



Species

ISSUE 64

2023 Report of the IUCN Species Survival Commission and Secretariat



The IUCN Species Survival Commission (SSC)

The IUCN Species Survival Commission (SSC) is a science-based network of thousands of volunteer experts from almost every country of the world, all working together toward achieving the vision of “a just world that values and conserves nature through positive action to both prevent the loss and aid recovery of the diversity of life on earth.”

Members of SSC belong to one or more of near 200 Specialist Groups, Red List Authorities, Action Partnerships, Task Forces, and Conservation Committees that make up the Network, each focusing on a taxonomic group (plants, fungi, mammals, birds, reptiles, amphibians, fishes, and invertebrates), national species, or a disciplinary issue, such as sustainable use and livelihoods, translocation of species, wildlife health, climate change, and conservation planning.

Framed by the Species Conservation Cycle, SSC’s major role is to provide information to IUCN on biodiversity conservation, the inherent value of species, their role in ecosystem health and functioning, the provision of ecosystem services, and their support to human livelihoods. This information is fed into the IUCN Red List of Threatened Species.

2021-2025 Species Strategic Plan

The IUCN Species Strategic Plan encompasses the joint work of the IUCN Species Survival Commission and a number of partnerships to achieve more than 2,700 targets proposed by the Network during the 2021-2025 quadrennium.

To accomplish those targets, the Species Conservation Cycle was established, which is the conceptual framework for the Network activities. The Species Conservation Cycle’s main purpose is to guide efforts for valuing and conserving biodiversity through three essential components that are linked to each other:

ASSESS: Understand and inform the world about the status and trends of biodiversity.

PLAN: Develop collaborative, inclusive and science-based conservation strategies, plans and policies.

ACT: Convene and mobilise conservation actions to improve the status of biodiversity.



Their implementation requires two transversal components:

NETWORK: Enhance and support our immediate network and alliances to achieve our biodiversity targets.

COMMUNICATE: Drive strategic and targeted communications to enhance our conservation impact.

SSC Species Report

Annual progress in the implementation of the 2021-2025 Species Strategic Plan is documented in the SSC *Species Report*, which consists of a comprehensive description and analysis of the activities and results generated by the members of the SSC Network and Centers for Species Survival (CSS) each year. Each SSC and CSS group contributes to this document by providing a yearly summarised description of their achievements, which is presented in stand-alone reports.

Structure of the IUCN SSC and CSS Stand-alone Reports

Stand-alone reports summarize the activities conducted and results generated by each group member of the SSC and CSS. Following, is the structure of the stand-alone report and the contents under each session.

Title of the group

Photograph(s) of the Chair/Co-Chairs

Group information

Includes names of Chair/Co-Chairs, Vice-Chairs, Deputy Chairs, Red List Authority Coordinators, Program Officers, Species Survival Directors, and Species Survival Officers, their institutional affiliations, number of members and social networks currently active.

Logo of the group

Mission statement

Includes the mission of the group.

Projected impact for the 2021-2025 quadrennium

Includes the description of the impact on species conservation resulting from the implementation of the targets formulated by the group for the 2021-2025 quadrennium.

Targets for the 2021-2025 quadrennium

Includes the targets planned by the SSC or CSS group for the 2021-2025 quadrennium ordered alphabetically by component of the Species Conservation Cycle. Each target is labeled with a numerical code (e.g., T-001, T-012) that identifies it in the SSC DATA database and its status for the reported year is indicated (Not initiated, On track or Achieved).

Activities and results

Includes the targets for which activities were conducted and results were generated during the reported year, ordered alphabetically, first by component of the Species Conservation Cycle, and second by Activity Category. Description of activities and results includes the indicator that best describes progress, its associated quantitative or qualitative result, and the narrative description of the activity conducted or result obtained. Each activity or result reported is linked to the Key Species Result to which it is mainly associated (e.g., KSR#1, KSR#5).

Acknowledgements

Includes the acknowledgements to funding agencies, partners, and persons who contributed to the progress of the targets of the group.

Summary of achievements

Summarises information of the group's strategic plan for the quadrennium and progress achieved implementing targets for all the components of the Species Conservation Cycle during the reported year.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

Example for the recommended citation:

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IUCN SSC Cycad Specialist Group



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56

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 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 through 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.

Targets 2021–2025

ASSESS

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

T-009 Assess newly described taxa.
Status: Not initiated

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

PLAN

T-006 Identify priority sites for cycad conservation.
Status: On track

ACT

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

T-005 Implement genetic analysis of priority taxa to guide conservation action.
Status: On track

T-008 Secure priority sites for cycad conservation.
Status: On track

NETWORK

T-002 Establish the Global Cycad Conservation Consortium and ensure it is operating.
Status: On track

T-011 Convene international conferences on cycad biology and conservation.
Status: Achieved

COMMUNICATE

T-001 Publish the official newsletter of the Cycad Specialist Group.
Status: On track

T-007 Promote positive cycad conservation action stories.
Status: On track

Activities and results 2023

ASSESS

Red List

T-003 Update Red List and Red List Index for all species described up to 2020. (KSR 6)

Number of global Red List reassessments completed: 80

Result description: All the outstanding assessments for *Cycas* species were completed and published on the IUCN Red List of Threatened Species. The only



Zamia magnifica, a species described in 2023 with CSG member Miguel Ángel Pérez Farrera.
Photo: Diego Villar Morales

outstanding assessments are for 12 East African species where assessments by the Cycad Specialist Group need to be reconciled with those by the East African Plant Red List Authority.

