Equipment	Operating frequency	RF Power generated by equipment (watts)	Field strength limit (uV/m)	Distance (meters)
	On or above 90 kHz	Any	300	[4]30

[1] Field strength may not exceed 10 μV/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.
[2] Reduced to the greatest extent possible.
[3] Field strength may not exceed 10 μV/m at 1600 meters. Consumer equipment is not permitted the increase in field strength otherwise permitted here for over 500 watts.
[4] Induction cooking ranges manufactured prior to February 1, 1980, shall be subject to the field strength limits for miscellaneous ISM equipment.

* * * * *

Notes

1. The tighter limit shall apply at the boundary between two frequency ranges.

2. Testing for compliance with these limits may be made at closer distances, provided a sufficient number of measurements are taken to plot the radiation pattern, to determine the major lobes of radiation, and to determine the expected field strength level at 30, 300, or 1600 meters. Alternatively, if measurements are made at only one closer fixed distance, then the permissible field strength limits shall be adjusted using 1/d as an attenuation factor.

3. In § 18.309, paragraph (a) is revised to read as follows:

§ 18.309 Frequency range of measurements.

(a) For field strength measurements:

Frequency band in which device operates (MHz)	Range of frequency measurements	
	Lowest frequency	Highest frequency
Below 1.705	Lowest frequency generated in the device, but not lower than 9 kHz.	30 MHz.
1.705 to 30	Lowest frequency generated in the device, but not lower than 9 kHz.	400 MHz.
30 to 500	Lowest frequency generated in the device or 25 MHz, whichever is lower.	Tenth harmonic or 1,000 MHz, whichever is higher.
500 to 1,000	Lowest frequency generated in the device or 100 MHz, whichever is lower.	Tenth harmonic.
Above 1,000	...do	Tenth harmonic or highest detectable emission.

* * * * *

[FR Doc. 86-10960 Filed 5-15-86; 8:45 am]
BILLING CODE 6712-01-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for Scaevola Coriacea (Dwarf Naupaka)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service determines *Scaevola coriacea* (dwarf naupaka) to be an endangered species, under the authority contained in the Endangered Species Act of 1973, as amended (Act). Populations, once prevalent throughout the major Hawaiian islands, are now limited to four small areas of State and private land in Maui County, Hawaii. The only signficant population, near Waiehu Point, is threatened by residential development. Approximately two-thirds of the plant's remaining habitat will be impacted by this development. Protective measures for the remaining plants are needed. This determination that *Scaevola coriacea* is an endangered species implements the protection provided by the Act.

EFFECTIVE DATE: The effective date of this rule is June 16, 1986.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Lloyd 500 Building, 500 N.E. Multnomah Street, Suite 1692, Portland, Oregon 97232.

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

SUPPLEMENTARY INFORMATION:

Background

Scaevola coriacea is a sparsely branched, prostrate shrub found in close proximity to the ocean. It was first collected by David Nelson in 1779, and later described by Thomas Nuttall (1843), based on specimens collected on "Atooi" (Kauai) in 1835. Its leaves are thick and succulent, light green, and about 2.5 centimeters (1 inch) in length. Cream-colored flowers, 1.9 centimeters (0.75 inch) long, may open at any time during the year. The flower is typical of the genus *Scaevola*, with a corolla split down the upper side so that it resembles half of a radially symmetrical flower that has been divided longitudinally. This is sometimes referred to as a "half-flower." The fruit is purplish black and approximately 1.3 centimeters (0.5 inch) in length, and contains 2 seed cells (Carr 1981). Single plants may cover up to 10 square meters (108 square feet) of surface area.

Sites occupied by *Scaevola coriacea* are mostly on low, consolidated sand dunes near the ocean. The habitat is relatively dry and hot. The sites receive high insolation and most of the vegetation is at or near ground level. Associated species include *Scaevola taccada* (a common, shrubby member of the same genus), *Bidens mauiensis, Nama sandwicensis, Boerhavia diffusa,* and *Lipochaeta integrifolia* (Herbst 1972).

