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[View Glossary](#)***Huperzia stemmermanniae*** - (A.C. Medeiros & W.H. Wagner) Kartesz

Stemmermann's Clubmoss

Synonym(s): *Phlegmariurus stemmermanniae* A.C. Medeiros & W.H. Wagner**Taxonomic Status:** Accepted**Related ITIS Name(s):** *Huperzia stemmermanniae* (A.C. Medeiros & W.H. Wagner) Kartesz, comb. nov. ined. (TSN 565229)**Unique Identifier:** ELEMENT_GLOBAL.2.160517**Element Code:** PPLYC020X0**Informal Taxonomy:** Plants, Vascular - Ferns and relatives[Search for Images on Google](#)

Kingdom	Phylum	Class	Order	Family	Genus
Plantae	Lycophyta	Lycopodiopsida	Lycopodiales	Lycopodiaceae	Huperzia

Check this box to expand all report sections: **Concept Reference**

Concept Reference: Kartesz, J.T. 1999. A synonymized checklist and atlas with biological attributes for the vascular flora of the United States, Canada, and Greenland. First edition. In: Kartesz, J.T., and C.A. Meacham. Synthesis of the North American Flora, Version 1.0. North Carolina Botanical Garden, Chapel Hill, N.C.

Concept Reference Code: B99KAR01HQUS**Name Used in Concept Reference:** *Huperzia stemmermanniae*

Taxonomic Comments: Medeiros et al. (1996) describe the new species *Phlegmariurus stemmermanniae* as distinct from, but most closely resembling *P. mannii*. Kartesz (1994) treats *P. mannii* in the genus *Huperzia*. Kartesz (1999) publishes the new combination *Huperzia stemmermanniae* (A.C. Medeiros & W.H. Wagner) Kartesz. In the original paper describing the new species, the spelling *P. stemmermanniae* is used in the description and throughout the text, but *P. stemmermannii* is used in the abstract.

Conservation Status**NatureServe Status****Global Status:** G1**Global Status Last Reviewed:** 27Sep2007**Global Status Last Changed:** 12Nov1997**Rounded Global Status:** G1 - Critically Imperiled

Reasons: *Phlegmariurus (Huperzia) stemmermanniae* is very rare and known only from four occurrences (possibly clonal), with a total of approximately twenty individuals (Palmer 2003). It occurs on the islands of Maui and Hawaii. It is found on rough tree bark (mostly *Acacia*) 3 m or less aboveground, or on the undersides of fallen logs in mesic to wet forests (Palmer 2003). It is threatened by feral ungulates, clearing, fire, and the invasion of non-native vegetation (Russell 2002).

Nation: United States**National Status:** N1

U.S. & Canada State/Province Status	
United States	Hawaii (S1)

Other Statuses

U.S. Endangered Species Act (USES): C: Candidate (09Nov2009)

U.S. Fish & Wildlife Service Lead Region: R1 - Pacific

NatureServe Global Conservation Status Factors

Range Extent Comments: East Maui and northeastern Hawaii Island, state of Hawaii.

Area of Occupancy: Unknown 4-km² grid cells

Area of Occupancy Comments:

Number of Occurrences: 1 - 5

Number of Occurrences Comments: Four (probably clonal) populations total (Medeiros, 1996). One occurrence on Maui, and three on the island of Hawaii (HBMP 2007).

Population Size Comments: Approximately 20 plants (Medeiros, 1996).

Number of Occurrences with Good Viability/Integrity: Unknown what number of occurrences with good viability

Environmental Specificity: Unknown

Overall Threat Impact: Very high - high

Overall Threat Impact Comments: Its habitat, koa forest, is threatened by clearing for cattle ranching, damage by feral and domestic ungulates (goats, pigs, cattle), wildland fire, and invasion by non-native plants (Medeiros, 1996). Introduced species that are a threat to *Huperzia stemmermanniae* include *Passiflora mollissima* (banana poka), *Psidium cattleianum* (strawberry guava), *Cyathea cooperi* (Australian tree fern), *Clidemia hirta* (Kosters curse), and *Miconia calvescens* (miconia) (Medeiros, 1996).

Intrinsic Vulnerability Comments: As an epiphyte, *P. stemmermanniae* is somewhat protected from ground disturbance by feral pigs and displacement by alien plants (Medeiros, 1996).

