

# IUCN SSC Cycad Specialist Group

2019 Report



John Donaldson



M. Patrick Griffith

## Co-Chairs

John Donaldson (1)  
M. Patrick Griffith (2)

## Vice-Chairs

Cristina Lopez-Gallego (3)  
Michael Calonje (2)

## Red List Authority Coordinator

De Wet Bösenberg (1)

## Location/Affiliation

(1) South African National Biodiversity Institute, South Africa  
(2) Montgomery Botanical Center, US  
(3) University of Antioquia, Medellin, Colombia

## Number of members

57

## Social networks

Facebook: Cycad Specialist Group  
Website: [www.cycadgroup.org](http://www.cycadgroup.org)



Cycad Specialist Group

## 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 for the 2017-2020 quadrennium

By 2020, we want to ensure that no cycad has become extinct because all high risk taxa are adequately represented in botanic gardens, that substantial advances are made in identifying and securing habitat for Critically Endangered species, and that reintroduction programmes are supported to start to increase population numbers for species reduced to <250 individuals. This will be achieved through our own efforts as well as collaboration with other organisations and will be supported by traditional strengths within the Cycad Specialist Group such as compiling the World List of Cycads, updating the Red List Index, studying the biology of cycads, understanding trade and the conditions required for sustainable use, developing conservation plans and managing *ex situ* collections.

## Targets for the 2017-2020 quadrennium

### Assess

Red List: update the Cycad Red List Index by undertaking a third global assessment of 350 species.

Research activities: strengthen information, knowledge and capacity to support cycad conservation actions.

### Act

Conservation actions: (1) increase the representation of threatened cycads in *ex situ* collections with at least 90% of Critically Endangered species in collections, beginning with benchmarking; (2) initiate projects to secure habitat and/or restore populations for at least five Critically Endangered species.

## Activities and results 2019

### Assess

#### Red List

i. Updating of the Cycad Red List Index: eighty-two percent of all assessments are complete. The remaining 56 species are going through final checks and will be completed by 31 March 2020. (KSR #1)

#### Research activities

i. At least 20 papers were published by members of the Cycad Specialist Group in 2019, providing critical information to inform cycad conservation. In addition, the Proceedings of the 9th International Cycad meeting, hosted by the CSG, were published. (KSR #32)



Near Threatened *Zamia chigua*  
Photo: Michael Calonje



Endangered *Encephalartos horridus*  
Photo: Michael Calonje

## Act

### Conservation actions

**i.** Of 51 Critically Endangered cycad species, 41 are in protective cultivation at recognised botanic gardens. This metric obscures three areas of need for future work, however: (1) many of these species are at fewer than five gardens, (2) the genetic representation of most of these species is not known, and (3) many provisionally-listed Critically Endangered species (22 as of 2020) are yet unassessed with regard to *ex situ* protection. The CSG has been in discussions with Botanic Gardens Conservation International and various gardens around the world to establish a Global Cycad Conservation Consortium along the same lines as the Global Oak Conservation Consortium. Newly secured funding from the US Federal Government will pilot this Cycad Consortium between 2020 and 2023. (KSR #14)

**ii.** Projects to secure habitat and/or restore populations for Critically Endangered species: not all cycad plans are managed by CSG members. For example, 12 species in South Africa have plans managed by state and provincial agencies and Australia has a national multispecies management plan for cycads as well as regional plans for cycads in the Northern Territory, covering 12 species. China

Near Threatened *Encephalartos friderici-guilielmi*  
Photo: Michael Calonje



has partial plans for 23 cycad taxa (either for *in situ* or *ex situ* efforts) including representation in reserves and restoration (e.g. *Cycas debaoensis*). Mexico has community-based management and propagation programmes for at least five species. The CSG is currently putting together action plans for ca. 70 Critically Endangered or Extinct in the Wild cycads based on an analysis of the main barriers to cycad conservation (e.g. loss of habitat or population decline). (KSR #31)

### Acknowledgements

We are grateful to Montgomery Botanical Center and SANBI for providing infrastructure and staffing for administration of the CSG.

### Summary of activities 2019

Components of Species Conservation Cycle: 2/5

Assess **2** ||

Act **2** ||

Main KSRs addressed: 1, 14, 31, 32

KSR: Key Species Result