Historically, populations of *Scaevola coriacea* were present on all the major Hawaiian islands, with Maui supporting the most extensive populations. Presently, only four small populations remain in Maui County, Hawaii: at Waiehu Point, West Maui; at Kaupo, East Maui; on the islet of Moke'ehia, off West Maui; and on the islet of Mokuho'oniki, east of Molokai. The islets are part of the Hawaiian State Seabird Sanctuary and are under the jurisdiction of the State Department of Land and Natural Resources. The Waiehu Point population is split between land in State and private ownership. The State-owned land is under the jurisdiction of the County of Maui. The Kaupo population is entirely on private land. Loss of current and suitable habitat to development represents the major threat to the species. Protection of the remaining habitat from degradation, through a cooperative State, Federal, and county effort, is needed to ensure the species' continued existence.

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. *Scaevola coriacea* was included in the Smithsonian report, the notice of review of July 1, 1975, and the proposal of June 16, 1976.

The Endangered Species 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 four 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. *Scaevola coriacea* was included in this notice as a category-1 species, indicating that existing data warranted 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. *Scaevola coriacea* was subject to this provision, so that a finding was required within one year as to whether its listing was warranted. On October 13, 1983, and again on October 12, 1984, the petition finding was made that listing *Scaevola coriacea* was warranted but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act. A proposal was published on July 16, 1985 (50 FR 28878), based on information available in 1976 and information gathered after that time and summarized in a detailed status report prepared under contract by a University of Hawaii botanist (Carr 1982). The Service now determines *Scaevola coriacea* to be an endangered species with the publication of this final rule.

Summary of Comments and Recommendations

In the July 16, 1985, proposed rule (50 FR 28878) 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. A newspaper notice that invited general public comment was published in the *Maui News* on August 18, 1985, and in the *Honolulu Star Bulletin* and the *Honolulu Advertiser* on August 21, 1985. Seven letters of comment were received and are discussed below. A public hearing was requested and held in Kahului, Maui, Hawaii on November 5, 1985. The comment period was reopened following the public hearing, closing again December 9, 1985 (50 FR 42196). Three persons testified; their testimony also is included in the following summary.

Comments were received from a U.S. Congressman, the Governor of the State of Hawaii, the Western Regional Office of the National Audubon Society, a Professor of Botany at the University of Hawaii, a landowner on whose property a part of one population of the *Scaevola* grows, and two other individuals. Testimony at the public hearing was presented by the Administrator of the Division of Forestry and Wildlife of the State Department of Land and Natural Resources, a member representing the Friends of Maui Botanical Gardens, and a private individual. All comments submitted and all testimony given at the public hearing have been considered in formulating this final rule.

Six of the seven letters of comment and all testimony at the public hearing supported listing *Scaevola coriacea* as an endangered species. In his letter of comment, the president of the company that owns several of the sand dunes at Waiehu disagreed with the Service's census of the species. He visited two of the dunes and counted over 1,000 plants on one dune in 1984 and found more than 300 on the other in 1985. The proposed rule stated that the entire known population at Waiehu consisted of approximately 300 individuals. Admittedly it is very difficult to count or to estimate population sizes because of the prostrate, creeping habit of the species. However, many botanists and interested naturalists have visited these dunes and made estimates of the population size; at least four individuals have done so between 1981 and 1985. Their estimates are fairly close and all approximate 300 plants. The company's president recommends that public lands be used to create a protected habitat for the species. Additional information was submitted in this and several of the other letters and has been incorporated into the final rule.

The University professor indicated reservations concerning the Service's failure to propose designation of critical habitat. The Service continues to believe that such designation would not be prudent in this case because of the associated risks of vandalism and collecting.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Scaevola coriacea* should be classified as an endangered species. Procedures found at 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 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 *Scaevola coriacea* Nutt. (dwarf naupaka) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Historically, *Scaevola coriacea* was present on all the major Hawaiian islands, with Maui supporting the largest populations. Presently, the species exists in only four small areas of Maui County, Hawaii: Waiehu Point, West Maui; Kaupo, East Maui; the islets of Moke'ehia off West Maui, and Mokuho'oniki, east of Molokai. The entire known population consists of approximately 350 individuals, 300 of which are found at Waiehu Point (Carr 1981). The Waiehu population may now be smaller as a result of recent urban development in that area.

