

50 CFR Part 17

[RIN 1018-AB41]

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for the Plant *Silene Polypetala* (Fringed Campion)**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: The Service proposes to determine *Silene polypetala* (fringed campion), a plant belonging to the pink (carnation) family, to be an endangered species pursuant to the Endangered Species Act of 1973 (Act), as amended. Fringed campion occurs in two separate geographic areas—one being a four-county area at the south boundary of the Piedmont region in central Georgia, west of Macon; and the second being a two-county area near the confluence of the Flint and Apalachicola Rivers on each side of the Georgia-Florida line. In recent years fringed campion has been found at 14 sites. The plant appears to be extirpated from a former site in Jackson County, Florida. Threats to the plant include logging or its side effects, encroachment by Japanese honeysuckle and residential development. This proposal, if made final, would implement the protection and recovery provisions afforded by the Act for fringed campion. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by September 10, 1990. Public hearing requests must be received by August 27, 1990.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Field Supervisor, 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**

Silene polypetala (fringed campion) is a perennial herb belonging to the pink or carnation family (Caryophyllaceae). It was first collected in central Georgia by Walter (1788), who named it *Cucubalus polypetalus*. Unfortunately, because most of Walter's specimens were destroyed, botanists mistakenly applied this name to other plants until 1948. Later, the Delaware physician William Baldwin collected specimens that Nuttall (1818) named *Silene Baldwinii* (sic), giving the locality as "the banks of Flint River, Florida," perhaps actually in central Georgia (Faust 1980, Allison 1988). Small (1933) and Hitchcock and Maguire (1947) spelled the name *Silene baldwinii*. Fernald and Schubert (1948) created the new combination *Silene polypetala* after they examined Walter's surviving specimens and determined that Walter's specific epithet had priority over Nuttall's. The common name "fringed campion" is from Duncan and Foote (1975), who illustrated this species with a color photograph.

Fringed campion is a perennial herb that spreads vegetatively by long, slender stolon-like rhizomes and leafy offshoots, both terminating in overwintering rosettes. The rosette and lower stem leaves are obovate, 3-9 centimeters (1-4 inches) long, and opposite. Each rosette has one to several flowering shoots, each of which is unbranched or sparingly branched, erect or ascending, and up to 4 decimeters (16 inches) tall. The flowers are arranged in groups of 3-5 in a terminal cyme with leafy bracts. The calyx is tubular, 2-3 centimeters long, 5-lobed, and covered with long, weak hairs. The five separate petals are each divided into a lower part about as long as the calyx and a triangular upper part that extends 3-4 centimeters from the calyx. The wide apex of each petal is fimbriate (divided

into slender segments) giving the flower a fringed appearance. The petals are pink or white. Flowering is in late March to May (Kral 1983, Hitchcock and Maguire 1947, Faust 1980).

This handsome wildflower is cultivated as a garden plant. F.C. Galle (Callaway Gardens, *in litt.* 1977) collected cuttings from a wild population in the 1950's, found that it is "very easy to propagate from cuttings," maintained stock at Callaway's nursery, established it on their wildflower trail, and distributed plants to other gardens around the United States. The ease of propagation was confirmed by Pinnell (1987).

By 1843, both A.W. Chapman and F. Rugel had collected fringed campion near the confluence of the Flint and Apalachicola Rivers at the Florida-Georgia boundary. In 1894, E.F. Andrews discovered a locality for fringed campion in the drainage of the Ocmulgee River near Macon, Georgia. By 1956, botanists including R. McVaugh, R. Thorne, W. Duncan, H. Hume, and R.K. Godfrey had established the approximate distribution of the fringed campion; since then, Henry Daniel, Robert Lane, W. Zack Faust, and Angus Cholson, Jr. (Faust 1980) have conducted field work on the plant. Allison (1988) conducted a survey that was specifically intended to seek out new localities for this and other plants of rich woods on and near north-facing slopes along the Flint and Chattahoochee river systems in southwestern Georgia. The survey successfully located new localities for *Rhododendron prunifolium* (plumleaf azalea) and the endangered *Trillium reliquum* (relict trillium), but did not substantially expand the known range of fringed campion, which is clearly a rare and narrowly distributed species. Allison's search was aided by responses to a call for information placed by Thomas Patrick (Georgia Freshwater Wetlands and Heritage Inventory) in the newsletter of the Garden Club of Georgia.

