

CANDIDATE ASSESSMENT AND LISTING PRIORITY ASSIGNMENT FORM

SCIENTIFIC NAME: Calypttranthes estremerae

COMMON NAME: no common name

LEAD REGION: 4

INFORMATION CURRENT AS OF: February 21, 2003

STATUS/ACTION (Check all that apply):

New candidate

Continuing candidate

Non-petitioned

Petitioned - Date petition received: ____

90-day positive - FR date: ____

12-month warranted but precluded - FR date: ____

Is the petition requesting a reclassification of a listed species?

Listing priority change

Former LP: ____

New LP: ____

Latest date species first became a Candidate: _____

Candidate removal: Former LP: ____ (Check only one reason)

A - Taxon more abundant or widespread than previously believed or not subject to a degree of threats sufficient to warrant issuance of a proposed listing or continuance of candidate status.

F - Range is no longer a U.S. territory.

M - Taxon mistakenly included in past notice of review.

N - Taxon may not meet the Act's definition of *Aspecies*.@

X - Taxon believed to be extinct.

ANIMAL/PLANT GROUP AND FAMILY: Plant - Myrtaceae

HISTORICAL STATES/TERRITORIES/COUNTRIES OF OCCURRENCE: Puerto Rico

CURRENT STATES/COUNTIES/TERRITORIES/COUNTRIES OF OCCURRENCE: Puerto Rico

LEAD REGION CONTACT (Name, phone number): Lee Andrews, 404/679-7217

LEAD FIELD OFFICE CONTACT (Office, name, phone number): Boquerón, Puerto Rico Field Office, Jorge Saliva, 787/851-7297.

BIOLOGICAL INFORMATION (Describe habitat, historic vs. current range, historic vs. current population estimates (# populations, #individuals/population), etc.):

William Estremera discovered Calypttranthes estremerae in the area of Camuy, Puerto Rico, and described it in 1985. It is a small tree, reaching 10 to 15 meters in height. Young twigs are

compressed and glandular-punctate. Leaves are elliptic, broadly elliptic or suborbicular, from 7 to 10 centimeters (cm) (2.7 to 3.9 inches) long and 5 to 5.7 cm (1.9 to 2.2 inches) broad, rounded at the apex and rounded or obtuse at the base. Leaves are also glandular-punctate on both surfaces and chartaceous. Inflorescences are 2 to 4, panicate with peduncle up to 6 cm in length. The flowers are white and the fruit unknown (Liogier 1994).

This endemic tree was originally known only from the area of the Cavernas de Camuy (Camuy Caves) in northwestern Puerto Rico. Several individuals are known from the recreation area adjacent to the Caves (Estremera, personal communication 1999). An individual was later reported from the Río Abajo Commonwealth Forest, in northern Puerto Rico. During the Biological Assessment conducted for the construction of Highway 10 through the Río Abajo Commonwealth Forest, an additional four individuals in two groups were located. All four trees were small, approximately 2 meters (6.6 feet) in height. All four individuals were to be affected by the construction of the highway. One was transplanted and still survives in the Puerto Rico Department of Natural and Environmental Resource nursery (Vida, personal communication 1999, Puerto Rico Highway and Transportation Authority 1994).

All individuals occur within the subtropical moist forest life zone, the most extensive life zone in Puerto Rico, overlying a limestone substrate. Those individuals at the Cavernas de Camuy occur in an area that was previously disturbed by the development of the recreation area. The Río Abajo Commonwealth Forest is located in the municipalities of Utuado and Arecibo. The Forest has very irregular topography, subterranean drainage, caves, natural depressions or sinkholes and haystack hills or Amogotes@typical of karst geological formation. Mean annual precipitation is approximately 200 cm (78 inches). Soils are limestone derived and well drained. The vegetation has been described as semi-evergreen and deciduous forest (Department of Natural Resources 1976).

THREATS (Describe threats in terms of the five factors in section 4 of the ESA providing specific, substantive information. If this is a removal of a species from candidate status or a change in listing priority, explain reasons for change.):

A. The present or threatened destruction, modification, or curtailment of its habitat or range.

Four individuals were eliminated for the construction of Highway 10 through the Río Abajo Commonwealth Forest, one of which was transplanted in the Department of Natural and Environmental Resources= nursery. It was to be transplanted during 1999 to a suitable site. While several individuals remain at the Cavernas de Camuy, they are located in an area of the facilities where any expansion might result in their elimination. Additional facilities, such as a hotel, have recently been proposed for development in the Río Abajo Commonwealth Forest, despite its public ownership.