The Waiehu Point population occurs on four sand dunes, both on State land, as part of Waiehu Golf Course, and on private land, owned by a realty company. The latter is presently being developed into residential lots. This action will cause loss of nearly two-thirds of the species' remaining habitat. Habitat degradation of the remaining fraction of public land by the activity of golfers off the fairway is a potential, but probably minimal, threat to the plant.

Scaevola coriacea can not compete with aggressive weedy species. Koa haole (*Leucaena leucocephala*) and other plants appear to be encroaching on some of the Waiehu habitat.

B. *Overutilization for commercial, recreational, scientific, or educational purposes. Scaevola coriacea* is subject to potential collecting and vandalism due to the accessibility of its habitat and current unprotected status. The flowering plant is attractive, is easily propagated, and has been noted as being ". . . a worthwhile plant for homes by the beach" (Degener and Greenwell 1950).

C. *Disease or Predation.* No such threats to *Scaevola coriacea* are known to occur at this time.

D. *The inadequacy of existing regulatory mechanisms.* A special permit is required to land on Mokuho' oniki islet, a State bird sanctuary. No other protection is now provided to *Scaevola coriacea.*

E. *Other natural or manmade factors affecting its continued existence.* Further reductions of the breeding population may have adverse effects on the reproductive capacity and survival ability of this species (Carr 1981).

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 *Scaevola coriacea* as endangered. The low number of individuals in the wild and the current loss of two-thirds of its remaining habitat warrant this decision. Critical habitat is not being designated at this time because of 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 a 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," *Scaevola coriacea* is potentially subject to collecting, 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. The plant currently occurs on State and private land outside Federal jurisdiction. Because publication of critical habitat descriptions would make this species more vulnerable to collecting and vandalism, without providing it with appreciable protection because of the lack of Federal involvement in the areas in which it occurs, there would be no net benefit to this species from such a designation.

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 individual. Section 6 of the Act details conditions for cooperative action between the Service and State agencies. Such actions include the establishment of conservation programs, acquisition of land, scientific research, and cooperative funding. The State of Hawaii has entered into a cooperative agreement with the Service. Since much of the remaining habitat of *Scaevola coriacea* occurs on State land, some of which is under county jurisdiction, cooperation among Federal, State, and county officials will be necessary to ensure the continued survival of the species. 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 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)(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 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 *Scaevola coriacea.*

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 an endangered species of plant, transport it in interstate or foreign commerce in the course of a commercial activity, sell it or offer it for sale in interstate or foreign commerce, or remove it and reduce it to possession from areas under Federal jurisdiction. 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. Cultivated specimens of *Scaevola coriacea* can be found at several sites in Hawaii, including the Maui Zoo and Botanical Garden and the courtyard of the Plant Science Building at the University of Hawaii. However, it is anticipated that few trade permits will ever be sought or issued since the species is not otherwise common in cultivation or in the wild. 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).

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

Carr, G.D. 1981. Unpublished status survey of *Scaevola coriacea.* U.S. Fish and Wildlife Service. Honolulu, Hawaii. 40 pp.

Degener, O., and A. Greenwell. 1950. Flora Hawaiiensis, family 340. *Scaevola coriacea.* Publ. priv. 2pp.

Herbst, D.R. 1972. Botanical survey of the Waiehu sand dunes. The Bulletin, Pacific Tropical Botanical Garden 2:6–7

Nuttall, T. 1843. Descriptions and notices of new or rare plants. Transactions of the American Philosophical Society, N.S. 8:251–272.

Author

The primary author of this final rule is Dr. Derral R. Herbst, Office of Environmental Services, U.S. Fish and Wildlife Service, 300 Ala Moana Blvd., P.O. Box 50167, Honolulu, Hawaii 96850 (808/546–7530 or FTS 546–7530).

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended 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. Amend § 17.12(h) by adding the following, in alphabetical order under the family Goodeniaceae, 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					
Goodeniaceae—Goodenia family:						
Scaevola coriacea	Dwarf naupaka	U.S.A. (HI)	E	231	NA	NA

Dated: April 24, 1986.

