

2021 Report

IUCN SSC Cycad **Specialist Group**

CO-CHAIR

Center, US

M. Patrick Griffith



Cycad Specialist Group

SOCIAL MEDIA AND WEBSITE Facebook: Cycad Specialist Group Website: www.cycadgroup.org





Mission statement

The Cycad Specialist Group (CSG) exists to bring together the world's cycad conservation expertise, and to disseminate this expertise to organisations and agencies which can use this guidance to advance cycad conservation.

Projected impact 2021–2025

In this quadrennium, the Cycad Specialist Group will impact on cycad species conservation by: (1) ensuring that no cycad becomes extinct, by enhancing assurance colonies for Critically Endangered and Extinct in the Wild species; (2) increasing population numbers of target Critically Endangered species as part of a process to improve their conservation status from Critically Endangered to Endangered; 3) working to reverse pollinator extinctions which will also potentially change the conservation status of three Critically Endangered species; and (4) securing habitat for species and effectively protecting these sites from habitat loss and illegal collecting of plants.

VICE-CHAIR Cristina Lopez-Gallego Montgomery Botanical University of Antioquia, Medellin, Colombia VICE-CHAIR Michael Calonje

Montgomery Botanical Center, US

RED LIST AUTHORITY COORDINATOR De Wet Bösenberg South African National Biodiversity Institute, South Africa

NUMBER OF MEMBERS

44

Targets 2021-2025

ASSESS

T-003 Update Red List and Red List Index for all species described up to 2020.

T-009 Assess newly described taxa.

T-010 Improve the evidence base for cycad conservation and management.

PLAN

T-006 Identify priority sites for cycad conservation.

ACT

T-004 Enhance percentage of Extinct in the Wild and Critically Endangered Cycad species represented in assurance colonies.

T-005 Implement genetic analysis of priority taxa to guide conservation action. T-008 Secure priority sites for cycad

conservation.

NFTWORK

T-002 Establish the Global Cycad Conservation Consortium and ensure it is operating.

COMMUNICATE

T-001 Publish official newsletter of the Cycad Specialist Group.

T-007 Promote positive cycad conservation action stories.

Activities and results 2021 ASSESS

Red List

T-003 (KSR 6)

Number of global Red List reassessments completed: 351

Result description: We submitted to the Red List Unit updated global assessments for all the cycads with available information to date. We are preparing a document with a Red List Index analysis using the three global assessments for cycads.

PLAN

Planning

T-006 (KSR 8)

Number of conservation plans/strategies developed: 3

Result description: A conservation management plan was developed for Encephalartos eugene-maraisii; a recovery action plan for Encephalartos latifrons; and an ex situ conservation plan for cycads in the South African National Botanical Gardens.

ACT

Conservation actions

T-004 (KSR 10)

Number of threatened species benefiting from ex situ conservation action: 3





Phakamani Xaba doing surveys of the Critically Endangered *Encephalartos latifrons* Photo: John Donaldson

Collecting seed for population recovery of *Encephalartos eugene-maraisii* Photo: John Donaldson

Acknowledgements

We are grateful for all of our partners and Commission members who participate in these initiatives. We are especially grateful to our US Federal funders at the National Science Foundation and the Institute of Museum and Library Services, which allowed for the ex situ and in situ genetic studies and also supporting the network through funding the Global Conservation Consortium for Cycads. We are grateful to Montgomery Botanical Center for providing the Programme Office for the CSG.

Summary of achievements

Total number of targets 2021–2025: 10 Geographic regions: 8 Global, 2 Africa, 2 America, 1 Asia

Actions during 2021:

Assess: 1 (KSR 6) Plan: 1 (KSR 8) Act: 2 (KSR 10) Network: 1 (KSR 1) Communicate: 2 (KSR 13)

Overall achievement 2021-2025:



Result description: Multiple botanical institutions and conservation NGOs are now engaged in efforts to develop genetically representative assurance colonies. Ongoing activities include acquisition and/or exchange of pollen, seed and offsets for Extinct in the Wild and Critically Endangered species, and genetic evaluation of in situ and ex situ populations. For three *Encephalartos* species in South Africa (*E. latifrons, E. middelburgensis, E. eugene-maraisii*), successful propagation and reintroductions are being implemented. **T-005** (KSR 10)

Number of technical documents provided to support conservation actions: $\ensuremath{\mathbb{1}}$

Result description: The Global Conservation Consortium for Cycads, in collaboration with the Montgomery Botanical Center (US) and other institutions, is coordinating efforts to implement genetic analysis for priority species. Extensive sampling and preliminary analysis of threatened Encephalartos in Southern Africa (ex situ and in situ) and the US (ex situ) is underway. In addition, a publication on the conservation genetics of a North American Zamia species has recently been published (Griffith, M.P., et al. (2021). 'Genetic Patterns of Zamia in Florida Are Consistent with Ancient Human Influence and Recent Near Extirpation'. International Journal of Plant Sciences 183(3):169-185. https:// doi.org/10.1086/717657). The results of these studies will inform both assurance colony development and reintroduction efforts.

NETWORK Synergy

T-002 (KSR 1)

Number of 'in kind' partnerships established and maintained: 1

Result description: The Global Conservation Consortium for Cycads has been established in collaboration with Botanic Gardens Conservation International (BGCI) and has appointed a steering committee. The consortium has organised several launch meetings (US, Mexico, Caribbean) and is actively engaging regional stakeholders (botanical gardens, NGOs) in North America, Africa and South America. 'Species stewards' are being identified for the most threatened species of cycads and these stewards have committed to concrete conservation actions for their focal taxa.

COMMUNICATE

Communication

T-001 (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 1

Result description: We suspended the publication on the Cycad Specialist Group Newsletter in 2021 (because of difficulties associated with the COVID-19 pandemic) but restarted the editorial work and plan to publish a new issue in January 2022. **T-007** (KSR 13)

Number of communication products using innovative tools: 1

Result description: We published a profile for the Colombian Cycad Conservation Action Plan on the Reverse the Red website (https://www.reversethered.org/stories/ cycad).