# IUCN SSC Hawaiian Islands Plant Specialist Group



### 2019 Report





Lauren Weisenberger

Vickie Caraway

#### Co-Chairs

Lauren Weisenberger (1) (former Deputy Chair) Vickie Caraway (2)

#### **Red List Authority Coordinator**

Matthew Keir (3)

#### Location/Affiliation

(1) U.S. Fish and Wildlife Service, Honolulu, Hawaii, US
(2) Department of Land and Natural Resources, U.S. Fish and Wildlife Service and

State of Hawaii, Hawaii, US (retired)
(3) State of Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife, Honolulu, Hawaii, US

#### **Number of members**

179



#### **Mission statement**

The mission of the Hawaiian Plant Specialist Group (HPSG) is to prevent the extinction of native Hawaiian plants and provide for their recovery through a cooperatively administered off-site plant conservation system, in collaboration with on-site management partners to sample, propagate, and reintroduce rare plants; and to advance the preservation of native plants and their habitats through effective communication and public education.

# Projected impact for the 2017-2020 quadrennium

In 2019, the IUCN SSC Hawaiian Plant Specialist Group (HPSG) continued to meet quarterly with its members. We added 54 new members this year. We also added the opportunity for remote participation at our quarterly meetings, with support from Laukahi, the Hawaii Plant Conservation Network. The chair, Vickie Caraway, asked to step down and Lauren Weisenberger, the Deputy Chair, assumed the role of Chair. Major highlights and projects from 2019 include: (1) drafting new best management practices for conservation collections at botanical gardens, (2) developing an evaluation and ranking process to determine at-risk species that are not currently federally-listed, (3) formed a conference sub-committee to help organise the timelines for local conferences and workshops to maximise participation, (4) started presenting and sharing all published literature relevant to HPSG, and (5) submitted Red List assessments for 30 species for review; currently one-third

of the flora has been initiated or assessed. The Plant Extinction Prevention Program, started in 2003 to conduct conservation actions for species with fewer than 50 individuals remaining in the wild, continued these activities on Kaua'i, O'ahu, Moloka'i, L'na'i, Maui, and Hawai'i islands. Activities in 2019 focused on 101 species most in need of monitoring and propagule collections, threat control, and translocation. Lastly, the Hawaiian Rare Plant Program at Lyon Arboretum, the main research and ex situ facility for rare plants in Hawaii, initiated the research and development of a cryopreservation facility for long-term germplasm storage, especially for Pteridophytes as well as angiosperms with recalcitrant seeds.

#### Targets for the 2017-2020 quadrennium

#### Assess

Red List: complete Red List assessments of Plant Extinction Prevention species. Research activities: develop a number of guidelines.

#### Act

Technical advice: develop online Rare Plant Restoration Guidelines based on workbook developed for the 2012 World Conservation Congress workshop held at Lyon Arboretum.

#### Communicate

Communication: participate in the 2020 World Conservation Congress.



Habitat maintenance-alien species control Photo: V Caraway



Rare plant monitoring on Kaua'i Photo: V Caraway

#### **Activities and results 2019**

#### Assess

#### Red List

i. We continue Red Listing species, focusing on taxa of interest and rarity. One hundred and seventy-one species have been assessed as of 2019. There are 65 Plant Extinction Prevention Program species to be completed, including eight that are extinct. (KSR #1)

#### Research activities

i. We drafted a guide of best management practices for conservation collections at botanical gardens. We are looking to draft additional best management practices for plant propagation. (KSR #14, 18, 43)

## Act

#### Technical advice

i. We have continued making more HPSG products available to the public and members through the Laukahi.org website. All best management practices are now available there. It was determined that the 2012 Handbook is now out of date, and sections will be revised and published separately. One major achievement was the publication of the seed storage behaviour of Hawaiian plants in the American Journal of Botany. (KSR #14, 18, 43)

# Communicate

#### Communication

i. The IUCN Hawaii Hui organised and completed an application process, and secured funding, to send a delegation from Hawaii to attend the World Conservation Congress in 2020. Of this delegation, there are eight botanists representing Laukahi to participate in a forum. (KSR #28)

#### Acknowledgements

We would like to thank all our members and partners for their continued dedication to Hawaiian plant conservation. We are so enormously grateful to Vickie Caraway for her endless motivation to support and encourage plant conservation in Hawaii, as well as her big picture thinking to keep our efforts grounded, relevant, and effective. We also would especially like to thank Laukahi for improving our communication both internally and to the public through their remote conferencing capabilities, website, and mission for public outreach. We would also like to thank both the State of Hawaii and Laukahi for continuing to support our Red Listing efforts. Lastly, we are also so grateful for our host, Lyon Arboretum, who not only supports the HPSG through hosting quarterly meetings but continues to remain the leading research and germplasm storage facility for rare plants.

# **Summary of activities 2019**

Components of Species Conservation Cycle: 3/5

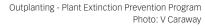
Assess

Act

1 Communicate 1

Main KSRs addressed: 1, 14, 18, 28, 43

KSR: Kev Species Result







Outplanting - Plant Extinction Prevention Program Photo: V Caraway