

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for *Lindera Melissifolia* (Pondberry)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine *Lindera melissifolia* (Walt.) Blume (pondberry), a small shrub limited to 12 locations in the southeastern United States, to be an endangered species under authority of the Endangered Species Act of 1973, as amended (Act). *Lindera melissifolia* is endangered by land clearing operations, timber harvesting, drainage activities, and encroachment by competitor species. This proposal, if made final, would implement the protection provided by the Act, for *Lindera melissifolia*. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by October 15, 1985. Public hearing requests must be received by September 27, 1985.

ADDRESSES: Comments and materials concerning this proposal should be sent to Mr. Warren T. Parker, Field Supervisor, Endangered Species Field Station, U.S. Fish and Wildlife Service, 100 Otis Street, Room 224, Asheville, North Carolina 28801. Comments and material received will be available for

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

FOR FURTHER INFORMATION CONTACT: Mr. Robert R. Currie at the above address (704/259-0321 or FTS 8/672-0321).

SUPPLEMENTARY INFORMATION:**Background**

Lindera melissifolia (pondberry) was described as a new species by Thomas Walter in 1788. The material upon which he based this description was collected from what is present-day Berkeley County, South Carolina (Maxon, 1936). This deciduous shrub grows to approximately 2 meters (6 feet) tall and spreads vegetatively by stolons. Pale yellow flowers appear in early spring before the leaves. The fruit, a bright red drupe (a fleshy, single-seeded fruit), matures in late autumn (Tucker, 1984). *Lindera melissifolia* is distinguished from the two other North American members of the genus (*Lindera benzoin* (L.) Blume and *Lindera subcoriacea* Wofford) by its drooping, membranaceous, and ovately to elliptically shaped leaves that have a strong, sassafras-like odor when crushed (Wofford, 1983). Since the description of *Lindera melissifolia* in 1788, the species has been reported from nine southeastern States. It currently is known to occur in six States and is believed to have been extirpated from three. The poorly drained depressions and the margins of limestone sinks in which it grows have been tremendously reduced in number and/or quality by land clearing and drainage activities in recent and historic times (Klomps, 1980; Morgan, 1983; Tucker, 1984). The loss of alteration of its habitat has been and continues to be the most significant threat to the continued existence of *Lindera melissifolia*.

Lindera melissifolia is known from only 12 populations in Arkansas, Georgia, Mississippi, Missouri, North

Carolina, and South Carolina. The species is believed to have been extirpated from Alabama, Florida, and Louisiana. A summary of the information currently available on the status of this species in each of these States follows:

Alabama: *Lindera melissifolia* was collected in 1839 and 1840 from Wilcox County. It has not been observed or collected since then and is considered to be extirpated from the State (Tucker, 1984; Miller, 1984).

Arkansas: Four populations of *Lindera melissifolia* are known from Clay County (Tucker, 1984). All these populations have been adversely affected by timbering, land clearing, and drainage activities. One population is located along the northern border of the county adjacent to Missouri. This population was discovered in 1973 and historically was probably part of a larger population that extended across the Missouri-Arkansas border. Habitat alteration and destruction has reduced this population into two subunits, one on each side of the border (S. Orzell, Arkansas Natural Heritage Program, personal communication, 1985). A second population consists of several colonies that were discovered in 1977; all have subsequently suffered severe adverse effects from timber harvesting. A third population was discovered in 1977 and occurs in an area that is heavily grazed by cattle. *Lindera melissifolia* persists at this site but probably will eventually be replaced by more aggressive weedy species. The site of a fourth population, also discovered in 1977, has since been cleared of timber and now contains few plants.

Florida: Steyermark (1949) reports early collections of *Lindera melissifolia* from Florida by Hale and Mohr. The species has not been observed or collected in the State since then and is currently considered to be extirpated from Florida (Tucker, 1984). Cooper (1984) believes that these reports may be

(Orzell, personal communication, 1985). The Georgia site and one Arkansas site are being adversely impacted due to trampling by domestic animals (hogs and cattle).

B. Overutilization for commercial, recreational, scientific, or educational purposes.—*Lindera melissifolia* is not currently a significant component of the commercial trade in native plants; however, the species has potential for horticultural use, and publicity surrounding the listing of the species could generate an increased demand.

