Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
• • •	•	•	•	•		•
Fabaceae—Pea family:						
• • •	•	•	•	•		•
Clitoria fragrans	Pigeon wings	U.S.A. (FL)	T	500	NA	NA
Crotalaria avonensis	Avon Park harebells	U.S.A. (FL)	E	500	NA	NA
• • •	•	•	•	•		•
Polygalaceae—Milkwort family:						
• • •	•	•	•	•		•
Polygala lewtonii	Lewton's polygala	U.S.A. (FL)	E	500	NA	NA
• • •	•	•	•	•		•
Polygonaceae—Buckwheat family:						
• • •	•	•	•	•		•
Eriogonum longifolium var. *gnaphalifolium* (=*Eriogonum floridanum*).	Scrub buckwheat	U.S.A. (FL)	T	500	NA	NA
• • •	•	•	•	•		•
Polygonella myriophylla	Sandlace	U.S.A. (FL)	E	500	NA	NA
• • •	•	•	•	•		•

Dated: April 8, 1993.

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

[FR Doc. 93–9748 Filed 4–26–93; 8:45 am]

BILLING CODE 4310–55–M

50 CFR Part 17

RIN 1018–AB83

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for Three Puerto Rican Plants

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines *Aristida chaseae, Lyonia truncata* var. *proctorii* and *Vernonia proctorii* to be endangered species pursuant to the Endangered Species Act (Act) of 1973, as amended. These plants, including two shrubs and one grass species, are endemic to Puerto Rico, and all are restricted to the southwestern part of the island. With the exception of one site on the Cabo Rojo National Wildlife Refuge, the habitat of all three species is threatened with modification and loss due to various types of development. *Aristida chaseae* may also be affected by competition from introduced grass species. This final rule will implement the Federal protection and recovery provisions afforded by the Act for *Aristida chaseae, Lyonia truncata* var. *proctorii* and *Vernonia proctorii.*

EFFECTIVE DATE: May 27, 1993.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours, at the Caribbean Field Office, U.S. Fish and Wildlife Service, P.O. Box 491, Boquerón, Puerto Rico 00622; and at the Service's Southeast Regional Office, suite 1282, 75 Spring Street, SW., Atlanta, Georgia 30303.

FOR FURTHER INFORMATION CONTACT: Ms. Susan Silander at the Caribbean Field Office address (809/851–7297) or Mr. Dave Flemming at the Atlanta Regional Office address (404/331–3580).

SUPPLEMENTARY INFORMATION:

Background

Aristida chaseae (no common name) was discovered by Agnes Chase near Boquerón in 1913. It was known only from the type collection for many years, until it was discovered by Paul McKenzie in 1987 on the Cabo Rojo National Wildlife Refuge. This new population, which contains from 150 to 175 plants, is approximately 8 km to the south of the type locality. The species apparently has been eliminated from the type location, possibly as a result of competition from vigorous, introduced grass species (McKenzie et al. 1989; Proctor 1991).

Later in 1987, McKenzie and Dr. George Proctor located a third population on the rocky, exposed upper slopes of Cerro Mariquita in the Sierra Bermeja, a range of hills also found within the municipality of Cabo Rojo. This range of hills is the oldest geologic formation in Puerto Rico and is known for its high plant endemism. Additional localities on ridges to the west within the Sierra Bermeja were found in 1988. In these hills, it occurs at elevations between 150 and 300 meters (McKenzie et al. 1989; Proctor 1991).

Aristida chaseae is a perennial grass with densely tufted, wide-spreading culms which may reach from 50 to 60 cm in length. The leaf blades are involute, 2 to 3 mm wide and 10 to 15 mm long. The panicles are narrow and may be from 10 to 15 cm in length. The glumes are equal, 10 to 13 mm long and acuminate or awn-tipped. The lemma is approximately 12 mm long, narrowed at the summit but scarcely beaked and scaberulous of the upper half. The callus is 1 mm long and densely pilose. The awns are equal, somewhat

divergent, flat at the base, not contorted except with age and approximately 2 cm long.

