

50 CFR Part 17

RIN 1018-AB52

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Stenogyne kanehoana* (No Common Name), a Hawaiian plant

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) determines a plant, *Stenogyne kanehoana*, to be endangered pursuant to the Endangered Species Act of 1973, as amended (Act). This species is known only from one small population located on the island of Oahu, Hawaii. The greatest immediate threat to the survival of this species is the encroachment and competition from naturalized, exotic vegetation. The extremely small size of the population also is a considerable threat as the limited gene pool may repress reproductive vigor, or a single

environmental disturbance could destroy the only known remaining individuals. This rule implements the protection and recovery provisions afforded by the Act for this plant.

EFFECTIVE DATE: June 12, 1992.

ADDRESSES: The complete file for this rule is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, room 6307, Honolulu, Hawaii 96813.

FOR FURTHER INFORMATION CONTACT: Derral R. Herbst, at the above address (808/541-2749 or FTS 551-2749).

SUPPLEMENTARY INFORMATION:

Background

Stenogyne kanehoana was first collected on the east ridge of Puu Kanehoa, Waianae Mountains by Harold St. John in 1934. Otto Degener collected it in the same area in 1939, and, along with Earl Sherff, described the taxon (Sherff 1941), naming it after the type locality. All subsequent collections have been from the same area which is near the summit of the ridge connecting Puu Kanehoa with Puu Hapapa to the north and Puu Kaua to the south, a distance totaling approximately 1.75 miles (2.8 kilometers). Today one population consisting of two to four plants remains under a canopy of mesic forest trees on a ridge leading to the summit of Puu Kanehoa (Center for Plant Conservation (CPC) 1989; Hawaii Heritage Program (HHP) 1988, 1989a, 1989b; Hawaii Plant Conservation Center (HPCC) 1990; Obata 1977; St. John 1981; Joel Lau, HHP, pers. comm., 1989; John Obata, HPCC, pers. comm., 1989; Steven Perlman, HPCC, pers. comm., 1989; Steven Weller, University of California at Irvine, pers. comm., 1989). The plants occur on privately-owned land.

Stenogyne kanehoana is a scandent vine in the mint family (Lamiaceae) with stems weakly 4-angled, hairy, and 3 to 6 feet (1 to 2 meters) long. The leaves are oppositely arranged and are narrowly ovate to oblong-ovate, thin but densely hairy, about 4 inches (in) (10 centimeters (cm)) long and 1.5 in (3.5 cm) wide. The flowers are in clusters of 3 to 6 per leaf axil; the petals are fused into a strongly curved tube about 1 to 1.5 in (2.7 to 4.2 cm) long, white or pale yellow with short pink corolla lobes. The fruit consists of 4 fleshy black nutlets (Weller and Sakai 1990). *Stenogyne kanehoana* is distinguished from the only other member of the genus occurring on Oahu, *S. kaalae*, primarily by the size and color of its flowers. The flowers of *S. kanehoana* are large, white to yellow, and tipped in pink, while those of *S. kaalae* are small and deep purple. *Stenogyne kanehoana* occurs on an open ridge top in mesic forest. Associated species include o'hia (*Metrosideros polymorpha*), koa (*Acacia koa*), 'ie'ie (*Freycinetia arborea*), and uluhe (*Dicranopteris linearis*).

The greatest immediate threat to the survival of this species is habitat degradation and competition for space, water, light, and nutrients by naturalized, alien vegetation (HPCC 1990; Obata, pers. comm., as cited by Weller and Sakai 1990). The extremely small number of individual plants and their restricted distribution increases the potential for extinction from stochastic

events. The limited gene pool may depress reproductive vigor, or a single man-caused or natural environmental disturbance could destroy all known individuals. Other potential threats which have been suggested include fire and deforestation (St. John 1981), but, at present, these probably are not serious threats to the species.