Short-term Trend: Unknown

Long-term Trend: Unknown

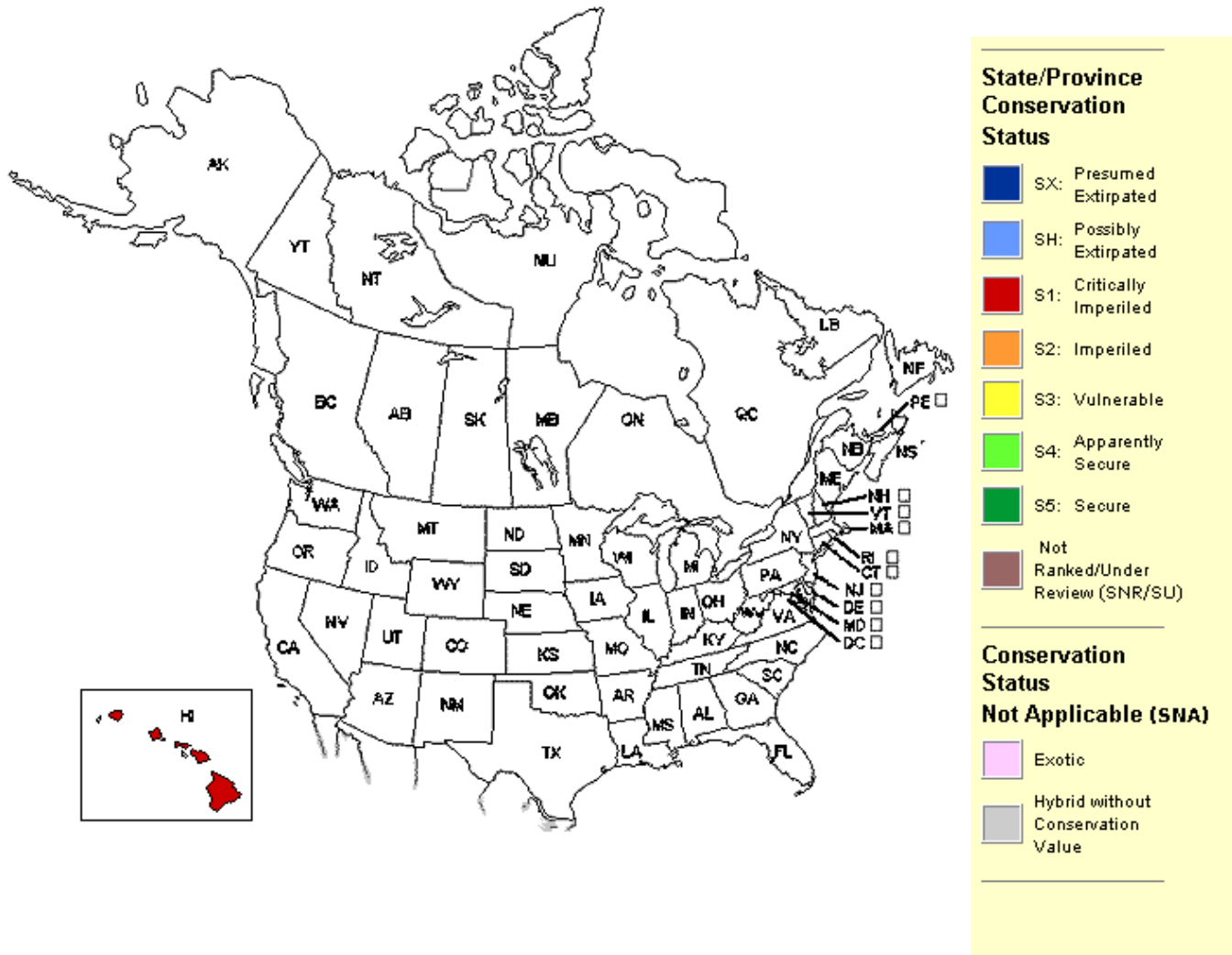
Other NatureServe Conservation Status Information

Distribution



Global Range: East Maui and northeastern Hawaii Island, state of Hawaii.

U.S. States and Canadian Provinces



U.S. & Canada State/Province Distribution	
United States	HI

Range Map
No map available.

U.S. Distribution by County ?	
State	County Name (FIPS Code)
HI	Hawaii (15001), Maui (15009)

* Extirpated/possibly extirpated

U.S. Distribution by Watershed ?	
Watershed Region ?	Watershed Name (Watershed Code)
20	Hawaii (20010000)+, Maui (20020000)+

+ Natural heritage record(s) exist for this watershed
* Extirpated/possibly extirpated

Ecology & Life History

Basic Description: A pendent epiphyte. Sterile basal stem green to pale yellow. Fertile terminal branchlets 1-15 cm long (mostly longer than 5 cm).

