

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: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Amend 17.12(h) by adding the following, in alphabetical order under Orchidaceae, 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					
Orchidaceae—Orchid family:						
<i>Lepanthes eilorensis</i>	None	U.S.A. (PR).....	E	451	NA	NA
<i>Cranichis ricartii</i>	None	U.S.A. (PR).....	E	451	NA	NA

Dated: October 29, 1991.
Richard N. Smith,
Acting Director, Fish and Wildlife Service.
[FR Doc. 91-28655 Filed 11-27-91; 8:45 am]
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50 CFR Part 17

RIN 1018-AB52

Endangered and Threatened Wildlife and Plants; *Conradina verticillata* (Cumberland Rosemary) Determined To Be Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines *Conradina verticillata* (Cumberland rosemary) to be a threatened species under authority of the Endangered Species Act (Act) of 1973, as amended. This rare woody plant is presently known from only 3 populations (44 colonies) in Tennessee and 1 population (4 colonies) in Kentucky. Most colonies are small and are threatened by activities that degrade water quality and by habitat destruction by campers, hikers, white-water enthusiasts, and off-road vehicles. This action extends Federal protection under the Act to Cumberland rosemary.

EFFECTIVE DATE: December 30, 1991.

ADDRESSES: The complete file for this rule is available for public inspection, by appointment, during normal business hours at the Asheville Field Office, U.S. Fish and Wildlife Service, 100 Otis Street, room 224, Asheville, North Carolina 28801.

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

SUPPLEMENTARY INFORMATION: Background

Conradina verticillata Jennison (Cumberland rosemary) is a small shrub in the mint family (Lamiaceae) known only from the banks of short reaches of three river systems in north-central Tennessee and adjacent Kentucky. Cumberland rosemary is about 1.5 feet high with reclining branches that spread over the sandy or gravelly surface of sandbars and streambanks. The leaves are about 1 inch long, very narrow, and arranged in tight bunches that appear as whorls around the stems. The one-half-inch-long flowers are purple, lavender, or occasionally white in color and are borne in leaf-like clusters of bracts at the ends of the stems. Flowers appear from mid-May to early June. After flowering, four small, dark brown nutlets develop as the fruit matures (Patrick and Wofford 1981).

Cumberland rosemary was first collected by Albert Ruth in 1894 from the banks of the Clear Fork River near Rugby, Tennessee. Until its recognition as a distinct species by H. M. Jennison (Jennison 1933), it was considered to be a disjunct population of the coastal plain species *Conradina canescens* (Torr. & Gray) Gray. J. K. Small also recognized the species as distinct and named it *Conradina montana* (Small 1933). However, Small's description of the species was published several months after Jennison's; therefore, it is a nomenclatural synonym of *C. verticillata*.

Gray (1965) considered *Conradina verticillata* to be an old species that is now represented by relict populations that are widely disjunct from the four other members of the genus. It is triploid (three sets of chromosomes), while the other species are diploid (two sets of chromosomes). Consequently, it has

reduced seed germination and a reduced ability to reproduce and disperse sexually. It, like the other members of the genus, is adapted to a narrow range of environmental conditions. The current distribution, ecological adaptations, and evolutionary history of the species in the genus *Conradina* increase the importance of protecting this species from extinction. Future studies of this species and the other members of the genus may provide important information on the mechanisms of evolution. In addition to these important scientific values, the species is an attractive ornamental (Patrick and Wofford 1981).

Somers (*in litt.*) reported that there are 44 occurrences of Cumberland rosemary in Tennessee. He further recommended that these be considered part of three distinct populations—one along the Big South Fork Cumberland River and its tributaries in Morgan, Scott and Fentress Counties; one along the Caney Fork River in Cumberland and White Counties; and one along the Obed River system in Morgan and Cumberland Counties. Somers indicated that although the colonies in each of these populations are scattered along extended reaches of their respective river systems, the pollinators for each population can travel readily between colonies. Since all colonies within each river system can interbreed, they are, biologically, just one population. Patrick and Wofford (1981) reported that there are four colonies of Cumberland rosemary in Kentucky. All of the Kentucky colonies are along the Big South Fork Cumberland River in McCreary County. Therefore, if the population definition used in Tennessee is followed, the Kentucky colonies should be considered part of the Big South Fork Cumberland River population of Tennessee.

