

**50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Proposed Rule To Determine Endangered Status for *Mezoneuron Kavaïense* (Uhiuhi)****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

**SUMMARY:** The Service proposes to determine endangered status for a Hawaiian plant, *Mezoneuron kavaïense* (uhiuhi). Once fairly common on the islands of Hawaii, Maui, Oahu, and Kauai, only 3 small populations of this endemic species, totaling fewer than 50 individuals, remain. These are located on State and privately owned land in North Kona, island of Hawaii; in the Waianae Mountains, island of Oahu; and in western Kauai. Populations of the species face threats from continued cattle grazing, wildfire, impaired

seedling establishment because of exotic plant species, rodent and insect damage, and feral animal browsing on or near sites on which they occur. Protective measures are needed to ensure the continued existence of this species. Listing of *Mezoneuron kavaïense* as endangered would implement the protection provided under the Endangered Species Act of 1973, as amended. The Service seeks relevant data and comments.

**DATES:** Comments from all interested parties must be received by October 4, 1985. Public hearing requests must be received by September 19, 1985.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to Regional Director, U.S. Fish and Wildlife Service, Suite 1692, Lloyd 500 Building, 500 N.E. Multnomah Street, Portland, Oregon 97232. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Wayne S. White, Chief, Division of Endangered Species, at the above address (503/231-6131 or FTS 429-6131).

**SUPPLEMENTARY INFORMATION:****Background**

*Mezoneuron kavaïense* (uhiuhi) is an endemic Hawaiian tree to 10 meters (34 feet) in height and 30 centimeters (12 inches) in trunk diameter, with loose, spreading branches. The bark is rough-scaly and of a dark gray to brown color. The leaves are pinnate, having 4 to 8 leaflets about 3 centimeters (1.25 inches) in length. The flowers are arranged in terminal racemes 2.5 to 10 centimeters (1 to 4 inches) long and are dark red in color (Rock, 1913). Seed pods are flat, very thin, bluish-glaucous when young, and pale pink to gray when older. They are about 8 centimeters (3.2 inches) long and 5 centimeters (2 inches) wide, with a conspicuous line running down the length of the pod (Lamoureux, 1982).

Sites occupied by *Mezoneuron kavaïense* can be described as dryland open forest on rough weathered (unweathered on Hawaii) lava on steep slopes, ranging in elevation from 76 meters (250 feet) to 910 meters (3,000 feet). Annual rainfall varies from 75 centimeters (30 inches) to 152 centimeters (60 inches) and is evenly distributed throughout the year. Associated species include *Erythrina sandwicensis*, *Chenopodium oahuense*, *Diospyros ferrea*, and *Colubrina*

*oppositifolia* (Lamoureux, 1982). *Kokia drynarioides*, an endangered species (see 49 FR 47397; December 4, 1984), coexists with uhiuhi in North Kona, island of Hawaii.

Although well known to Hawaiian natives, who used its strong, dark, heavy wood for spears and fishing implements, the species remained uncollected by botanists until 1865, when Horace Mann, Jr. obtained specimens from Kauai. He later described them as a new species, *Caesalpinia kavaensis* (Mann, 1867). William Hillebrand acquired additional specimens from Oahu and Maui and transferred the species to the genus *Mezoneuron*, as *Mezoneuron kavaense* (Hillebrand, 1888). Commonly known as uhiuhi, the tree is also referred to as kea (on Maui only).

Historically known to have occurred on the islands of Hawaii, Oahu, Maui, and Kauai, *Mezoneuron kavaense* has declined to only 3 populations, totalling fewer than 50 individuals, located on the slopes of Hualalai, North Kona, Hawaii; in the Waianae Mountains, Oahu; and in the Waimea Canyon in western Kauai. The Hawaii population occurs on the Pu'uwa'awa'a Ranch, State-owned land, and on private land owned by the Bernice P. Bishop Estate. These lands are leased as cattle pasture.

Grazing by cattle, goats, and other wild herbivores is the most probable cause for the species' decline, and continues to impact the remaining trees. In recent years rodent and insect damage and competition from exotic plant species, especially fountaingrass (*Pennisetum setaceum*), have reduced the number and survivorship of seedlings, and increased the probability, extent, and intensity of wildfire (Lamoureux, 1982). Only 1 of the 3 remaining populations exhibits signs of successful reproduction. A cooperative effort among Federal, State, and private agencies is needed to preserve the remaining trees and promote the species' recovery.