B. Overutilization for commercial, recreational, scientific, or educational purposes.

These factors have not been documented as threats to the species.

C. Disease or predation.

Neither disease nor predation has been documented as threats to the 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, Calyptranthes estremerae is not yet on this list. Federal listing would provide some level of immediate protection under the Endangered Species Act. By virtue of an existing cooperative agreement with the Commonwealth under section 6 of the Endangered Species Act, Federal listing will also ensure the addition of this species to the Commonwealth list. The Río Abajo Commonwealth Forest does not currently have a management plan that considers the protection of this species.

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

One of the most important factors affecting the continuing survival of this species is its limited distribution. Less than ten individuals are currently known. Because so few individuals are known, the risk of extinction is extremely high. Catastrophic natural events, such as significant hurricanes, may dramatically affect forest species composition and structure, felling large trees and creating numerous canopy gaps.

FOR RECYCLED PETITIONS:

- a. Is listing still warranted? ____
- b. To date, has publication of a proposal to list been precluded by other higher priority listing actions? ____
- c. Is a proposal to list the species as threatened or endangered in preparation? ____
- d. If the answer to c. above is no, provide an explanation of why the action is still precluded.

LAND OWNERSHIP (Estimate proportion Federal/state/local government/private, identify non-private owners):

Both the Cavernas de Camuy and the Río Abajo Commonwealth Forest are publicly owned and managed by the Commonwealth of Puerto Rico, the former by the Compañía de Fomento Recreativo and the latter by the Department of Natural and Environmental Resources.

PRELISTING (Describe status of conservation agreements or other conservation activities):

Surveys of the distribution and abundance of Calypttranthes estremerae have been conducted. The removal of one individual from the wild to the nursery was successful. The results of its transplanting have not been documented.

REFERENCES (Identify primary sources of information (e.g., status reports, petitions, journal publications, unpublished data from species experts) using formal citation format):

Department of Natural Resources. 1976. The Master Plan for the Commonwealth Forests of Puerto Rico. Department of Natural Resources, San Juan, Puerto Rico. 259 pp.

Liogier, H. A. 1994. Descriptive flora of Puerto Rico and adjacent islands. Volume III. Cyrillaceae to Myrtaceae. Editorial de la Universidad de Puerto Rico. Rio Piedras, Puerto Rico. 461 pp.

Puerto Rico Highway and Transportation Authority. 1994. Biological Assessment for the Relocation of Highway #10, Utuado, Puerto Rico. San Juan, Puerto Rico.

LISTING PRIORITY (place * after number)

THREAT

Magnitude	Immediacy	Taxonomy	Priority
High	Imminent	Monotypic genus	1
		Species	2
		Subspecies/population	3
	Non-imminent	Monotypic genus	4
		Species	5*
		Subspecies/population	6
Moderate to Low	Imminent	Monotypic genus	7
		Species	8
		Subspecies/population	9
	Non-imminent	Monotypic genus	10
		Species	11
		Subspecies/population	12

Rationale for listing priority number:

Magnitude and Imminence: *Calyptanthes estremerae* is currently known from two locations under Commonwealth jurisdiction: the Cavernas de Camuy Recreational Area and the Río Abajo Commonwealth Forest. Although less than ten individuals of *C. estremerae* are known to occur, the individuals within the Río Abajo Commonwealth Forest seem adequately protected because potential development projects within this forest require measures that protect listed and critical species, and provide habitat for future introduction of listed species (e.g., Puerto Rican parrot, *Amazona vittata*). Also, unlike other plant species, transplanting of this species has been successful, therefore the threat of development may be reduced with a sound transplanting program. Additionally, the moist forest life zone habitat where this species occur is the most extensive life zone in Puerto Rico and a large portion of it has not been surveyed to determine if *C. estremerae* is found outside known locations. Based on the non-imminent threat to *C. estremerae*, a Listing Priority of 5 was assigned.

APPROVAL/CONCURRENCE: Lead Regions must obtain written concurrence from all other Regions within the range of the species before recommending changes to the candidate list, including listing priority changes; the Regional Director must approve all such recommendations. The Director must concur on all additions of species to the candidate list, removal of candidates, and listing priority changes.

Approve: Linda Kelsey March 14, 2003
Acting Regional Director, Fish and Wildlife Service Date

Concur: _____
Director, Fish and Wildlife Service Date

Do not concur: _____
Director, Fish and Wildlife Service Date

Director's Remarks:

-

-

Date of annual review: February 21, 2003

Conducted by: Jorge E. Saliva - Boquerón, Puerto Rico FO

Comments:

-

-

-