Fringed campion occurs in two distinct geographic areas. The northern portion of its range is in central Georgia,

from near Macon in Bibb County west through Crawford, Taylor, and Talbot Counties, where the Piedmont meets the Coastal Plain's Fall Line Sandhills. All the known sites are on Piedmont soils, even though one site (in western Taylor County) appears to be in the sandhills on a standard physiographic map. The sites are near Pine Mountain, but separate from it (Wharton 1978, fig. 1).

Allison (1988) counted at least 610 fringed campion rosette-clusters at nine sites in the Georgia Piedmont; the largest site had at least 225 rosette-clusters. Because the plant spreads vegetatively, in any population the number of rosette clusters probably far exceeds the number of genotypes. In central Georgia, fringed campion occurs "in various situations within hardwood forest. Often on fairly steep slopes of deep ravines or north-facing hillsides. Sometimes on nearly level ground, particularly in 'flatwoods' developed on Iredell soils" (Allison 1988). Piedmont "flatwoods" are bottomland hardwood forests on level sites, with basic or circumneutral soils on mafic or ultramafic volcanic rock. Three sites are on "flatwoods," five sites are on gentle to strongly north-facing slopes, and one site is on gentle east-facing slopes. A tenth site was discovered in 1989; only sketchy information is available on it (T. Patrick, Georgia Freshwater Wetlands and Natural Heritage Inventory, pers. comm. 1989). All of the sites on which fringed campion occurs appear to be consistently moist, either from downslope seepage or from location in a bottomland.

The Georgia Piedmont deciduous hardwood forests in which fringed campion occurs have northern red and white oaks, mockernut and pignut hickories, tulip tree, beech, maples, and loblolly and shortleaf pines. Understory species include oak-leaf hydrangea, blue palmetto (*Sabal minor*) and *Rhododendron minus* (Faust 1980). At one site in Talbot County, Georgia, fringed campion is known to occur with the endangered relict trillium (*Trillium reliquum*) (Allison 1988). At another site, fringed campion occurs with *Scutellaria ocmulgee*, a candidate for Federal listing.

The southern portion of fringed campion's range is along the east side of the Flint and Apalachicola Rivers at the boundary between Decatur County, Georgia and Gadsden County, Florida, with two sites in Georgia (Faust 1980, Allison 1988), and two in Gadsden County, Florida, in and near Chattahoochee. A specimen was collected on the west side of the Apalachicola River, Jackson County, in

1937 (Kent Perkins, Herbarium, Univ. of Florida, *in litt.* 1990). Field work in Jackson County in recent years has not yielded any localities (Deborah White, Florida Natural Areas Inventory, Tallahassee, Florida, pers. comm. 1990). A distribution map that places fringed campion's range near the Suwannee River in Florida (Hitchcock and Maguire 1947) is evidently incorrect; no herbarium specimens are known to support such a distribution (W. Thomas, *in litt.* 1990, checked the New York Botanical Garden herbarium).

Near the Georgia-Florida border, fringed campion occurs in rich wooded ravines with southern magnolia, tulip tree, maples, beech, spruce pine, and sugarberry (*Celtis laevigata*). Understory trees include oakleaf hydrangea and redbud (*Cercis canadensis*). Herbs include giant chickweed (*Stellaria pubera*) and bloodroot (*Sanguinaria canadensis*), both northern species. The endangered Florida torreya (*Torreya taxifolia*) occurs in these ravines. Allison counted at least 250 rosette-clusters of fringed campion at the two southwest Georgia sites. Faust (1980) found about 625 plants in the same ravines; the difference in numbers may be due to the severe 1988 drought (Allison 1988). One Florida population of fringed campion had about 250 plants in 1980, and was normally about this size (Faust 1980, reporting data from A. Gholson, Jr.). The size of the second Florida population is unknown.