Susan Recce,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 86–11107 Filed 5–15–86; 8:45 am]

BILLING CODE 4310–55–M

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Endangered Status for Chrysopsis Floridana (Florida Golden Aster)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines a plant in the family Asteraceae (asters), *Chrysopsis floridana* (Florida golden aster), to be an endangered species pursuant to the Endangered Species Act of 1973 (Act), as amended. Critical habitat is not being designated. This plant is endemic to small areas of ancient dunes in Hillsborough, Manatee, and Pinellas Counties, Florida. All known colonies of the plant are on private property. *Chrysopsis floridana* is endangered by residential and commercial development of its habitat, and also by mowing, intense grazing, and heavy use of off-road vehicles. This action will implement Federal protection and recovery provisions afforded by the Act for this plant.

DATES: The effective date of this rule is June 16, 1986.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Service's Endangered Species Station Office, 2747 Art Museum Drive, Jacksonville, Florida 32207.

FOR FURTHER INFORMATION CONTACT: David J. Wesley, Endangered Species Field Supervisor, at the above address (904/791–2580 or FTS 946–2580).

SUPPLEMENTARY INFORMATION:

Background

Chrysopsis floridana was described by John K. Small in 1903 from specimens collected by S. M. Tracy at Bradenton, Manatee County, Florida, in 1901. Small subsequently collected the species at Long Key, Pinellas County, in 1921 (where it has since been extirpated), and in southern Hillsborough County in 1924. The species was not collected again until 1953. Since 1961, a number of collections have been made in southern Hillsborough County near Riverview and Ruskin. Specimens were collected west or Bradenton, Manatee County, in 1964, and in 1982 (Andre Clewell, pers. comm.) (this population was incorrectly described in the proposal as being east of Bradenton and extirpated). A population was discovered near Seminole, Pinellas County, in 1983 (R. Wunderlin and A. Burdett, pers. comm.). *Chrysopsis floridana* was included in a list of the plants of a State park in Highlands County, Florida but this report is not supported by a specimen and is almost certainly incorrect. All the known populations are on private land.

Several alternative taxonomic treatments have been proposed for *Chrysopsis floridana* and associated species. Fernald (1937) made *Chrysopsis floridana* a variety of *C. mariana.* Shinners (1951) merged the entire genus *Chrysopsis* into *Heterotheca;* Harms, in several publications, supported Shinners' view, and formally published the name *Heterotheca mariana* subspecies *floridana.* Long (1970), preferring to recognize this plant as a species, published the name *Heterotheca floridana.* In the 1970's Semple began an extensive program of taxonomic research on golden asters that resulted in the reinstatement of *Chrysopsis* as a genus. A floristic treatment of the aster family in the southeastern United States by Cronquist (1980) included *Chrysopsis floridana* in *C. scabrella,* while noting that "work in progress by John C. Semple may necessitate the revival of some names here reduced to synonomy." Semple's (1981) revision of the genus *Chrysopsis* recognized *C. floridana* as a full species.

Chrysopsis floridana is a perennial herb of the aster family. Young plants form rosettes with leaves that are covered with dense, white, short-wooly hairs. Upright stems that grow from the rosettes are 0.3–0.4 meters (1–1.5 feet) tall or taller, with closely-spaced, obovate-elliptic, hairy leaves. The leaves are nearly as large at the top of the stem as at the bottom. The flower heads are arranged in a more or less flat-topped cluster. Each head is slightly over 2.5 centimeters (1 inch) in diameter. Both the central disc and the rays are yellow. The plants grow in open, sunny areas in sand pine-evergreen oak scrub vegetation, on well-drained fine white sand. In the past, the plant also grew on beach dunes. The plant has been extirpated from much of its former range by urban development. The two largest remaining sites are in residential subdivisions where streets and utilities already exist, and where many houses have been built. Other threats are intense cattle grazing, railroad maintenance, and heavy off-road vehicle use (Wunderlin *et al.,* 1981).

Chrysopsis floridana was recognized as an endangered species by the Florida Committee on Rare and Endangered Plants and Animals in its 1979 publication on plants (Ward, 1979). In response to this project, the Service contracted for a status survey on this species by botanists from the University of South Florida. A preliminary status report was submitted in 1980 and a final report in 1981 (Wunderlin *et al.,* 1981).