ACT

Conservation actions

T-004 Enhance the percentage of Extinct in the Wild and Critically Endangered Cycad species represented in assurance colonies. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 4

Result description: Assurance colonies for *Encephalartos hirsutus* (CR?, EW), *Encephalartos dolomiticus* (CR?, EW), *E. nubimontanus* and *E. laevifolius* (CR) were strengthened through the purchase of historical collections that can now be properly managed to conserve genetic diversity.

T-005 Implement genetic analysis of priority taxa to guide conservation action. (KSR 10)

Number of technical documents provided to support conservation actions: 5

Result description: Preliminary analyses for *E. laevifolius* have been completed. This taxon is nearly Extinct in the Wild (EW) and was originally distributed through at least



Zamia decumbens in habitat
Photo: Michael Calonje



Zamia encephalartoides in habitat.
Photo: Michael Calonje

six widely separated localities. In order to identify relationships between plants from different localities RADSeq analyses have been undertaken to guide the establishment and management of assurance colonies and for planning recovery actions. Sampling and initial analyses have also been completed for *Encephalartos latifrons*. This taxon comprises ca. 70 mature plants distributed across three widely separated localities. Conservation genetic assessments have been published for *Cycas bifida*, *Cycas micholitzii* and *Dioon holmgrenii*.

T-008 Secure priority sites for cycad conservation. (KSR 10)

Number of areas under management for the species or group of species: 3

Result description: An area of ca. 4,000 ha, where the major portion of *Encephalartos eugene-maraisii* (EN) occurs, was secured for conservation and has been incorporated into the management plan for a larger conservation area in the Waterberg Mountains of South Africa. A core population of *E. latifrons* (CR) is now part of an established private reserve with a recovery plan. The implementation of the plan has resulted in a population increase of >300 plants. At this stage, these are primarily juveniles, but the plan includes actions to speed up recovery to achieve >250 mature plants within 10 years. The Cycad Specialist Group worked with the Selati Wilderness Foundation and the Limpopo Province conservation authorities to further secure the single site where *Encephalartos dyerianus* (CR) occurs. This site was previously guarded against poaching by government-funded rangers whose later absence



Cycad micronesica in habitat
Photo: Michael Calonje

led to a spike in poaching incidents. The SWF obtained an IUCN SOS grant for one year and the CSG and SWF are working together to develop longer-term plans to ensure the site is protected from poachers.

NETWORK

Synergy

T-002 Establish the Global Cycad Conservation Consortium and ensure it is operating. (KSR 1)

Number of 'in-kind' partnerships established and maintained: 3

Result description: A workshop was held at the Entabeni Nature Reserve in January 10-13, 2023 to launch the African section of the Global Conservation Consortium for Cycads. The consortium involves a broad partnership of government, NGOs and private actors. The meeting was attended by 25 participants representing national government agencies from South Africa and Zimbabwe, representatives from two provinces as well as the South African National Biodiversity Institute and SANParks, the Endangered Wildlife Trust, Wild Cycad Conservancies, Selati Wilderness Trust and Entabeni Safari Conservancy.

T-011 Convene international conferences on cycad biology and conservation. (KSR 3)

Number of conferences held over 4a four-year cycle: 1

Result description: The 13th International Conference on Cycad Biology and Conservation was jointly convened by the Cycad Specialist Group and the Lasallian Institute for the Environment in the Philippines in July 24-28, 2023. The conference was attended by delegates comprising a mix of international experts, and local

scientists and conservationists from the Philippines, including 22 members of the CSG. We were able to offer 20 conference attendance grants thanks to donations from The Montgomery Botanical Center, Wild Cycad Conservancy, the Cycad Society of South Africa, The Cycad Society, and the Huntington Library, Art Museum and Botanical Garden. The conference program included 45 presentations on a wide range of topics, and this was preceded by a meeting of the CSG to finalise the 'Cycads 2050' strategy.

COMMUNICATE

Communication

T-007 Promote positive cycad conservation action stories. (KSR 13)

Number of communication products using innovative tools: 2

Result description: In 2023, cycad stories have been featured in various media, [comprising video](#), and newspapers (e.g. Guardian 17 May 2023).

Acknowledgements

The Cycad Specialist Group acknowledges the following organizations for their support: Montgomery Botanical Centre for its invaluable role as the institutional host; the Global Conservation Consortium for mobilising actions aligned with CSG priorities; the San Diego Zoo and Wildlife Alliance, Indianapolis Zoo, and Gregory Family Trust for funding of projects; the De La Salle University, the Lassalian Institute for the Environment and the La Salle Botanic Garden for hosting the international cycad conference in the Philippines.

Summary of achievements

Total number of targets 2021–2025: 11

Geographic regions: 8 Global, 2 Africa, 2 America, 2 Asia

Actions during 2023:

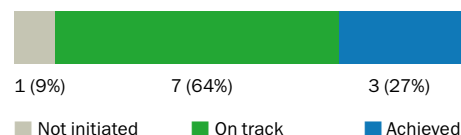
Assess: 1 (KSR 6)

Act: 3 (KSR 10)

Network: 2 (KSR 1, 3)

Communicate: 1 (KSR 13)

Overall achievement 2021–2025:





Nothobranchius fuscotaeniatus
Photo: Csenge Nagy



Tetra Parnaiba
Photo: Karina Molina



Trioceros hoehnelii
Photo: Christopher V. Anderson



Sternberia lutea
Photo: Hayri Duman



Egretta rufescens
Photo: Ernesto Gómez



Lactifluus neotropicus
Photo: Aida Vasco



Mayfly nymph (*Ecdyonurus* sp.)
Photo: Astrid Schmidt-Kloiber and Wolfram Graf