Cumberland rosemary's habitat, as described by Patrick and Wofford (1981), is always in close association with the floodplain of water courses. Specific areas supporting the species include boulder bars, sand bars, gravel bars, terraces of sand on gradually sloping riverbanks and islands, and pockets of sand between large boulders on islands and streambanks. All sites exhibit the following characteristics:

1. Open to slightly shaded conditions. Plants growing in full sun always produce more flowers.
2. Moderately deep, well drained soils, consisting of pure sand or a mixture of sand and gravel with no visible organic matter.
3. Periodic flooding that is forceful enough to maintain the open condition of the sites.
4. Topographic features such as long, narrow channels or depressions on gravel bars, bank terraces, or large boulders that enhance sand deposition and to some degree protect the plants from the full force of the flooding and help in their establishment.

Woody plants growing in the shrubby vegetation adjacent to the sites supporting Cumberland rosemary include *Alnus*, *Cephalanthus*, *Chionanthus*, *Cornus*, *Hamamelis*, *Itea*, *Kalmia*, *Lyonia*, *Rhododendron*, and *Viburnum*. The herbaceous associates growing with the species include the grass *Calamovilva arcuata* and the herb *Marshallia grandiflora* which are category 2 plants on the Service's list of species under review for possible addition to the Federal list of endangered and threatened species. Other herbaceous associates include: The common grasses *Andropogon gerardii*, *Elymus virginicus*, and *Sorghastrum nutans*; and the herbs *Aster linariifolius*, *Coreopsis pubescens*, *Hypericum* spp., *Liatris microcephala*, *Phlox glaberrima*, *Pycnanthemum tenuifolium*, *Silphium trifoliatum*, *Thalictrum revolutum* and *Veronicastrum virginicum*.

Federal government actions for this species began with Section 12 of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*), which directed the Secretary of the Smithsonian Institution to prepare a report on those 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. On July 1, 1975, the Service published a notice (40 FR 27823) that formally accepted the Smithsonian report as a petition within the context of section 4(c)(2) (now section 4(b)(3)) of the Act. By accepting this report as a petition, the Service also acknowledged

its intention to review the status of those plant taxa named within the report. *Conradina verticillata* was included in the Smithsonian report and in the July 1, 1975, Notice of Review. On June 16, 1976, the Service published a proposed rule (41 FR 24523) to determine approximately 1,700 vascular plant taxa to be endangered species pursuant to section 4 of the Act; *Conradina verticillata* was included in this proposal.

The 1978 amendments to the Act required that all proposals over 2 years old be withdrawn. On December 10, 1979 (44 FR 70796), the Service published a notice withdrawing plants proposed on June 16, 1976. *Conradina verticillata* was included as a category 1 species in the revised notice of review for native plants published on December 15, 1980 (45 FR 82480). Category 1 species are those for which the Service has information that indicates that proposing to list them as endangered or threatened is appropriate.

The Service funded a survey in 1979 to determine the status of *Conradina verticillata* in Tennessee and Kentucky; a final report on this survey was accepted by the Service in 1981. Based upon the information provided in the report, this species was included as a category 1 species when the notice of review for native plants was revised in 1983 (48 FR 53640), in 1985 (50 FR 39528), and in 1990 (55 FR 6184). A notification of an additional status review for Cumberland rosemary was prepared and distributed by the Service on June 22, 1990. This notice was sent to all Federal, State and county agencies having jurisdiction over the areas in which the species occurs, to State and private conservation agencies and organizations, and to knowledgeable botanists and other scientists. Four responses to this notice supported the protection of *Conradina verticillata* under the Act and/or provided more information on the current status and distribution of the species. The Federal Energy Regulatory Commission provided information on hydropower licenses and pending applications for exemptions from or for licenses. The portion of the Obed River supporting the species has two potential hydropower sites; however, development of these sites is precluded by the inclusion of the river in the National Wild and Scenic River System. There are three potential hydropower sites on the Big South Fork Cumberland River. Development of these sites is precluded by the river's inclusion in the Big South Fork National River and Recreation Area. The Caney Fork River has one potential hydropower site; however, there are no

current applications for a license or for an exemption from a license on the reach of the river supporting *Conradina verticillata*. No objections to the possible addition of the species to the Federal List of Endangered and Threatened Wildlife and Plants were received.

