# IUCN SSC Galapagos Plant Specialist Group



2019 Report



Alan Tye

# Chair

Alan Tye

# **Red List Authority Coordinator**

Alan Tye

# Location/Affiliation

UK

# **Number of members**

11



# **Mission statement**

The Galapagos Plant Specialist Group promotes the conservation of all Galapagos native plants and plant-like organisms (including algae, fungi, lichens and similar taxa), with the intention to be inclusive rather than exclusive.

# Projected impact for the 2017-2020 quadrennium

By the end of 2020, we expect to have draft reassessments for at least 10 vascular plants and at least 50 lichens submitted to the IUCN Red List Unit, and to have increased the effort directed to threatened plant conservation by the Charles Darwin Research Station and the Galapagos National Park Directorate.

# Targets for the 2017-2020 quadrennium

# Assess

Red List: (1) begin re-evaluation of endemic vascular plants; (2) conduct Red Listing of all ca. 200 endemic species of lichenised fungi.

Research activities: (1) evaluate the conservation status of the Scalesia forests on the islands of Santa Cruz and Isabela; (2) assess the value of water-saving technology on the recovery of threatened plant populations.

# Plan

Planning: contribute to research and conservation planning in Galapagos.

# Act

Conservation actions: restore threatened and endangered plant populations within protected and populated areas.

# **Activities and results 2019**

#### Assess

#### Red List

- i. Two species were re-evaluated in coordination with the Crop Wild Relative Specialist Group. (KSR #1)
- ii. One species was fully evaluated, with 200 others entered into the IUCN SIS database. (KSR #1)

# Research activities

- i. A report to the Galapagos National Park Directorate was completed. (1) The status of *Scalesia pedunculata* on Santa Cruz and *Scalesia cordata* on Isabela were evaluated; (2) population dynamics (five years) of *S. pedunculata* was evaluated; (3) the reason for die-off of invasive quinine determined; (4) endemic species recovery after invasive blackberry control was assessed. (KSR #27)
- **ii.** A total of 9,964 individuals have been planted since phase 1 with a variety of water-saving technology. A paper was published in *PeerJ* on water-saving technology effectiveness for *Opuntia* populations; Groasis and Cocoon technology are almost doubling the 1-year survival of planted individuals. (KSR #16)

# Plan

# Planning

i. A project on threatened marine algae is under development. (KSR #18)

# Δct

# Conservation actions

i. In total, 5,533 plants of various endemic and native species were planted on seven different islands; the *Galvezia leucantha* population increased by 600%. (KSR #24)



Galapagos lichen, *Acantholichen galapagoensis*, EdLR Photo: Frank Bungartz

Seedlings of *Galvezia leucantha*, target species for restoration, in cultivation *ex situ* before planting out in the wild Photo: Patricia Jaramillo





Galvezia leucantha planted out using Groasis water retention technology to assist the young plants to establish in the wild Photo: Patricia Jaramillo

# Acknowledgements

Crop Wild Relative Specialist Group, Charles Darwin Research Station, Galapagos National Park Directorate, IUCN SSC Lichen Specialist Group, Instituto Nacional de Biodiversidad (INABIO, Ecuador).

# **Summary of activities 2019**

Components of Species Conservation Cycle: 3/5

Assess 4 ||||
Plan 1 |
Act 1 |

Main KSRs addressed: 1, 16, 18, 24, 27

KSR: Key Species Result



Scalesia affinis, one of the target species for restoration Photo: Patricia Jaramillo