Terrestrial Habitat(s): Forest - Hardwood, Forest/Woodland

Habitat Comments: Mesic koa forests.

Economic Attributes

Not yet assessed

Management Summary

Not yet assessed ?

Population/Occurrence Delineation

Not yet assessed ?

Population/Occurrence Viability

?

Justification: [Use the Generic Guidelines for the Application of Occurrence Ranks \(2008\).](#)[The Key for Ranking Species Occurrences Using the Generic Approach provides a step-wise process for implementing this method.](#)[Key for Ranking Species Element Occurrences Using the Generic Approach \(2008\).](#)**U.S. Invasive Species Impact Rank (I-Rank)**

Not yet assessed ?

Authors/Contributors

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NatureServe Conservation Status Factors Edition Date: 30Oct2007**NatureServe Conservation Status Factors Author:** JQCL, D. Gries, rev. A. Olivero (2003), rev. D. Matsuwaki (2007)Botanical data developed by NatureServe and its network of natural heritage programs (see [Local Programs](#)), The North Carolina Botanical Garden, and other contributors and cooperators (see [Sources](#)).**References**

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- Kartesz, J.T. 1999. A synonymized checklist and atlas with biological attributes for the vascular flora of the United States, Canada, and Greenland. First edition. In: Kartesz, J.T., and C.A. Meacham. Synthesis of the North American Flora, Version 1.0. North Carolina Botanical Garden, Chapel Hill, N.C.
- Medeiros, A.C., W.H. Wagner, Jr., and R.W. Hobdy. 1996. A new Hawaiian hanging firmoss (Lycopodiaceae: Phlegmariurus) from the eastern Hawaiian Islands. *American Fern Journal* 86(3):89-97.
- Palmer, D.D. 2003. *Hawaii's Ferns and Fern Allies*. Univ. Hawaii Press, Honolulu. 324 pp.
- Russell, C. 2002. February-last update. Candidate and Listing Priority Assignment Form: *Phlegmariurus stemmermanniae*. U.S. Fish and Wildlife Service, Endangered Species Program. Online. Available: http://ecos.fws.gov/tess/candforms_pdf/r1/phlste.pdf. Accessed 2003, March 4.

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Citation for data on website including State Distribution, Watershed, and Reptile Range maps:
 NatureServe. 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>. (Accessed: January 9, 2015).

Citation for Bird Range Maps of North America:
 Ridgely, R.S., T.F. Allnutt, T. Brooks, D.K. McNicol, D.W. Mehlman, B.E. Young, and J.R. Zook. 2003. Digital Distribution Maps of the Birds of the Western Hemisphere, version 1.0. NatureServe, Arlington, Virginia, USA.

Acknowledgement Statement for Bird Range Maps of North America:
 "Data provided by NatureServe in collaboration with Robert Ridgely, James Zook, The Nature Conservancy - Migratory Bird Program, Conservation International - CABS, World Wildlife Fund - US, and Environment Canada - WILDSPACE."

Citation for Mammal Range Maps of North America:

Patterson, B.D., G. Ceballos, W. Sechrest, M.F. Tognelli, T. Brooks, L. Luna, P. Ortega, I. Salazar, and B.E. Young. 2003. Digital Distribution Maps of the Mammals of the Western Hemisphere, version 1.0. NatureServe, Arlington, Virginia, USA.

Acknowledgement Statement for Mammal Range Maps of North America:

"Data provided by NatureServe in collaboration with Bruce Patterson, Wes Sechrest, Marcelo Tognelli, Gerardo Ceballos, The Nature Conservancy-Migratory Bird Program, Conservation International-CABS, World Wildlife Fund-US, and Environment Canada-WILDSPACE."

Citation for Amphibian Range Maps of the Western Hemisphere:

IUCN, Conservation International, and NatureServe. 2004. Global Amphibian Assessment. IUCN, Conservation International, and NatureServe, Washington, DC and Arlington, Virginia, USA.

Acknowledgement Statement for Amphibian Range Maps of the Western Hemisphere:

"Data developed as part of the Global Amphibian Assessment and provided by IUCN-World Conservation Union, Conservation International and NatureServe."

NOTE: Full metadata for the Bird Range Maps of North America is available at:

<http://www.natureserve.org/library/birdDistributionmapsmetadatav1.pdf>.

Full metadata for the Mammal Range Maps of North America is available at:

<http://www.natureserve.org/library/mammalsDistributionmetadatav1.pdf>.

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