Lyonia truncata var. *proctorii* was discovered in September of 1987 by Dr. George Proctor and described by Dr. Walter Judd in 1990 (Judd 1990). It is only known from the type locality, the upper slopes and summits of Cerro Mariquita (elevations of 250 to 300 m) in the Sierra Bermeja. Approximately 63 individual plants have been reported from two locations: 18 to the northwest of the summit and 45 just to the east of the summit (Proctor 1991).

Lyonia truncata var. *proctorii* is an evergreen shrub which may reach up to 2 meters in height. The leaves are alternate, elliptic to ovate, coriaceous, and from 0.9 to 4.5 cm long and 0.4 to 2.3 cm wide. The leaf margins may be toothed and the lower surface is sparsely to moderately lepidote and moderately to densely pubescent. The inflorescences are fasciculate with from 2 to 15 flowers. Pedicels are from 2 to 5 mm in length and sparsely pubescent. Flowers are small (0.7 to 1.6 mm in length), white, and urn-shaped. The fruit is a dry capsule, 3 to 4.5 mm in length and 2.5 to 4 mm in width, sparsely pubescent, and contain seeds approximately 2.5 mm in length.

Vernonia proctorii was discovered in September of 1987 by Dr. George Proctor, Dr. Horst Haneke and Paul McKenzie. It is known to occur only on the summit of Cerro Mariquita in the Sierra Bermeja of southwestern Puerto Rico at elevations between 270 and 300 meters. Plants are scattered throughout a scrub woodland which covers several acres. The population has been estimated at approximately 950 individual plants at this one known location (Proctor 1991).

Vernonia proctorii is a small erect shrub which may reach a height of 1.5 meters. The stems and trunk are densely pubescent with silvery uniseriate hairs and with a knobby appearance due to the persistent petiole bases. Leaves are alternate, ovate to orbicular, subsessile or with the petioles appressed to the stem, and from 1.5 to 3.5 cm long and 1.0 to 2.6 cm wide. The upper blade surface is green to olive-green and moderately strigose with scattered glistening globular trichomes. The lower surface is grayish-green, sometimes becoming rusty with age, and densely sericeous. The leaf margins are densely ciliate with silvery hairs. Flowers are borne in terminal clusters of 2 to 5 heads, each approximately 3 mm in length, and bright purple in color. Achenes are from 2 to 3 mm long and sericeous with silvery hairs.

Aristida chaseae, *Lyonia truncata* var. *proctorii* and *Vernonia proctorii* were recommended for listing by Dr. George Proctor during a September 1988 meeting concerning the revision of the candidate plant species list in Puerto Rico and the U.S. Virgin Islands. They were subsequently included as category 1 species (species for which the Service has substantial information supporting the appropriateness of proposing to list them as endangered or threatened) in the notice of review for plants published February 21, 1990 (55 FR 6184). A proposal to list the three species as endangered was published in the **Federal Register** of September 3, 1992 (57 FR 40429).

Summary of Comments and Recommendations

In the September 3, 1992, proposed rule and associated notifications, all interested parties were requested to submit factual reports of information that might contribute to the development of a final rule. Appropriate agencies of the Commonwealth of Puerto Rico, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice inviting general comment was published in the San Juan Star on September 20, 1992, and in El Día on October 2, 1992. Nine letters of comment were received and are discussed below. A public hearing was neither requested nor held.

The Cabo Rojo National Wildlife Refuge, Fish and Wildlife Service, supported the listing of the three species. The Refuge biologist indicated that *Aristida chaseae*, found on the Refuge, was apparently suffering from the effects of competition from exotic vegetation.

Four letters were received from different areas within the Puerto Rico Department of Natural Resources that supported the listing of the three species. The Forest Service area of the Department expressed interest in the propagation of the species. Two letters originating from the Research area recommended that *Aristida chaseae* and *Lyonia truncata* var. *proctorii* be listed as threatened rather than endangered. The Department's primary response, however, emphasized the threat to the species' habitat, stating that the high scenic value of the area would attract developers and that current zoning regulations did not provide strong protection to the range of hills. The Service believes that development is a significant threat and that considering the highly restricted distribution of these species, a classification of endangered is more appropriate than threatened.