All plants included in the comprehensive plant notices that were also included in the 1975 Smithsonian report are treated as under petition. Section 4(b)(3)(B) of the Act, as amended in 1982, requires the Secretary to make certain findings on pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 amendments further requires that all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. This was the case for *Conradina verticillata* because of the acceptance of the 1975 Smithsonian report as a petition. In each October from 1983 through 1989, the Service found that the petitioned listing of *Conradina verticillata* 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 the January 18, 1991, proposal to list Cumberland rosemary as threatened (56 FR 1967) constituted the final 1-year finding.

Summary of Comments and Recommendations

In the January 18, 1991, proposed rule 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 inviting public comment were published in the following newspapers: Fentress Courier, Jamestown, Tennessee, February 6, 1991; Independent Herald, Oneida, Tennessee, February 7, 1991; Morgan County News, Wartburg, Tennessee, February 7, 1991; Crossville Chronicle, Crossville, Tennessee, February 6, 1991; Sparta Expositor, Sparta, Tennessee, February 5, 1991; and McCreary County Record, Whitley City, Kentucky, February 5, 1991.

Three written responses to the proposed rule were received during the comment period. One Federal agency, one State agency and one private organization provided comments. The Tennessee Valley Authority (TVA)

stated that, based upon the data in their files, they concurred with the proposed listing of Cumberland rosemary as a threatened species. They also stated that the species was not known to occur on TVA lands or within the impact areas of any proposed TVA projects. The Tennessee Department of Conservation stated that the status and distribution data in the proposed rule were accurate and that they supported the proposed protection of Cumberland rosemary as a threatened species under the Act. The Center for Plant Conservation provided information on their conservation efforts for the species and offered their assistance in future protection efforts.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that Cumberland rosemary should be classified as a threatened species. Procedures found at section 4(a)(1) of the Act 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 *Conradina verticillata* Jennison (Cumberland rosemary) (Synonym: *Conradina montana* Small) are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range

The extant populations of Cumberland rosemary all occur in close proximity to rivers on the Cumberland plateau in north-central Tennessee and adjacent Kentucky. Patrick and Wofford (1981) noted that this species' distribution has probably been reduced by such factors as dam construction and the general deterioration of water quality resulting from silt and other pollutants contributed by coal mining, poor land use practices, and waste discharges. Many of these factors continue to impact the species and its habitat. Because the colonies inhabit only short river reaches, they are vulnerable to extirpation from accidental toxic chemical spills. Direct habitat destruction by recreational visitors to the species' habitat is a significant threat to its survival. Hikers, campers, white-water enthusiasts, and off-road-vehicle users all impact the species and its habitat. Visitation to the Big South Fork National River and Recreation Area has increased

dramatically in the past few years. W.B. Dickinson, superintendent of the recreation area, reports (*in litt.*) that visitors to the recreation area increased from 120,000 in 1986 to 730,000 in 1989. The superintendent anticipates that use of the area will continue to increase and that additional adverse impacts to aquatic and riparian species may accompany this increase.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

There is commercial trade in *Conradina verticillata* at this time. McCartney (*in litt.*) reports that this species, as well as all the other species within the genus *Conradina*, are easily propagated and are in cultivation. This commercial trade, provided that it is dependent upon plants propagated from plants in cultivation, should not adversely affect the species in the wild. Many of the wild colonies are small and cannot support collection of plants for scientific or other purposes. Inappropriate collecting from plants in the wild is a threat to the species.

C. Disease or Predation

Disease and predation are not known to be factors affecting the continued existence of the species at this time.