Federal government action on this species began with the publication by the Service of an updated notice of review for plants on December 15, 1980 (45 FR 82479). *Stenogyne kanehoana* was included in that publication as a category 1 candidate for Federal listing, meaning that the Service has on file substantial information on biological vulnerability and threats to support preparation of a listing proposal. The species also was included as a category 1 candidate species in the September 27, 1985 (50 FR 39525), and February 21, 1990 (55 FR 6183), notices of review. On January 23, 1991, the Service published in the *Federal Register* (56 FR 2493) a proposal to list *Stenogyne kanehoana* as endangered. This proposal was based primarily on information supplied by the Hawaii Heritage Program, the Center for Plant Conservation, and the observations of botanists and naturalists. The Service now determines *Stenogyne kanehoana* to be an endangered species with the publication of this rule.

Summary of Comments and Recommendations

In the January 23, 1991, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information relevant to a final listing decision. The public comment period ended on March 25, 1991. Appropriate State agencies, county and city governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice inviting general public comment was published in "The Honolulu Advertiser" on February 2, 1991. Two letters of comment were received, both from conservation organizations which supported the listing of the taxon.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Stenogyne kanehoana* should be classified as an endangered species. Procedures found at section 4 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 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). The five factors and their application to *Stenogyne kanehoana* Degener and Sherff (no common name) are as follows:

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

Encroachment and competition from naturalized, exotic plants probably is the single greatest threat to this species (HPCC 1990). Koster's curse (*Clidemia hirta*) has recently invaded the *Stenogyne kanehoana* habitat; this aggressive, rapidly spreading bush probably is the single greatest threat to the species (J. Lau, pers. comm., 1989). This species forms a dense understory, shading other plants and hindering plant regeneration. Lantana (*Lantana camara*) also is common in the area along with some Christmas berry (*Schinus terebinthifolius*) (S. Weller, pers. comm., 1989). Christmas berry is a fast-growing alien plant that is able to form dense thickets, displacing other plants. It also may release a chemical that inhibits the growth of other species (Smith 1985). All of the above three species have invaded former native habitat in Hawaii to the exclusion or detriment of the native vegetation. Fires and deforestation have been suggested as potential threats to the *Stenogyne*, but these probably are not serious threats at the present.

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

Overutilization is not known to be a factor, but unrestricted scientific collecting or excessive visits by individuals interested in seeing rare plants could result from increased publicity and could seriously affect the species. Disturbance to the area by trampling would promote greater ingress by competing exotic species.

C. Disease or Predation

Disease or predation are not known to be factors threatening this species.

D. The Inadequacy of Existing Regulatory Mechanisms

There are no State laws or existing regulatory mechanisms at the present time to protect *Stenogyne kanehoana* or prevent its further decline. However, Hawaii's Endangered Species Act (HRS, section 195D-4(a)) states that "Any species of wildlife or plant that has been determined to be an endangered species

pursuant to the Endangered Species Act (of 1973) shall be deemed to be an endangered species under the provisions of this chapter * * * Further, the State may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species (section 195D-5(c)). Funds for these activities could be made available under section 6 of the Federal Act (State Cooperative Agreements). Listing of this species will therefore reinforce and supplement the protection available to the plant under State law. The Federal Act also will offer additional protection to the species, because it is a violation of the Act for any person to remove, cut, dig up, damage, or destroy an endangered plant in an area not under Federal jurisdiction in knowing violation of State law or regulation or in the course of any violation of a State criminal trespass law.

E. Other Natural or Manmade Factors Affecting its Continued Existence

The small number of individual plants of this species increases the potential for extinction from stochastic events. The limited gene pool may depress reproductive vigor, or a single man-caused or natural environmental disturbance could destroy the only known extant population of the species. It has been stated that the species is not setting seed (CPC 1989, HPCC 1990) or at least is not successfully reproducing (HHP 1989).

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 issue this final rule. Based on this evaluation, the preferred action is to list *Stenogyne kanehoana* as endangered. Only two to four individuals remain in the wild, and these face threats from the encroachment and competition from exotic species of plants, especially lantana and Koster's curse, two particularly aggressive weeds. Because this taxon is in danger of extinction throughout all or a significant portion of its range, it fits the definition of endangered as defined by the Act. Critical Habitat is not being designated for this species for reasons discussed in the "Critical Habitat" section of this rule.

