

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for *Iris lacustris* (Dwarf Lake Iris)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines threatened status for *Iris lacustris* (dwarf lake iris) under authority of the Endangered Species Act (Act) of 1973, as amended. *Iris lacustris* is found along the northern shores of Lakes Michigan and Huron, at about 60 sites in 10 Michigan counties and 15 sites in two Wisconsin counties, as well as several areas in Ontario. Threats to this species include continued loss of habitat and lack of appropriate overstory vegetation management. This action will implement the Federal protection provided by the Act for *Iris lacustris*.

EFFECTIVE DATE: October 28, 1988.

ADDRESS: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Service's Regional Office of Endangered Species, Federal Building,

Fort Snelling, Twin Cities, Minnesota 55111.

FOR FURTHER INFORMATION CONTACT: James M. Engel, Endangered Species Coordinator (see **ADDRESS** section) at 612/725-3276 or FTS 725-3276.

SUPPLEMENTARY INFORMATION:

Background

Iris lacustris, a member of the family Iridaceae, has been treated as a variety of *Iris cristata* (Dykes 1913), but is recognized by others as a distinct species (Foster 1937). *Iris lacustris* is an herbaceous perennial, a diminutive iris with flat, erect, narrow leaves that sheath each other at the base. Leaves are 3 inches (7.5 centimeters) tall at the onset of flowering in late spring, later reaching 5-6 inches (15 cm). The flowers are 2-2.5 inches (6 cm) long, have three petals and sepals with the sepals being larger and the most conspicuous part of the flower, ranging in color from blue to dark violet. Fruit capsules are about 1 inch (2.5 cm) tall and triangular. *Iris lacustris* is rhizomatous and forms dense colonies under favorable conditions.

Iris lacustris is found in Michigan, Ontario, and Wisconsin. Reports in the literature of this species' occurrence on the shores of Lake Superior have been discounted (Guire and Voss 1963). In Michigan, the species is found at about 60 sites in 10 counties on the northern shores of Lake Michigan and Huron (The Nature Conservancy data files). In Ontario, it is found on Manitoulin Island

and the Bruce Peninsula. Makhholm (1986) recorded *Iris lacustris* at 15 scattered colonies in two counties on Wisconsin's Door Peninsula. The lakeshore habitat of this species is usually sandy or gravelly and open, although the plant occurs in the partial shade of coniferous trees and in mesic areas at the forest edge. The species seems to thrive on calcareous gravels, in partial shade near the lakeshore (E.G. Voss, University of Michigan, pers. comm. 1987). Voss also mentions that the plant will grow in crevices of limestone, or dolomite, when the substrate is bedrock. *Iris lacustris* grows in dense colonies and may be scattered in small patches in upper beach habitats, where it is shaded (Makhholm 1986). The plant is not found in full sunlight.

Although some colonies of *Iris lacustris* are protected on public land, most of the plants are threatened by habitat destruction and a lack of active management. It is estimated that less than 20 percent of the *Iris lacustris* colonies in Michigan receive any type of habitat protection, while approximately 40 percent of the Wisconsin *Iris lacustris* colonies are considered to be protected. The rarity of the species and various threats indicate that it is likely to become endangered in the long term. Federal actions involving this iris begin with section 12 of the Endangered Species Act of 1973, 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 in the *Federal Register* (40 FR 27823) of its acceptance of the report of the Smithsonian Institution as a petition within the context of section 4(c)(2), now section 4(b)(3)(A), of the Act and of its intention thereby to review the status of those plants. *Iris lacustris* was included in the Smithsonian petition as a candidate for threatened status.

On December 15, 1980, the Service published a revised notice of review for native plants in the *Federal Register* (45 FR 82480); *Iris lacustris* was included as a Category-1 species (species for which data in the Service's possession indicate listing is warranted). This iris was still included in Category 1 in the September 27, 1985, revised notice of review of plants (50 FR 39526).

Section 4(b)(3)(B) of the Endangered Species 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 *Iris lacustris* because the 1975 Smithsonian report had been accepted as a petition. On October 13, 1983; October 12, 1984; October 11, 1985; October 10, 1986; and October 13, 1987, the Service found that the petitioned listing of these species was warranted, but that listing this species was precluded due to other higher priority listing actions. On December 4, 1987, the Service published a proposal in the *Federal Register* (52 FR 46334) to list *Iris lacustris* as a threatened species. The Service now determines *Iris lacustris* to be a threatened species with the publication of this final rule.