Chrysopsis floridana was included as a category-1 species in a revised list of plants under review for threatened or endangered classification published in the December 15, 1980, **Federal Register** (45 FR 82480). Category 1 comprises taxa for which the Service presently has sufficient biological information to support their being proposed to be listed as endangered or threatened species.

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 listed in the December 15, 1980, notice of review were considered to be petitioned, and the deadline for a finding on those species, including *Chrysopsis floridana* was October 13, 1983. On October 13, 1983, and again on October 13, 1984, the petition finding was made that listing *Chrysopsis floridana* 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. On August 5, 1985, the Service published a proposed rule in the **Federal Register** (50 FR 31629), to list *Chrysopsis floridana* as an endangered species, constituting the next required one year finding.

Summary of Comments and Recommendations

In the August 5, 1985, proposed rule (50 FR 31629) 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, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice was published in the *Tampa Tribune* on August 23, 1985, which invited general public comment. Eight written comments were received and are discussed below.

One State agency, The Florida Natural Areas Inventory; the Pinellas County Board of County Commissioners; two garden clubs; and two garden circles supported listing. A Florida botanist did not oppose the proposal to list *Chrysopsis floridana*, but questioned the prudence of listing this weedy looking plant, an action that might provoke residential developers. He said that he would rather see other species listed first, and also suggested that recovery action could be conducted without listing. The Service responds that the Act requires listing of species to be based on the best biological and commercial data available. The Service is proceeding to list *Chrysopsis floridana*, because an excellent new taxonomic revision of the genus was available, together with up to date information on its status, and its listing priority number (see listing priority guidelines, 48 FR 43098) is higher than other candidate plants which are awaiting listing. Recovery actions are organized by the Service after a species is listed as endangered or threatened.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Chrysopsis floridana* should be classified as an endangered species. Procedures found at 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 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 *Chrysopsis floridana* Small (Florida golden aster) [synonyms: *Chrysopsis mariana* (L.) Ell. var. *floridana* (Small) Fern., *Heterotheca mariana* subsp. *floridana* (Small) Harms, and *Heterotheca floridana* (Small) Long] are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The historical range of the Florida golden aster is uncertain because new specimens were ever collected. The plant has been extirpated from most of the sites where it was collected prior to the 1970's, including Long Key (St. Petersburg Beach) and Bradenton Beach. A population reported from Manatee County in 1982 was in a "remnant sand pine scrub patch in an area that was rapidly becoming residential west of Bradenton" (Clewell, pers. comm., 1985). The Seminole area, in Pinellas County, is urban, with little or no possible habitat left for the golden aster. The five existing populations in southern Hillsborough County are all on well-drained sand soil with sand pine-evergreen oak scrub vegetation. The two largest populations are in residential subdivisions. The Florida golden aster is restricted to vacant lots, where it occupies areas of bare sand at the edges of remnants of scrub vegetation. Other populations are in scrub vegetation grazed by cattle, on an abandoned railroad embankment, and in a recently burned sand pine scrub area. At least 16 tracts of scrub vegetation near the existing populations lack *Chrysopsis floridana* (Wunderlin *et al.*, 1981). *Chrysopsis floridana* requires bare sand. Consequently, the plant benefits from limited disturbance (which can include fire, limited land clearing, grazing, and off-road vehicles), but may be destroyed by more intense, frequent, or extensive disturbance. Such disturbance, including dumping and intense off-road vehicle use, threatens the Florida golden aster. The plant does not tolerate mowing. The main threat to this plant is the loss of its habitat to residential construction as the urbanization of southern Hillsborough County progresses. The recent completion of Interstate Highway 75 from Tampa to Bradenton ensures rapid growth (Wunderlin *et al.*, 1981).

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* All populations of *Chrysopsis floridana* occur in areas that are easily accessible and near population centers. *Chrysopsis floridana* has been suggested for cultivation for planting on barrier island dunes. If such a demand develops, care will have to be taken to ensure that material is obtained from only cultivated sources (not from wild populations).

C. *Disease or predation.* Two populations found in pastures are subject to grazing by cattle. Light grazing may be beneficial or non-harmful to this species; however, heavy grazing with associated soil compaction and erosion would further threaten *Chrysopsis floridana*.