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 Service finds that designation of critical habitat is not presently prudent for this species. Such a determination would result in no known benefit to the species. The few known individuals are on privately-owned land zoned as conservation land; all involved parties and the landowner have been notified of the general location and importance of protecting this species' habitat. The publication of descriptions and maps required when critical habitat is designated would make *Stenogyne kanehoana* more vulnerable and increase enforcement problems. It would increase the degree of threat to this species from possible take or vandalism because *Stenogyne kanehoana* is an attractive plant and live specimens would be of interest to curiosity seekers or collectors of rare plants. Protection of the species' habitat will be addressed through the recovery process. Therefore, the Service finds that designation of critical habitat for this species is not prudent at this time, because such designation would increase the degree of threat from vandalism, collecting, or other human activities and because it is unlikely to aid in the conservation of the species.

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 activities. 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 State 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)(2) of the Act requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or 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 involvement with *Stenogyne kanehoana* is anticipated.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general prohibitions and exceptions that apply to all endangered plants. With respect to *Stenogyne kanehoana*, 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 with respect to any endangered plant, 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; maliciously damage or destroy any such species on any area under Federal jurisdiction; or remove, cut, dig up, damage, or destroy endangered plants on any other area in knowing violation of any State law or regulation or in the course of any violation of a 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 plant species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued because the species is not 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, 4401 North Fairfax Drive, room 432-ARLSQ, Arlington, Virginia 22203-3507 (703/358-2104 or FTS 921-2104; FAX 703/358-2281).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment or Environmental Impact Statement, 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

Center for Plant Conservation. 1989. Hawaiian priority A and B plants as of 27 September 1989. Jamaica Plain, Massachusetts. Unpubl. rept. 52 pp.

Hawaii Heritage Program. 1988. Element Occurrence Record for *Stenogyne kanehoana*. PDLAM1YOGO.003, dated November 17, 1988. Honolulu. Unpubl. 1 p.

Hawaii Heritage Program. 1989a. Element Occurrence Record for *Stenogyne kanehoana*. PDLAM1YOGO.005, dated February 23, 1989. Honolulu. Unpubl. 1 p.

Hawaii Heritage Program. 1989b. Element Occurrence Record for *Stenogyne kanehoana*. PDLAM1YOGO.002, dated March 1, 1989. Honolulu. Unpubl. 2 p.

Hawaii Plant Conservation Center. 1990. Accession data for *Stenogyne kanehoana*. 905053.000, dated February 22, 1990. Lawai, Kauai. Unpubl. 1 p.

Obata, J.K. 1977. Native plants: in Palmer, D.D. (ed.), Hawaiian plants—notes and news. Newslett. Hawaiian Bot. Soc. 16: 74-75.

St. John, H. (C.A. Corn, ed.). 1981. Rare endemic plants of the Hawaiian Islands. Hawaii. Dept. Land Nat. Resources. Honolulu, 74 unnum. pp.

Sherff, E.E. 1941. Additions to our knowledge of the American and Hawaiian floras. Field Mus. Nat. Hist. Bot. Ser. 22: 407-441.

Smith, C.W. 1985. Impact of alien plants on Hawaii's native biota. Pp. 180-250 in: Stone, C.P., and J.M. Scott (eds.). Hawaii's terrestrial ecosystems: preservation and management. Coop. Natl. Park Resources Stud. Unit. Univ. Hawaii, Honolulu.

Weller, S.G., and A.K. Sakai. 1990. *Stenogyne*. Pp. 831-843. in: Wagner, W.L., D.R. Herbst, and S.H. Sohmer. Manual of the flowering plants of Hawaii. Bishop Mus. Spec. Publ. 83. University of Hawaii Press and Bishop Museum Press. Honolulu.

Author

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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 the family 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>Stenogyne kanehoana</i>	None.....	U.S.A. (HI).....	E	.	466	NA NA

Dated: April 30, 1992.
 Bruce Blanchard,
 Acting Director, Fish and Wildlife Service.
 [FR Doc. 92-10906 Filed 5-12-92; 8:45 am]
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