Summary of Comments and Recommendations

In the December 4, 1987 proposed rule (52 FR 46334) 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, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices inviting public comment were published in the *Green Bay News Chronicle* on December 17, 1987; *Escanaba Daily Press*, *Petoske News Review*, *Manistee News Advocate*, and *Menominee Herald-Leader*, on

December 21, 1987; the *Charlevoix Courier*, on December 23, 1987; and *The St. Ignace News*, *The Alpena News*, and *The Cheboygan Daily Tribune* on December 24, 1987.

Eight comments were received. The United States Forest Service, the Michigan Department of Natural Resources, the Michigan Chapter of the Nature Conservancy, Natural Resources Defense Council, a university professor, and a sanctuary manager supported the proposal and provided new status information. The Michigan Department of Natural Resources questioned the status information and indicated that additional information will be furnished to the Service later when recovery efforts are initiated. The U.S. Forest Service advised of occurrences of *Iris lacustris* on the Hiawatha and Huron-Manistee National Forests and that the plant adds beauty and diversity to the plant community and also seems to be a good soil stabilizer. The Nature Conservancy urged additional monitoring and taxonomic studies and habitat management research. The Natural Resources Defense Council emphasized the potential threat of commercial trade because closely related species are commonly sold through garden catalogs. The Manager of the 1000 acre Ridges Sanctuary, boreal forest community in Door County, Wisconsin which contains a large population of *Iris lacustris*, advised of his ongoing monitoring program within the sanctuary. The Michigan Department of Transportation submitted two comments, but did not take a position on the proposal. They expressed reservations about increased involvement they will have with the Federal Highway Administration in the section 7 consultation process and indicated it would be difficult for them to meet construction and roadside maintenance schedules because of the added time required for section 7 consultation procedures. The Michigan Department of Transportation is also concerned that listing *Iris lacustris* might affect their ability to maintain new safety standards along coast roads. They expressed concern about added responsibilities once *Iris lacustris* is listed, while adjoining landowners are not bound by the Act and sometimes destroy plants. Therefore the Michigan Department of Transportation supports added protection for plants on private land and further suggests continued cooperation and early consultation under section 7 with the Federal Highway Administration. Since the Michigan Department of Transportation is currently complying with the

Michigan Department of Natural Resources requirements for endangered and threatened species permits, the Service will endeavor to integrate these state requirements and actions into section 7 activities so as not to cause unnecessary delay or added work. The Department of Transportation expressed a desire to cooperate with the Service, but admits they have limited control over some uses on the right-of-way. Because of the limited nature of *Iris lacustris* and the narrow habitat requirements, the number of instances in which the plant may be affected by the Michigan Department of Transportation actions may not be of the magnitude expected. The Michigan Department of Transportation also requested representation on the recovery team for *Iris lacustris*. The Service will consider the expertise of Michigan Department of Transportation staff when formulating a recovery plan for this species. The other comment from The Michigan Department of Transportation provided additional status and occurrence information.

Summary of Factors Affecting the Species

After a thorough review and consideration of information available, the Service has determined that *Iris lacustris* should be classified as a threatened 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 *Iris lacustris* Nuttall (dwarf lake iris) are as follows:

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

Iris lacustris formerly was more widely distributed than it is today (Guire and Voss 1963, Crispin 1981, Makhholm 1986). Major habitat areas in Michigan have been significantly altered by private development to the extent that they cannot support *Iris lacustris* populations (Crispin 1981). Development of private shore areas continues and is increasing. Private residential development and associated impacts such as access road development are the greatest threats to *Iris lacustris*. In Wisconsin, Alverson (1981) identified home and cottage construction, road widening, chemical spraying and salting,

and off-road vehicle use as current threats to the species' habitat. According to R. Lukes (Ridges Sanctuary, Inc., WI, pers. comm. 1987) natural plant succession combined with the construction of shoreline homes and associated disturbances has been the cause of the steady decline of *Iris lacustris* in Door County, Wisconsin. The population of *Iris lacustris* in Milwaukee was destroyed in the course of urban development (Read 1976). Voss (pers. comm. 1987) notes that roads in these developing shoreline areas are generally placed on the solid gravelly ridges, exactly where *Iris lacustris* is found.

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

The species has attractive flowers and so has commercial potential. Faith T. Campbell (Natural Resources Defense Council pers. comm. 1987) reports that *Iris lacustris* is being offered for sale in garden catalogs and the potential exists for increased commercial trade of this species.

C. Disease or Predation

Not known to be a threatening factor.