The Department of Biology of the University of Puerto Rico, Mayaguez Campus, supported the listing of the three species, emphasizing the threat that development poses to the Sierra Bermeja. Both the "Servicios Cientificos y Tecnicos" of Puerto Rico (Scientific and Technical Services), in two letters, and The Conservation Agency in Rhode Island provided letters of support for the listing of the species as endangered. The latter also recommended the designation of critical habitat. The Service's reasons for not designating critical habitat are discussed in detail under a subsequent section of this rule.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that these species should be classified as 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 endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Aristida chaseae* Hitchcock, *Lyonia truncata* Urban var. *proctorii* Judd, and *Vernonia proctorii* Urbatsch are as follows:

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

All three species are found on privately owned land currently subject to intense pressure for agricultural, rural and tourist development. The land is currently being cleared for grazing by cattle and goats. Adjacent land is being subdivided for sale in small farms, some destined for tourist and urban developments. Only *Aristida chaseae* occurs outside of the Sierra Bermeja, on the nearby Cabo Rojo National Wildlife Refuge, where the population occurs within and along a little used roadway.

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

Taking for these purposes has not been a documented factor in the decline of these species.

C. Disease or Predation

Disease and predation have not been documented as factors in the decline of these species.

D. The Inadequacy of Existing Regulatory Mechanisms

The Commonwealth of Puerto Rico has adopted a regulation that recognizes and provides protection for certain Commonwealth listed species. However, *Aristida chaseae, Lyonia truncata* var. *proctorii* and *Vernonia proctorii* are not yet on the Commonwealth list. Federal listing would provide immediate protection and, if the species are ultimately placed on the Commonwealth list, enhance their protection and possibilities for funding needed research.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

One of the most important factors affecting the continued survival of these species is their limited distribution. Because so few individuals are known to occur in a limited area, the risk of extinction is extremely high. Wildfires are a frequent occurrence in this extremely dry portion of southwestern Puerto Rico. McKenzie et al. (1989) indicate that *Aristida chaseae* may have once extended throughout sandy coastal areas and rocky hillsides in southwestern Puerto Rico, but that competition from vigorous, introduced grasses such as *Brachiaria subquadripara* may have eliminated the species from the majority of this area.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to make this rule final. Based on this evaluation, the preferred action is to list *Aristida chaseae, Lyonia truncata* var. *proctorii* and *Vernonia proctorii* as endangered. *Lyonia truncata* var. *proctorii* and *Vernonia proctorii* are known to occur only on the upper slopes and ridges of the Sierra Bermeja. *Aristida chaseae* is currently known from only two areas. Deforestation for rural, agricultural, and tourist development are imminent threats to the survival of the species. *Aristida chaseae* appears to be threatened also by competition from introduced grasses. Therefore, endangered rather than threatened status seems an accurate assessment of the species' condition. The reasons for not proposing critical habitat for these species are discussed below in the "Critical Habitat" section.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary propose critical habitat at the time the species is proposed to be endangered or threatened. The Service's regulations (50 CFR 424.12(a)) state that designation of critical habitat is not prudent when one or both of the following situations exist: (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of such threat to the species, or (2) such designation of critical habitat would not be beneficial to the species.

The Service finds that designation of critical habitat is not prudent for these species. The number of individuals of *Aristida chaseae, Lyonia truncata* var. *proctorii* and *Vernonia proctorii* is sufficiently small that vandalism and collection could seriously affect the survival of the species. Taking is an activity that is difficult to control, and it is only regulated by the Act with respect to endangered plants in cases of (1) removal and reduction to possession of these plants from lands under Federal jurisdiction, or their malicious damage or destruction on such lands; and (2) removal, cutting, digging up, or damaging or destroying these plants in knowing violation of any State law or regulation, including State criminal trespass law. Publication of critical habitat descriptions and maps in the **Federal Register** would only increase the likelihood of such activities and would not provide offsetting benefits. No Federal involvement outside of the Cabo Rojo National Wildlife Refuge is known or anticipated at this time. The Service believes that any future Federal involvement in the areas where these plants occur can be identified without the designation of critical habitat. All involved parties and landowners have been notified of the location and importance of protecting these species' habitat. Protection of these species' habitat will also be addressed through the recovery process and through the section 7 jeopardy standard.