D. The Inadequacy of Existing Regulatory Mechanisms

Conradina verticillata is listed as an endangered plant in Tennessee under that State's Rare Plant Protection and Conservation Act of 1985. This protects the species from taking without the permission of the landowner or land manager. This species is included on Kentucky's unofficial list of endangered, threatened, and rare species prepared by the Kentucky Academy of Science but receives no additional protection as a result of this recognition. When the species is added to the Federal list of endangered and threatened species, additional protection from taking will be provided by the Act when the taking is of plants located on Federal lands. Protection from inappropriate commercial trade would also be provided.

E. Other Natural or Manmade Factors Affecting its Continued Existence

No other additional factors adversely affecting the survival of Cumberland rosemary are known at this time.

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 make this rule final. Based on this evaluation, the

preferred action is to list *Conradina verticillata* as a threatened species. The plant is not in imminent danger of extinction, but its status is deteriorating due to declines in water quality and impacts to its habitat from campers, hikers, white-water enthusiasts, and off-road vehicles. Classification of *Conradina verticillata* as a threatened species, as defined under section 3(19) of the Act, would be appropriate under current circumstances and would help to protect the plant from further losses. 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 critical habitat at the time the species is determined to be endangered or threatened. However, the Service finds that designation of critical habitat is not prudent for *Conradina verticillata* at this time. Many of the colonies of this species are small, and loss of even a few individuals to inappropriate activities could extirpate the species from some of its sites. While listing under the Act increases the public's awareness of the species' plight, it can also increase the desirability of a species to collectors. As stated previously, *Conradina verticillata* is currently in commercial trade and is considered by some to be an attractive ornamental. Most of the populations are located on Federal and State lands and are freely accessible to the public. Some of these lands currently receive heavy recreational use.

Taking of listed plants is prohibited by the Act from locations under Federal jurisdiction. Removal, cutting, digging up, damaging, or destroying threatened plants in knowing violation of any State law or regulation, including State criminal trespass law, could also be prohibited in the future through regulations promulgated by the Service under the provisions of section 4(d) of the Act; however, regardless of current and potential regulations, many of the sites are in isolated locations and taking prohibitions are difficult to enforce. Publication of critical habitat descriptions and maps in the **Federal Register** and local newspapers would increase the vulnerability of the species to losses from taking, as well as trampling by the curious.

As indicated above, it would not now be prudent to determine critical habitat for *Conradina verticillata*. The owners and managers of the federally and State-owned colonies of this species have been made aware of the plant's locations and of the importance of

protecting the plant and its habitat. Owners of the privately owned sites will be contacted by the appropriate State plant conservation agencies or the Service. Protection of this species will be addressed through the recovery process and through the section 7 jeopardy standard.

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 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)(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 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.

The only anticipated Federal actions that may affect this species are those associated with the management of recreational use of the National Park Service's Big South Fork National River and Recreation Area. As recreational use of the area increases, modification of current policies through formal or

informal section 7 consultation may be required.

The Act and its implementing regulations found at 50 CFR 17.71, and 17.72 set forth a series of general prohibitions and exceptions that apply to 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 this species in interstate or foreign commerce, or to remove and reduce to possession the 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 unknown as to what extent trade permits would be sought or issued for this species. 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, Virginia 22203 (703/358-2104).

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

Gray, T.C. 1965. A Monograph of the Genus *Conradina* A. Gray (Labiatae). Unpublished Ph.D. Dissertation, Vanderbilt University, Nashville, Tennessee. 189 pp.
 Jennison, H.M. 1933. A New Species of *Conradina* from Tennessee. Journal of the Elisha Mitchell Scientific Society 48:268-269.
 Patrick, T.S., and B.E. Wofford. 1981. Status Report *Conradina verticillata* Jennison. Unpublished report to the Southeast Region, U.S. Fish and Wildlife Service. 49 pp.
 Small, J.K. 1933. Manual of the Southeastern Flora. Published by the author. New York. Pp. 1166-1167.

Author

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

List of Subjects in 50 CFR Part 17

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

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: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

(2) Amend § 17.12(h) by adding the following, in alphabetical order under Lamiaceae 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					
Lamiaceae—Mint family:						
<i>Conradina verticillata</i>	Cumberland rosemary.....	U.S.A. (KY, TN).....	T	452	NA	NA

Dated: October 29, 1991.

Richard N. Smith,

Director, Fish and Wildlife Service.

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