D. The Inadequacy of Existing Regulatory Mechanisms

This species is listed as threatened by the States of Michigan and Wisconsin. Wisconsin regulations prohibit any person from removing or transporting an endangered or threatened wild plant away from its native habitat on public property, or from property he or she does not own or control, except in the course of forestry or agricultural practices or in the construction and maintenance of a utility facility. The Michigan Endangered Species Act requires developers to determine threatened species involvement in proposed projects. Although *Iris lacustris* is offered various forms of protection under these State laws, monitoring and enforcement are difficult due to limited personnel. The Endangered Species Act offers possibilities for protection of this taxon through section 6 by cooperation between the States and the Service and through section 7 (Interagency Cooperation) requirements. The Endangered Species Act will provide additional protection for *Iris lacustris* through section 9 and the recovery process.

E. Other Natural or Manmade Factors Affecting its Continued Existence

Iris lacustris colonies require management to maintain required open

habitat. Successional processes have altered some habitat beyond the tolerance limit for species. Planisek (1983) concluded that a pollen vector is necessary for fruit set. However further research is needed to determine the pollinator and what attracts it to the iris. Planisek also concluded that *Iris lacustris* is self-compatible, which increases the percentage of fruit set. However, seed production is still low.

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 upon this evaluation, the preferred action is to list *Iris lacustris* as threatened. Threatened status is proposed due to the species' restricted range and the threats facing it and its habitat. Since the iris is not in any immediate threat of extinction, largely because of its scattered distribution, the Service is not proposing it for endangered status. Critical habitat is not being proposed for reasons discussed in the following section, "Critical Habitat."

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. The designation of critical habitat is not considered to be prudent when such designation would not be of net benefit to the species involved (50 CFR 424.12). The Service believes that designation of critical habitat for *Iris lacustris* would not be prudent because no benefit to the species can be identified that would outweigh the potential threat of vandalism or collection, which might be exacerbated by the publication of a detailed critical habitat description and map.

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. It also requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following the listing. Potential recovery actions include habitat management to reduce shade and

competition of other plants and transplanting to previously occupied sites. 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 provisions 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 a listed species or destroy or adversely modify its critical habitat. If a Federal action may adversely affect a listed species, or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. *Iris lacustris* is known to occur on Federal lands near an unoccupied U.S. Coast Guard Lighthouse on Thunder Bay Island, Michigan, and at several sites within the Huron-Manistee and Hiawatha National Forests. No Federal actions are anticipated which would affect *Iris lacustris* at this time.

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. With respect to *Iris lacustris* 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 commercial activity, sell or offer for sale this species 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 species under certain circumstances. With respect to *Iris lacustris*, it is anticipated that few trade permits would be sought or issued since the species is not now common in cultivation or in the wild. 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 27239, Central Station, Washington, DC 20038-7329 (703/343-4955).

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

Alverson, W.S. 1981. Status report on *Iris lacustris*. Wisconsin Dept. Nat. Res. Unpubl. rep. 13 pp.
 Crispin, S.R. 1981. *Iris lacustris* in Michigan. Unpubl. rep. 6 pp.

Dykes, W.R. 1913. The genus *Iris*. Univ. Press, Cambridge. 245 pp.
 Foster, R.C. 1937. A cyto-taxonomic study of the North American species of *Iris*. Contr. Gray Herb. No. 69. 81 pp.
 Guire, K.E., and E.C. Voss. 1963. Distribution of distinctive shoreline plants in the Great Lakes Region. Michigan Bot. 2:99-114.
 Makhholm, M.M. 1986. Ecology and management of *Iris lacustris* in Wisconsin. M.S. thesis, Univ. Wisconsin. 123 pp.
 Planisek, S.L. 1983. The Breeding System, Fecundity, and Dispersal of *Iris lacustris*. Michigan Bot. 22:93-102.
 Read, R.H. 1976. Endangered and Threatened Vascular Plants in Wisconsin. Tech. Bull. No. 92. Sci. Areas Pres. Council. Wisconsin Department of Natural Resources. 58 pp.

Author

The primary author of this final rule is William F. Harrison (see ADDRESSES section) (612/725-3276 or FTS 725-3276).

List of Subjects in 50 CFR Part 17

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

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, 96 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 Iridaceae, to the list of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

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Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific	Common name					
Iridaceae:						
<i>Iris lacustris</i>	Dwarf lake iris	U.S.A. (MI, WI), Canada (ON)	T	330	NA	NA

Dated: September 2, 1988.
 Susan Recce,
 Acting Assistant Secretary for Fish and Wildlife and Parks.
 [FR Doc. 88-22149 Filed 9-27-88; 8:45 am]
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