

5-YEAR REVIEW

Short Form Summary

Species Reviewed: *Pritchardia schattaueri* (loulou)

Current Classification: Endangered

Federal Register Notice announcing initiation of this review:

[USFWS] U.S. Fish and Wildlife Service. 2023. Endangered and Threatened Wildlife and Plants; Initiation of 5-Year Status reviews for 133 Species in Oregon, Washington, Idaho, Montana, California, Hawaii, Guam, and the Northern Mariana Islands. Federal Register 88(56): 17611–17614, March 23, 2023.

Lead Region/Field Office:

Region 1/Pacific Islands Fish and Wildlife Office (PIFWO), Honolulu, Hawai'i

Name of Reviewer:

Daniel Adamski, Biologist, PIFWO

Lauren Weisenberger, Plant Recovery Coordinator, PIFWO

Megan Laut, Recovery Program Manager, PIFWO

Methodology used to complete this 5-year review:

This review was conducted by staff of the Pacific Islands Fish and Wildlife Office (PIFWO) of the U.S. Fish and Wildlife Service (Service) beginning in October 2023. The review was based on a review of current, available information since the last 5-year review for *Pritchardia schattaueri* (USFWS 2020). The evaluation by Daniel Adamski, Biologist, was reviewed by Lauren Weisenberger, Plant Recovery Coordinator, and Megan Laut, Recovery Program Manager.

Background:

For information regarding the species' listing history and other facts, please refer to the Fish and Wildlife Service's Environmental Conservation On-line System (ECOS) database for threatened and endangered species (<http://ecos.fws.gov/ecp/species/7374>).

Review Analysis:

Please refer to the previous 5-year reviews for *Pritchardia schattaueri* published in the Federal Register on June 2, 2009 (available at https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/1375.pdf), and on August 6, 2015 (available at https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/2280.pdf), and on September 30, 2020 (available at https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/3176.pdf), for a complete review of the species' status, threats, management efforts, and references cited. We are not aware of any significant new information regarding the species' biological status since listing to warrant a change in the Federal listing status of *Pritchardia schattaueri*.

This long-lived perennial tree in the Arecaceae (palm) family is endangered and found on the island of Hawai‘i. The status and trends for *Pritchardia schattaueri* are provided in the tables below.

New Status Information:

- Currently, there are 12 wild individuals of *Pritchardia schattaueri* in one population in the South Kona area on the island of Hawai‘i (Plant Extinction Prevention Program [PEPP] 2024).
- Currently, there are 10 founder lines represented in *ex situ* storage and propagation collections, including plants in a nursery or living collection (National Tropical Botanical Garden [NTBG] 2025; Volcano Rare Plant Facility [VRPF] 2024).

New Threats:

- Coconut rhinoceros beetle (CRB). CRB is a highly destructive beetle that feeds on growing leaves of palm trees and is native to Southeast Asia. It uses its large horn and legs to dig into the crown of palm trees and can cause destruction of the tree (Big Island Invasive Species Committee [BIISC] 2025). At least 23 adult beetles have been detected near the Kona Airport and surrounding area in 2025 (BIISC 2025).

New Management Actions:

- Monitoring and surveys—PEPP surveys historic locations and monitors the current population of *Pritchardia schattaueri* (PEPP 2024).
- Ungulate monitoring and control—PEPP monitors fences and excludes ungulates from fences protecting reintroduced populations (PEPP 2024).
- CRB control—BIISC controls and traps CRB around known infestation areas and Kona Airport (BIISC 2025).
- Collection and propagation for genetic storage and reintroduction—
 - VRPF reports 53 individuals in cultivation representing 10 founders (USAG 2024).
 - NTBG reports 12 individual plants in living collection at Southshore Garden (NTBG 2025).
- Translocations—Between 2003 and 2016, there were over 400 individuals reintroduced at four locations, however, the current status of those plants is unknown (VRPF 2024). From 2016 through 2019, an additional 188 individuals were introduced to State-owned and privately managed land, but no monitoring has been reported since the initial plantings. Currently, there are at least 47 individual outplants at two locations, planted in 2022 and 2023 (VRPF 2024).

Table 1. Status and trends of *Pritchardia schattaueri* from listing through current 5-year review. Table 1a shows progress according to Interim Stabilization Goals; Table 1b shows progress according to Preventing Extinction Goals.

Table 1a.