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. 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 to be endangered species pursuant to section 4 of the Act. This proposal was withdrawn in 1979 (44 FR 12382). *Silene polypetala* was included in the Smithsonian Report; the July 1, 1975 notice; the June 16, 1976 proposal; and the 1979 withdrawal.

On December 15, 1980, the Service published a notice of review for plants (45 FR 82480), which included *Silene*

polypetala as a category 2 candidate (a taxon for which data in the Service's possession indicate listing is possibly appropriate). A supplement to the notice of review published on November 28, 1983 (48 FR 53640) changed *Silene polypetala* to a category 1 candidate (a taxon for which data in the Service's possession indicates listing is warranted), based on the status survey by Faust (1980). Updated notices of review published September 27, 1985 (50 FR 39526) and February 21, 1990 (55 FR 6184) retained *Silene polypetala* 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 that all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. This was the case for *Silene polypetala* because the Service had accepted the 1975 Smithsonian report as a petition. In October of 1983, 1984, 1985, 1986, 1987, 1988, and 1989, the Service found that the petitioned listing of this 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 required by the Act.

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 *Silene polypetala* (Walter) Fernald & Schubert (fringed campion) are as follows:

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

Three known sites are in residential areas and may be lost to house construction or landscaping (the owner of at least one site is interested in conserving fringed campion and *Scutellaria ocmulgee*). Two sites may suffer loss of at least some plants due to recent logging upslope from the populations, which may disrupt downslope seepage of water or decrease

summer shade. However, because these sites are now small remnants of mature forest surrounded by regeneration, they are not threatened by cutting for many years. Six more sites may be subject to eventual clearcutting. Two sites can be considered secure.

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

The two secure sites are moderately well known to botanists. There is no evidence that overcollection for scientific or educational purposes has occurred, although reported numbers of plants at these sites were much higher in 1980 (650 plants) than in 1988 (250 plants) (Faust 1980, Allison 1988). Although fringed campion is a desirable garden species, overutilization of fringed campion for horticultural purposes is not known to have occurred, perhaps because it is easily propagated from cuttings, making digging up of wild plants unnecessary and unproductive.

C. Disease or Predation

Several populations in Talbot and Taylor Counties, Georgia "displayed moderate to heavy grazing, presumably by deer. This could greatly limit the potential for population expansion and dispersal by sexual means, particularly as most of these populations are rather small" (Allison 1988).

D. The Inadequacy of Existing Regulatory Mechanisms

Georgia's Wildflower Preservation Act of 1973 protects fringed campion as an endangered species; the act prohibits cutting, digging, pulling up, or otherwise removing any protected plant from public land without a permit from the Georgia Department of Natural Resources, and provides for permits for transporting, carrying, or conveying protected plants taken from private land belonging to another person. Violations are punishable as a misdemeanor. The only occurrences of this plant on public land are at two sites administered by the U.S. Army Corps of Engineers in southern Georgia; the Corps is capable of prohibiting take of this plant from its lands by regulation. Listing fringed campion as an endangered or threatened species will add the substantial penalties provided by the Endangered Species Act to State and agency penalties.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

At four sites that are vulnerable to logging, Japanese honeysuckle (*Lonicera japonica*), a noxious weed, is already present or is encroaching. Japanese

honeysuckle often destroys populations of forest-floor herbs; in addition, because Japanese honeysuckle can thrive in the wake of logging, its presence in these areas appears to greatly exacerbate the threat from logging. The small number of populations of this plant, and the likelihood that each population contains few individuals and fewer genotypes greatly exacerbates the degree of threat to fringed campion from the other factors.

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 *Silene polypetala* (fringed campion) as endangered.

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 presently prudent for fringed campion. As discussed under Factor B in the Summary of Factors Affecting the Species, fringed campion is a handsome wildflower and a desirable garden plant. Although overutilization and take are not presently considered to threaten this species, the protected populations are small and are in a habitat with a number of other sensitive species that could be adversely affected by take or by excessive numbers of visitors. One unprotected site of fringed campion is shared with the federally endangered *Trillium reliquum* (relict trillium), which is considered vulnerable to take (U.S. Fish and Wildlife Service 1988).

