IUCN SSC Galapagos Plant Specialist Group

2020 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 the Galapagos.

Act

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

Activities and results 2020

Assess

Red List

i. An assessment was submitted for *Ramalina fragilis*. (KSR #1)

ii. We participated in two Red List workshops. (KSR #1, 5)

iii. We led Latin American lichen assessments. (KSR #1)

iv. A draft manuscript was prepared on Galapagos endemic lichens. (KSR #43)

Research activities

i. The 6th annual assessment of *Scalesia pedunculata* forest on Santa Cruz Island was completed, including population dynamics, invasive plant impacts, and two publications submitted. (KSR #27)

ii. On Isabela, plots were established to assess population dynamics of *Scalesia cordata*. (KSR #27)

iii. Results from assessment of the value of water-saving technology on the recovery of threatened plant populations: Two water-saving technologies with 72% survival, one with 26%. *Opuntia* tripled growth, *O. megasperna* showed good results but was consumed by tortoises, experimental design change and seed germination. *Galvezia* growing and with a new seedling, *Scalesia affinis* dying by natural herbivory, *Scalesia pedunculata* growing with Groasis technology. *Darwiniothmnus* without results. (KSR #16)

Site of the remnant populations of the Vulnerable *Lecocarpus lecocarpoides* at Punta Manzanillo, Española Island
Photo: Cristina Georgii

GPSG member Patty Jaramillo with young plants of the endemic cactus *Opuntia echios* var. *echios*, grown in the lab for population enhancement on Plaza Sur Island, Galápagos
Photo: Sebastián Palacio

Plan

Planning

i. Vegetation in plots on Santa Cruz was monitored and data partially analysed to determine impacts of quinine and its control on native vegetation and invasions, and endemic species recovery after blackberry control. A workshop on biological control of blackberry was postponed to 2021 due to COVID-19. (KSR #18)

Act

Conservation actions

i. The results of restoration practices for threatened and endangered plant populations within protected and populated areas can be summarised as follows: 67% survival and seed production, pollinators and plants in good condition. *Opuntia* with fruits; 3,200 *Galvezia* seeds collected; *Scalesia affinis* little survival, publication on the way; *Scalesia pedunculata* regeneration in two restored farms; *Darwiniothamnus* awaiting results. (KSR #24)

Ramalina fragilis, recently described lichen species endemic to Galapagos
Photo: Frank Bungartz

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Summary of activities 2020

Components of Species Conservation Cycle: 3/5	
Assess	**7**
Plan	**1**
Act	**1**
Main KSRs addressed: 1, 5, 16, 18, 24, 27, 43	

KSR: Key Species Result