Date	No. wild individuals	No. Outplanted	Stability Goals identified in Recovery Plan	Stability Goals Completed?
1996 (Listing)	12	> 122 in 1993 10 in 1996	All threats managed in the 3 populations	Partially
			Complete genetic storage	Partially
			3 populations with 25 individuals each	No
2009 (5-year review)	12	109	All threats managed in the 3 populations	Partially
			Complete genetic storage	Partially
			3 populations with 25 individuals each	Partially
2015 (5-year review)	12	518	All threats managed in the 3 populations	Partially
			Complete genetic storage	Partially
			3 populations with 25 individuals each	Partially

Table 1b.

Date	No. wild individuals	No. outplanted	*Preventing Extinction Targets identified by HPPRCC	*Preventing Extinction Targets Completed?
2020 (5-year review)	12	Unknown (ca 288 planted)	All threats managed in all 3 populations	Partially
			Reproduction (i.e., viable seeds, seedlings, saplings) at all 3 populations	Yes, viable seeds
			Complete genetic storage	Yes
			3 populations with 25 mature individuals each	No
2025 (5-year review)	12	635 planted, at least 47 remain	All threats managed in all 3 populations	Partially
			Complete genetic storage	Almost (10 of 12 represented)
			Reproduction (i.e., viable seeds, seedlings, saplings) at all 3 populations	Partial, viable seeds, not recruitment
			3 populations with 25 mature individuals each	No

* The Preventing Extinction Stage was established in 2011. Prior to 2011, the Interim Stabilization Stage was the first stage towards recovery (now it is the second stage after Preventing Extinction).

Table 2. Threats to *Pritchardia schattaueri* and ongoing conservation efforts.

Threat	Listing factor	Current Status	Conservation/ Management Efforts
Ungulate destruction and degradation of habitat	A	Ongoing	Partial, small exclosure
Established ecosystem altering invasive plant species degradation of habitat	A, E	Ongoing	Nonnative plant control at reintroduction site
Agriculture and urban development	A	Ongoing	None
Lava flows destruction and degradation of habitat	A	Potential	None
Climate change degradation and loss of habitat	A	Ongoing	None
Illegal collection for horticulture trade	B	Ongoing	None
Ungulate predation and herbivory	C	Ongoing	Partial, small exclosure
Rodent predation and herbivory	C	Ongoing	None
Invertebrate predation and herbivory	C	Potential	None
Coconut rhinoceros beetle (CRB)	C	Ongoing	Trapping, HDOA rules, and BIISC management
Lack of adequate hunting regulations	D	Ongoing	Partial, small exclosure
Low numbers and small, fragmented population	E	Ongoing	Partial, collection, propagation, and reintroduction

Synthesis:

Currently there are 12 wild individuals of *Pritchardia schattaueri* on the island of Hawai‘i. Individuals are provided protection from ungulates by fencing and nonnative plant control. Plant cutting collections, propagation, and reintroductions are ongoing.

Stabilizing (interim) targets, and Downlisting and Delisting criteria are provided in the Addendum to the Recovery Plan for the Big Island Plant Cluster (USFWS 1998), and recovery objective guidelines developed by the Hawai‘i and Pacific Plants Recovery Coordinating Committee (HPPRCC 2011). The HPPRCC identifies an additional initial objective, the Preventing Extinction Stage, in addition to the Interim Stabilization, Delisting, and Downlisting objectives. Furthermore, life history traits such as breeding system, population size fluctuation or decline, and reproduction type (sexual or vegetative), have been included in the calculation of goals for the number of populations and reproducing individuals for each stage. The goals for each stage remain grouped by

life span defined as annual, short-lived perennial (fewer than 10 years), or long-lived perennial.

Pritchardia schattaueri is a long-lived perennial tree. To prevent extinction, which is the first milestone in recovering the species, the taxon must be managed to control threats (e.g., fenced) and have 50 individuals (or the total number of individuals if fewer than 50 exist) from each of three populations represented in *ex situ* (secured off-site, such as a nursery or seed bank) collections that are well managed. In addition, a minimum of a total of three populations should be documented on the island of Hawai‘i, where they now occur or occurred historically and each of these populations must be naturally reproducing (i.e., viable seeds, seedlings) with a minimum of 25 mature, reproducing individuals per population.

The preventing extinction goals for this species have not been met (Table 1). There are only 12 wild individuals, all threats are not being managed, although genetic storage is almost complete (Table 2). Therefore, *Pritchardia schattaueri* meets the definition of Endangered as it remains in danger of extinction throughout its range.