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, Commonwealth, and private agencies, groups and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the Commonwealth, 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 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) 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 critical habitat is being proposed for these three species, as discussed above. Federal involvement is anticipated only for the population of *Aristida chaseae* located on the Cabo Rojo National Wildlife Refuge.

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. 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 any endangered plant, transport it in interstate or foreign commerce in the course of commercial activity, sell or offer it for sale in interstate or foreign commerce, or remove it from areas under Federal jurisdiction and reduce it to possession. In addition, for endangered plants, the 1988 amendments (Pub. L. 100–478) to the Act prohibit the malicious damage or destruction on Federal lands and the removal, cutting, digging up, or damaging or destroying of endangered plants in knowing violation of any Commonwealth law or regulation, including Commonwealth criminal trespass law. Certain exceptions can apply to agents of the Service and Commonwealth 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 for these three species will ever be sought or issued, since the species are not known to be in cultivation and are uncommon in the wild. Requests for

copies of the regulations on listed plants and inquiries regarding prohibitions and permits should be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, room 432, Arlington, Virginia 22203 (703/358–2104).

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

Judd, W.S. 1990. A new variety of *Lyonia* (Ericaceae) from Puerto Rico. Jour. Arnold Arb. 71:129–133.

McKenzie, P.M., R.E. Noble, L.E. Urbatsch, and G.R. Proctor. 1989. Status of *Aristida* (Poaceae) in Puerto Rico and the Virgin Islands. Sida 13(4):423–447.

Proctor, G.R. 1991. Status report on *Aristida chaseae* Hitchcock. *In* Publicación Científica Miscelánea No. 2, Departamento de Recursos Naturales de Puerto Rico. 196 pp.

Proctor, G.R. 1991. Status report on *Lyonia truncata* Urban var. *proctorii* Judd. *In* Publicación Científica Miscelánea No. 2, Departamento de Recursos Naturales de Puerto Rico. 196 pp.

Proctor, G.R. 1991. Status report on *Vernonia proctorii* Urbatsch. *In* Publicación Científica Miscelánea No. 2, Departamento de Recursos Naturales de Puerto Rico 196 pp.

Author

The primary author of this proposed rule is Ms. Susan Silander, Caribbean Field Office, U.S. Fish and Wildlife Service, P.O. Box 491, Boquerón, Puerto Rico 00622 (809/851–7297).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Regulations 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 Asteraceae, Ericaceae and Poaceae, 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:						
• • •		•	•	•	•	•
Vernonia proctorii	None	U.S.A. (PR)	E	501	NA	NA
• • •		•	•	•	•	•
Ericaceae—Heath family:						
• • •		•	•	•	•	•
Lyonia truncata var. *proctorii.*	None	U.S.A. (PR)	E	501	NA	NA
• • •		•	•	•	•	•
Poaceae—Grass family:						
• • •		•	•	•	•	•
Aristida chaseae	None	U.S.A. (PR)	E	501	NA	NA
• • •		•	•	•	•	•

Dated: April 9, 1993.

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

[FR Doc. 93–9749 Filed 4–26–93; 8:45 am]

BILLING CODE 4310–55–P

50 CFR Part 17

RIN 1018–AB56

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Duskytail Darter, Palezone Shiner and Pygmy Madtom

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service determines endangered status for three fishes—the duskytail darter (*Etheostoma* (*Catonotus*) sp.), palezone shiner (*Notropis* sp., cf. *procne*), and pygmy madtom (*Noturus stanauli*)—under the Endangered Species Act of 1973, as amended (Act). The duskytail darter is presently known to inhabit only five short stream reaches—the Little River, Blount County, Tennessee; Citico Creek, Monroe County, Tennessee; Big South Fork Cumberland River, Scott County, Tennessee; and Copper Creek and Clinch River, Scott County, Virginia. Two other historic duskytail darter populations are extirpated. The palezone shiner is presently known from only two stream