Publication of critical habitat descriptions and maps would make fringed campion and other plant species in the habitat more vulnerable and increase enforcement problems. Involved parties and principal landowners are aware of the locations of this species and the importance of protecting its habitat. Protection of this species' habitat will be addressed through the recovery process and through the section 7 jeopardy standard, which will almost certainly include provisions to ensure that this species is not harmed by herbicide use. Therefore, it would not be prudent to determine critical habitat for fringed campion.

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 Environmental Protection Agency (EPA) is establishing a national system to prevent the use of herbicides (including herbicides used in forestry) from jeopardizing endangered species; the State of Florida's Department of Agriculture and Consumer Services is establishing its own herbicide regulatory system under a program approved by the EPA. Herbicide restrictions, if they are adopted to protect fringed campion, may have some impact on private landowners in this area.

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 plants. All trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, 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. (If a plant is listed as a threatened species rather than as an endangered species, seeds from cultivated specimens of that 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 to the Act (Pub. L. 100-478) 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. Certain exceptions 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 trade permits would be sought and issued because fringed campion has a limited popularity in cultivation. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, P.O. Box 3507, Arlington, VA 22203-3507 (703/358-2104).

Public Comments Solicited

The Service intends that any final action 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 fringed campion;

(2) The location of any additional populations of this 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 range, distribution, and population size of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Final promulgation of the regulation on this 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).

References Cited

- Allison, J.R. 1988. Report on a botanical survey of north-facing ravines and bluffs along the Flint and Chattahoochee Rivers in western Georgia. Report submitted to U.S. Fish and Wildlife Service, Jacksonville, Florida. 100 pp.
- Duncan, W.H., and L.E. Foote. 1975. Wildflowers of the southeastern United States. Univ. of Georgia Press, Athens. 296 pp.
- Faust, W.Z. 1980. Status survey for *Silene polypetala*. Prepared for U.S. Fish and Wildlife Service. On file at Jacksonville, Florida office. 9 pp. + individual site reports. (Incorporates data from H. Daniel, A. Gholson, and R. Lane).
- Fernald, M.L., and B.G. Schubert. 1948. Studies of American types in British herbaria. *Rhodora* 50: 197-199.

Kral, R. 1963. A report on some rare, threatened, or endangered forest-related vascular plants of the South. USDA Forest Service Technical Publication R8-TP 2. 2 vols., 1305 pp.

Hitchcock, C.L., and B. Maguire. 1947. A revision of the North American species of *Silene*. Univ. of Washington Publications in Biology. Univ. of Washington Press, Seattle. 13:19.

Nuttall, T. 1818. The genera of North American plants, and a catalogue of the species to the year 1817. Philadelphia. p. 288.

Pinnell, M. 1987. Micropropagation of two Georgia endangered species, *Silene polypetala* (Walt.) Fern. & Schub. and *Baptisia arachnifera* Duncan. Master's thesis, Univ. of Georgia, Athens. 74 pp.

Small, J.K. 1933. Manual of the Southeastern flora. Univ. of North Carolina Press, Chapel Hill. xxi + 1554 pp.

Walter, T. 1788. *Flora Carolina*. p. 141.

Wharton, C.H. 1978. The natural environments of Georgia. Georgia Department of Natural Resources, Atlanta, GA. 227 pp.

U.S. Fish and Wildlife Service. 1988. Determination of endangered status for the relict trillium. *Federal Register* 53(64): 10879-10884.

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 record-keeping 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; 16 U.S.C. 1531-1543; 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) for plants by adding the following, in alphabetical order under Caryophyllaceae, 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					
Caryophyllaceae—Pink family:						
Silene polypetala	Fringed campion.....	U.S.A. (FL, GA).....			NA	NA

Dated: May 22, 1990.

Bruce Blanchard,
 Acting Director, Fish and Wildlife Service.
 [FR Doc. 90-15942 Filed 7-10-90; 8:45 am]
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