest the plant is effectively confined to manmade open areas, where it is vulnerable to a variety of human activities. Critical habitat is not being determined for *Bonamia grandiflora* for the reasons described in the next 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 *Bonamia grandiflora* at this time. Publication of critical habitat descriptions and maps would increase the degree of threat from taking or other human activity. *Bonamia grandiflora* has a large blue "morning glory" type flower and may be of potential horticultural interest. Forest Service personnel at the forest Supervisor's Office and the Regional Office were contacted during the preparation of the proposal and informed of the precise locations of this plant. Designation of critical habitat on Forest Service land might increase the vulnerability of *Bonamia grandiflora* to vandalism, collecting, and unintentional trampling by visitors. While collecting is regulated on National Forests, such regulations are difficult to enforce. Therefore, the Service finds that designation of critical habitat for *Bonamia grandiflora* is not prudent at the present time, since such designation can be expected to increase the degree of threat from taking or other human activity.

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 collecting are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402. Section 7(a)(2) requires Federal agencies to insure 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. All presently known sites for *Bonamia grandiflora* are on private land, except for those in the Ocala National Forest. The Forest Service's present management and its new Land and Resource Management Plan appear to benefit this species; consultation is not foreseen unless a decline in *Bonamia grandiflora* is observed in the National Forest or unless the Plan is significantly revised.

The Act and its implementing regulations found at 50 CFR 17.71 and 17.72 set forth a series of general trade prohibitions and exceptions that apply to all threatened plant species. 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 a threatened plant, transport it in interstate or foreign commerce in the course of a commercial activity, sell or offer it for sale in interstate or foreign commerce, or remove it from areas under Federal jurisdiction and reduce it to possession. 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 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving threatened plant species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued. 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, DC 20240 (703/235-1903).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

Austin, D.F. 1979. Florida bonamia. Page 71 in D.B. Ward, Ed. Rare and endangered biota of Florida. Vol. 5. Plants. University Presses of Florida, Gainesville.
 Fernald, E.A. 1981. Atlas of Florida. Florida State Univ. Foundation, Tallahassee. xi + 276 pp.
 Gray, A. 1880. Botanical contribution. Proc. Amer. Acad. Arts 15:25-52.
 Johnson, A.F. 1981. Scrub endemics of the central ridge, Florida. Unpublished report prepared for U.S. Fish and Wildlife Service.
 Myint, T., and D.B. Ward. 1968. A taxonomic revision of the genus *Bonamia* (Convolvulaceae). Phytologia 17:121-239.
 Peroni, P.A., and W.G. Abrahamson. 1985. A rapid method for determining losses of native vegetation. Natural Areas Journal 5:20-24.

Small, J.K. 1933. Manual of the southeastern flora. Univ. of North Carolina Press, Chapel Hill.
 Stout, I.J. 1982. Descriptions of 64 stands of Florida sand pine scrub vegetation. Unpublished data prepared for U.S. Fish and Wildlife Service.
 Wunderlin, R. 1984. Status report on *Lupinus aridorum*. Unpublished report prepared for U.S. Fish and Wildlife Service.
 Wunderlin, R., D. Richardson, and B. Hansen. 1980. Status report on *Bonamia grandiflora*. Unpublished report prepared for U.S. Fish and Wildlife Service.

Author

The primary author of this final rule is David Martin, Endangered Species Field Station, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207 (904/791-2580 or FTS 946-2580).

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended as set forth below:

PART 17—[AMENDED]

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

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 98 Stat. 1411 (16 U.S.C. 1531 *et seq.*); Pub. L. 99-625, 100 Stat. 3500 (1986), unless otherwise noted.

2. Amend § 17.12(h) by adding the following, in alphabetical order under the family Convolvulaceae, 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					
Convolvulaceae—Morning glory family:						
<i>Bonamia grandiflora</i>	Florida bonamia	U.S.A. (FL)	T	297	NA	NA

Dated: October 22, 1987.
Susan Recce,
 Acting Assistant Secretary for Fish and Wildlife and Parks.
 [FR Doc. 87-25333 Filed 10-30-87; 8:45 am]
 BILLING CODE 4310-55-M