D. *The inadequacy of existing regulatory mechanisms. Chrysopsis floridana* is listed as endangered under the Preservation of Native Flora of Florida Act (Section 581.185–187, Florida Statutes), which regulates taking, transport, and the sale of plants, but does not provide habitat protection. The Hillsborough County Land Alteration and Landscaping Ordinance (Ordinance 85–29) provides limited protection to the plant's sand pine scrub habitat, but not to the plant itself. Federal listing augments these protections, and provides for development of a recovery plan for the species.

E. *Other natural or manmade factors affecting its continued existence.* Restriction to specialized habitats and small geographically limited ranges tend to intensify any adverse effects upon the populations or habitat of any rare plant. This is certainly true for *Chrysopsis floridana* and is further intensified by the loss of habitat that has already taken place.

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 *Chrysopsis floridana* as endangered. The very limited habitat and range of this plant render it highly vulnerable to residential and commercial real estate development. All the populations are on private land. Several sites where they formerly occurred have been lost and

the species is in danger of extinction. Critical habitat is not being designated for the reasons discussed in the next section.

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 *Chrysopsis floridana* at this time. Such designation would not be beneficial to *Chrysopsis floridana* since identification of critical habitat with maps and precise localities, several of them in residential neighborhoods, would increase the degree of threat from taking or vandalism. All populations of this plant occur in easily accessible sites in heavily populated areas. Appropriate landowners, county and State agencies, and Federal agencies (should any become involved in the future) will be notified of the locations of this plant and the Service will work towards protection of the sites during the recovery process. No additional notification benefits would accrue from designating critical habitat.

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 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 its critical habitat, if any is being designated. 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)(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 affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Since all presently known sites for *Chrysopsis floridana* are on private land where no Federal involvement is currently known, there will be no effect on Federal agencies from the above requirements unless the project requires a Federal permit or approval.

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. 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. It is anticipated that few trade permits will be sought or issued since this species is not common in cultivation or in the wild. *Chrysopsis floridana* might be cultivated in the future for planting on barrier island dunes. *Chrysopsis floridana* is not known at present on Federal lands, so requests for collection permits are not anticipated. 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, DC 20240 (703/235–1903).

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).

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Semple, J.C. 1981. A revision of the goldenaster genus *Chrysopsis* (Nutt.) Ell. Nom. Cons. (Compositae—Astereae). Rhodora 83(835):323–384.

Shinners, L.H. 1951. The North Texas Species of *Heterotheca* including *Chrysopsis* (Compositae). Field and Lab 19:66–71.

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Wunderlin, R., D. Richardson, and B. Hansen. 1981. *Chrysopsis floridana*. Status report prepared for U.S. Fish and Wildlife Service. Endangered Species Field Station files, Jacksonville, Florida.

Author

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List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended 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. Amend § 17.12(h) by adding the following, in alphabetical order under Asteraceae, 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					
Asteraceae—Aster family:						
Chrysopsis floridana (=*Heterotheca floridana*)	Florida golden aster	U.S.A. (FL)	E	232	NA	NA

Dated: April 18, 1986.

P. Daniel Smith,

Deputy Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 86-11108 Filed 5-15-86; 8:45 am]

BILLING CODE 4310-55-M

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for Eight Foreign Mammals, Leadbeater's Possum, etc.

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines endangered status for eight foreign mammals: Leadbeater's possum, buffy tufted-ear marmoset, southern bearded saki, large-earned hutia, little earth hutia, dwarf hutia, Cabrera's hutia, and Baluchistan bear. All occupy very restricted ranges and are jeopardized by human habitat disruption and/or direct killing. This rule implements the protection of the Endangered Species Act of 1973, as amended, for these eight mammals.

EFFECTIVE DATE: The effective date of this rule is June 16, 1986.

ADDRESS: The complete file for this rule is available for public inspection, by appointment, during normal business hours at the Service's Office of Endangered Species, Suite 500, Broyhill Building, 1000 N. Glebe Road, Arlington, Virginia.

FOR FURTHER INFORMATION CONTACT: Mr. John L. Spinks, Jr., Chief, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, DC 20240 (703/235-2771 or FTS 235-2771).