Section 12 of the Endangered Species Act of 1973 (Act) directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened, or extinct. This report (House Document No. 94-51) was presented to Congress on January 9, 1975. On July 1, 1975, the Service published a notice of review in the **Federal Register** (40 FR 27823) accepting this report as a petition within the context of section 4(c)(2) of the Act (petition acceptance is now governed by section 4(b)(3) of the Act, as amended). On June 16, 1976, the Service published a proposed rule in the **Federal Register** (41 FR 24523) to determine approximately 1,700 vascular plant taxa

to be endangered species pursuant to Section 4 of the Act. *Mezoneuron kavaense* was included in the Smithsonian report, the notice of review of July 1, 1975, and the proposal of June 16, 1976.

The Act, as amended in 1978, required that all proposals over 2 years old be withdrawn, except that a 1-year grace period was given to proposals already over 2 years old. On December 10, 1979, the Service published a notice of withdrawal of the portion of the June 16, 1976, proposal that had not been made final, along with 4 other proposals that had expired (44 FR 70796). In the **Federal Register** of December 15, 1980 (45 FR 82480), the Service published a revised notice of review. *Mezoneuron kavaense* was included in this notice as a category-1 species, indicating that existing data warranted a proposal to list as endangered or threatened.

The Endangered Species Act Amendments of 1982 required that all petitions pending as of October 13, 1982, be treated as having been newly submitted on that date. The species covered in the notice of review of December 15, 1980, are considered to be under petition, and the deadline for making a finding on those species, including *Mezoneuron kavaense*, was October 13, 1983. On October 13, 1983, and again on October 12, 1984, the petition finding was made that listing *Mezoneuron kavaense* was warranted, but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act, such a finding requires a recycling of the petition, pursuant to section 4(b)(3)(C)(i) of the Act. Therefore, a new finding must be made on or before October 13, 1985; this proposed rule constitutes the finding that the petition action is warranted, and proposes to implement the action in accordance with section 4(b)(3)(B)(ii) of the Act.

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; see revision at 49 FR 38900, October 1, 1984) 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 *Mezoneuron kavaense* (Mann) Hbd. (uhiuhi) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* At one time,

*Mezoneuron kavaense* was common enough in the Hawaiian islands to have its wood used by natives for spears and fishing implements. Since the arrival of European settlers and their domestic stock, the species has declined sharply and, in this past century alone, 3 populations have been extirpated and another has been reduced to a single tree. Fewer than 50 trees currently remain in the wild, occurring on Hualalai, North Kona, island of Hawaii; in the Waianae Mountains, island of Oahu; and in western Kauai. The species' habitat is subject to degradation through the grazing of cattle, sheep, goats, and other feral herbivores. Exotic plant species, especially fountaingrass, jeopardize its existence by inhibiting regeneration and increasing the probability, extent, and intensity of wildfire (Lamoureux, 1982). Presently, only the Oahu population is exhibiting signs of successful reproduction.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* The wood of the uhiuhi is extremely hard, close-grained, dark-colored, and durable (Rock, 1913). It was used by native Hawaiians for spears and "la'au melo-melo" (fishing devices). Harvesting of the few remaining trees poses a continued threat since the wood is highly prized by certain knowledgeable people (Lamoureux, 1982, and Herbst, U.S. Fish and Wildlife Service, pers. comm., 1984).

Collection of seeds, seedlings, and saplings for private gardens presents an additional, if slight, threat to the species. The tree is attractive and, given proper care, grows readily in cultivation (Lamoureux, 1982).

C. *Disease or Predation.* The black coffee twig borer (*Xylosandrus compactus*) affects *Mezoneuron kavaense* by reducing the survival of seedlings and saplings (Lamoureux, 1982). Rodent damage has been observed on Hawaii, where seeds were taken from fruit on the ground and on the tree (Lamoureux, 1982). The grazing of cattle (Hawaii), goats (Hawaii, Oahu, and Kauai), and sheep (Hawaii) on shoots, seedlings, and saplings also seriously affects the species.