Recommendations for Future Actions:

No significant new information regarding the species’ biological status has been reported since the last 5-year review in 2020. Thus, the following recommendations for future actions are updated or reiterated for the 5-year review for 2025.

- Surveys and monitoring—
 - Continue to monitor known populations of *Pritchardia schattaueri* to assess resiliency and make collections.
 - Continue surveys for populations of *Pritchardia schattaueri* in areas of potentially suitable habitat.
 - Determine suitable locations for reintroductions.
- Ungulate monitoring and control—Maintain fenced exclosures and construct new fences to protect individuals from the negative impacts of browsing by ungulates.
- Invasive nonnative plant monitoring and control—Control established ecosystem-altering nonnative invasive plant species, and those that compete with *Pritchardia schattaueri*.
- Site and habitat protection—
 - Develop and implement effective control measures to reduce the impacts of destruction by agriculture and urban development, lava flows, and illegal collections.
 - Develop and implement effective control measures to reduce the impact of invasive invertebrate predation.
 - Continue to implement control and trapping of CRB.
- Rodent prevention and control—Develop and implement effective control measures for rodents.
- Climate change adaptation strategy—Research suitability of habitat for viability of species, including where to conduct translocations in the future due to the impacts of climate change.

- Captive propagation for genetic storage and reintroduction—Continue to maintain collection and propagation efforts for maintenance of genetic stock and for reintroduction.
- Build resiliency, redundancy, and representation—Increase species' viability through habitat restoration, threat control, and reintroduction and translocation into suitable habitat that is being managed for known threats to this species to reduce impacts of reduced viability due to low numbers.
- Research—Conduct genetic studies to determine genetic variation within the population (and between populations) and plan an effective breeding program.
- Alliance and partnership development—Continue to work with partners and other land managers in planning and implementation of ecosystem-level restoration and management to benefit this species.

References:

- [BIISC] Big Island Invasive Species Committee. 2025. <https://www.biisc.org/pest/coconut-rhinoceros-beetle/>. Accessed 12 AUG 2025.
- [HPPRCC] Hawai'i and Pacific Plants Recovery Coordinating Committee. 2011. Revised recovery objective guidelines. 8 pp.
- [NTBG] National Tropical Botanical Garden. 2025. Report on controlled propagation of listed species, as designated under the U.S. Endangered Species Act. Unpublished report submitted to the U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawai'i.
- [PEPP] 2024. Plant Extinction Prevention Program FY 2023 annual report Oct 1, 2023-Sep 30, 2024), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F14AC00174, December 24, 2016, UH Mānoa, PCSU, PEPP. 56 pp.
- [USFWS] U.S. Fish and Wildlife Service. 1998. Addendum to Recovery plan for the Big Island plant cluster. Portland. 69 pp. + appendices.
- [USFWS] 2009. *Pritchardia schattaueri* 5-year review summary and evaluation. USFWS Pacific Islands Fish and Wildlife Office, Honolulu, HI. https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/1375.pdf.
- [USFWS] 2015. *Pritchardia schattaueri* 5-year review summary and evaluation. USFWS Pacific Islands Fish and Wildlife Office, Honolulu, HI. https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/2280.pdf.
- [USFWS] 2020. *Pritchardia schattaueri* 5-year review summary and evaluation. USFWS Pacific Islands Fish and Wildlife Office, Honolulu, HI. https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/species_nonpublish/3176.pdf.
- [USFWS] 2023. Endangered and Threatened Wildlife and Plants; Initiation of 5-Year Status reviews for 133 Species in Oregon, Washington, Idaho, Montana, California, Hawaii, Guam, and the Northern Mariana Islands. Federal Register 88(56): 17611–17614, March 23, 2023.
- [VRPPF] Volcano Rare Plant Propagation Facility. 2024. Report on controlled propagation of listed species, as designated under the U.S. Endangered Species Act. Unpublished report submitted to the U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawai'i.

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SIGNATURE PAGE for 5-YEAR REVIEW of *Pritchardia schattaueri* (Ioulu)

Pre-1996 DPS listing still considered a listable entity? N/A

Recommendation resulting from the 5-year review:

- Delisting
- Reclassify from Endangered to Threatened status
- Reclassify from Threatened to Endangered status
- X No Change in listing status

For Field Supervisor, Pacific Islands Fish and Wildlife Office

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