C. Disease or predation. Not applicable to this species at this time.

D. The inadequacy of existing regulatory mechanisms.—*Lindera melissifolia* is afforded legal protection in only two of the States in which it is known to occur. North Carolina General Statute 19-B, 202.12-202.19, provides for protection from intrastate trade (without a permit) and for monitoring and management of State listed species. Missouri's legislation and regulations dealing with rare and endangered species provide for the protection of *Lindera melissifolia* from commercial exploitation without a permit. In Missouri, listed plants, such as pondberry, can be protected through acquisition of significant areas supporting the species. Both North Carolina and Missouri list *Lindera melissifolia* as an endangered species. Although unofficially recognized as an endangered or threatened component of the flora of the other four States in which it occurs, *Lindera melissifolia* has no official protection status in these States. Section 404 of the Federal Water Pollution Control Act (FWPCA) could potentially provide some protection for the pondberry's habitat; however, most, if not all, of the sites where it occurs do not meet the wetlands criteria of the FWPCA. The Endangered Species Act will provide additional protection for *Lindera melissifolia*.

E. Other natural and manmade factors affecting its continued existence. Observations of the species by Tucker (1984) and the Missouri Department of Conservation (Morgan, 1983) have revealed that despite the regular production of mature fruits, no seedlings of *Lindera melissifolia* have been observed at any of the known sites. The cause of this apparent lack of sexual reproduction is unknown, and in the long term it could have significant adverse effects upon the species.

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 this rule. Based on this evaluation, the

preferred action is to list *Lindera melissifolia* as endangered. With only a small number of populations of this species known to exist, it definitely warrants protection under the Act; endangered status seems appropriate because of the threats facing most populations. Critical habitat is not being designated for the reasons discussed below.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary designate any habitat of a species that is considered to be critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for *Lindera melissifolia* at this time. The species has potential for horticultural use. Increased publicity and the provision of specific location information associated with critical habitat designation could result in taking pressures on the pondberry. Although taking and reduction to possession of endangered plants from lands under Federal jurisdiction are prohibited by the Endangered Species Act, taking provisions are difficult to enforce. Publication of critical habitat descriptions would make *Lindera melissifolia* more vulnerable and would increase enforcement problems for the U.S. Forest Service. Also, the populations on private lands would be vulnerable to taking. Increased visits to population locations stimulated by critical habitat designation could therefore adversely affect the species. The Federal agency and landowners involved in managing the habitats of the pondberry have been informed of the locations of this species and of the importance of protecting it. Therefore, no additional benefits would result from the notification function of critical habitat designation.

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)(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 U.S. Forest Service has jurisdiction over a portion of this species' habitat. Federal activities that could impact *Lindera melissifolia* and its habitat in the future include, but are not limited to, the following: timber harvesting, recreational development, drainage alterations, road construction, permits for mineral exploration, and implementation of forest management plans. It has been the experience of the Service that the large majority of section 7 consultations are resolved so that the species is protected and the project can continue.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general trade prohibitions and exceptions that apply to all endangered plant species. With respect to *Lindera melissifolia*, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, 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 this species in interstate or foreign commerce. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving

endangered species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued since *Lindera melissifolia* is not common in cultivation or 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 would apply to *Lindera melissifolia* only where located on areas under Federal jurisdiction. Permits for exceptions to this prohibition are available through section 10(a) 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). It is anticipated that few, if any, permits will be requested for taking the pondberry from Federal lands. 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 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 *Lindera melissifolia*;
 - (2) The location of any additional populations of *Lindera melissifolia* 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 this species; and
 - (4) Current or planned activities in the subject area and their possible impacts on *Lindera melissifolia*.
- Final promulgation of the regulation on *Lindera melissifolia* 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 the Field Supervisor, Asheville Endangered Species Field Station (see "ADDRESSES" section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined by 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

Cooper, S.T. 1984. Letter to W.T. Parker, Field Supervisor, Asheville Endangered Species Field Station, on the status of *Lindera melissifolia* in Florida.

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Miller, D.L. 1984. Letter to W.T. Parker, Field Supervisor, Asheville Endangered Species Field Station, on the status of *Lindera melissifolia* in Alabama.

Morgan, S. 1983. *Lindera melissifolia*, a rare southeastern shrub. Natural Areas Jour. 3(4):62-67.

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Wofford, E.B. 1983. A new *Lindera* (Lauraceae) from North America. Jour. Arnold Arb. 64:325-331.

Author

The primary author of this proposed rule is Mr. Robert R. Currie, Endangered Species Field Station, U.S. Fish and Wildlife Service, 100 Otis Street, Room 224, Asheville, North Carolina 28801 (704/259-0321 or FTS 8/672-0321).

List of Subjects in 50 CFR Part 17

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

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: 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 under the family Lauraceae, 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					
Lauraceae—Laurel family: <i>Lindera melissifolia</i>	Pondberry	U.S.A. (AL, AR, FL, GA, LA, MO, MS, NC, SC)	E		NA	NA

Dated: July 30, 1985.

Susan Recce,

*Acting Assistant Secretary for Fish and
Wildlife and Parks.*

[FR Doc. 85-19183 Filed 8-12-85; 8:45 am]

BILLING CODE 4310-55-M