D. *The inadequacy of existing regulatory mechanisms.* The Pu'uwa'awa'a Ranch is zoned for agriculture, and managed to maximize grazing potential rather than to provide protection for native species such as *Mezoneuron kavaense*. State-owned land on Oahu and Kauai is zoned for conservation, but such zoning provides no specific protection to the species.

E. *Other natural or manmade factors affecting its continued existence.*

Reduction of the gene pool and genetic variability, resulting from small population sizes, could have detrimental effects on the continued existence of *Mezoneuron kavaense*.

The Hawaii population, which occurs on the slopes of a dormant volcano, is also subject to potential destruction should an eruption occur. The last eruption of Hualalai sent lava through the center of the uhiuhi's present habitat.

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 *Mezoneuron kavaense* as endangered. The historical decline of the species, including its extirpation on Maui; the small number of individuals remaining in the wild; and the present threats faced by the species warrant this determination. For the reasons discussed below, critical habitat is not being designated at this time.

#### 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 which 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 this species at this time. As discussed under factor "B" in the "Summary of Factors Affecting the Species," *Mezoneuron kavaense* is subject to taking, an activity difficult to control and not regulated by the Endangered Species Act with respect to plants, except for a prohibition against removal and reduction to possession of endangered plants from lands under Federal jurisdiction. *Mezoneuron kavaense* occurs on State and private land not under Federal jurisdiction. Publication of a critical habitat description in the *Federal Register* would serve to increase the risk of taking or vandalism, while providing no additional benefit to the species. Therefore, it would not be prudent to determine critical habitat for *Mezoneuron kavaense* at this time.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the 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. Section 6 of the Act details conditions for cooperative action between the Service and State agencies. The State of Hawaii has entered into a cooperative agreement with the Service, and this may facilitate needed protection for the uhiuhi. Since much of the species' habitat is on State land, cooperation between Federal and State officials is necessary to ensure its continued survival. 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 any area proposed or designated as critical habitat. 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. No Federal activities are known or expected to affect *Mezoneuron kavaense*.

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 *Mezoneuron kavaense*, 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. Due to its depleted state

in the wild, and low percentage of seedling survival, propagation of *Mezoneuron kavaense* in nurseries may be necessary for its continued existence and recovery. Cultivated specimens are currently found on several sites in the Hawaiian Islands. If propagation of the species for its recovery is proposed, permits for scientific purposes and for enhancing the propagation of the species, allowed under section 17.62, may be requested. Otherwise, it is anticipated that few trade permits would ever be sought or issued since the species 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 provision would apply to *Mezoneuron kavaense* should it be found on land 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), and it is anticipated that these will be made final following public comment. Currently, the species is known to occur only on State and private land not under Federal jurisdiction. It is anticipated that few, if any, collecting permits for the species will ever be requested. 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 the following:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *Mezoneuron kavaense*;

(2) The location of any additional populations of *Mezoneuron kavaense* 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 the possible impacts on *Mezoneuron kavaense*.

Final promulgation of the regulation on *Mezoneuron kavaense* 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 Act provides for a public hearing on this proposal, if one is 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 Regional Director, U.S. Fish and Wildlife Service [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).

**Literature Cited**

Hillebrand, W. 1888. Flora of the Hawaiian Islands. Carl Winter, Heidelberg. 673 pp.  
 Lamoureux, C. 1982. Unpublished status survey of *Mezoneuron kavaense* (Mann) Hbd. U.S. Fish and Wildlife Service, Honolulu. 46 pp.  
 Mann, H., Jr. 1867. Enumeration of Hawaiian plants. Proc. Amer. Acad. Arts 7: 143-235.  
 Rock, J.F. 1913. The indigenous trees of the Hawaiian Islands. Honolulu. 518 pp.

**Author**

The primary author of this proposed rule is Dr. John J. Fay, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-1975 or FTS 235-1975). Preliminary documentation was provided under contract by the Research Corporation of the University of Hawaii and Mr. Laurance Torok.

**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 Fabaceae, 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					
Fabaceae—Pea family.						
<i>Mezoneuron kavaense</i>	uhihi	U.S.A. (HI)	E		NA	NA

Dated: July 9, 1985.  
 Susan Recce,  
 Assistant Secretary for Fish and Wildlife and Parks.  
 [FR Doc. 85-18470 Filed 8-2-85; 8:45 am]  
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