SUPPLEMENTARY INFORMATION:

Background

Whenever practical, and if there is no substantial evidence to the contrary, the Service classifies foreign mammals as endangered, pursuant to the Endangered Species Act of 1973, as amended, if such mammals are so classified in the *Red Data Books* of the International Union for Conservation of Nature and Natural Resources (IUCN). These books result from research by the IUCN Conservation Monitoring Centre in the United Kingdom, which draws upon authorities from around the world for the latest and best data on the bioconservation status of mammals. The Service and IUCN classifications are now almost in general accord, but in the most recent editions of the *Red Data Books* covering mammals (Thornback 1978, Thornback and Jenkins 1982), the following eight taxa, which were not hitherto on the U.S. List of Endangered and Threatened Wildlife, are categorized as endangered by the IUCN:

Leadbeater's possum (*Gymnobelideus leadbeateri* McCoy, 1867), a marsupial, about 150 millimeters (mm) (6 inches (in.)) in head and body length, with a tail about 200 mm (8 in.) long and flattened laterally, arboreal and nocturnal, and found in the wet forests of southeastern Australia (Nowak and Paradiso 1983);

Buffy tufted-ear marmoset (*Callithrix jacchus aurita* (E. Geoffroy, 1812), considered a full species, *C. aurita*, by IUCN), a small primate, less than 300 mm (12 in.) in head and body length and 400 mm (15 in.) in tail length, characterized by white ear tufts and black head markings, arboreal, and found in forests along the southeastern coast of Brazil (Nowak and Paradiso 1983);

Southern bearded saki (*Chiropotes satanas satanas* (Hoffmannsegg, 1807)), a primate, 360 to 520 mm (14 to 20 in.) in head and body length, with a bushy tail of about the same length, dark in color, and found in the tropical forests of Amazonian Brazil (Nowak and Paradiso 1983, Thornback and Jenkins 1982);

Large-eared hutia (*Capromys auritus* Varona, 1970), a large rodent, about 300 mm (12 in.) in head and body length, with a tail about 180 mm (7 in.) long, having harsh brown fur, arboreal, and found only in a mangrove swamp on Cayo Fragoso, an island off north-central Cuba (Hall 1981, Thornback and Jenkins 1982);

Little earth hutia (*Capromys sanfelipensis* Varona, 1970), a rodent similar to the large-eared hutia, but having a mostly reddish tail, and found in an area of low and dense vegetation on Cayo Juan Garcia off southwestern Cuba (Hall 1971, Thornback and Jenkins 1982);

Dwarf hutia (*Capromys nana* G.M. Allen, 1917), a somewhat smaller rodent that the above, about 200 mm (8 in.) in head and body length and 175 mm (7 in.) in tail length, generally reddish agouti in color, and found only in the Zapata Swamp, about 100 kilometers (62 miles) southeast of Havana, Cuba (Hall 1981, Thornback and Jenkins 1982);

Cabrera's hutia (*Capromys angelcabrerai* Varona, 1979), a rodent similar to the dwarf hutia, but having a relatively shorter tail, and found only on the Cayos de Ana Maria off south-central Cuba (Varona 1979); and

Baluchistan bear (*Ursus thibetanus gedrosianus* Blanford, 1877, considered by some authorities to belong to a separate genus, *Selenarctos*), a small subspecies of the Asiatic black bear, generally reddish brown in color, usually with a pale breast mark, and now found in the mountains of southern Pakistan and possibly southeastern Iran (Macey 1982).

Available data indicate that each of the above mammals qualifies for classification as endangered, pursuant to the Endangered Species Act. Several appear to be on the verge of extinction. As explained below, the main problems are thought to be habitat destruction and direct killing by people. In the **Federal Register** of October 25, 1985 (50 FR 43420-43423), the Service proposed to determine endangered status for each of these mammals. The proposal requested comments and information that might contribute to development of a final rule. Notifications also were sent to the governments of the nations in which the mammals occur. Only two responses were received, both supportive.

Summary of Factors Affecting the Species

After a through review and consideration of all information available, the Service has determined that the eight mammals named above should be classified as endangered. Procedures found at 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 were followed. A species may be determined to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors, and their application to the eight mammals named above, are as follows