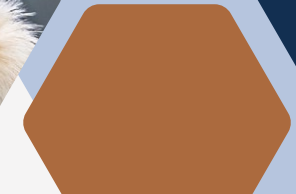




Species

ISSUE 65

2024-2025 Report of the IUCN Species Survival Commission and Secretariat



Stand-alone report
IUCN SSC Cycad Specialist Group

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 that were generated during 2024 (full year) and 2025 (first quarter), 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:

Donaldson, J, and Griffith, MP. (2025). 2024-2025 Report of the Cycad Specialist Group. In: IUCN SSC and Secretariat. *Species: Annual Report of the IUCN Species Survival Commission and Secretariat 2024-2025*. Gland, Switzerland: IUCN. 6 pp.

2024-2025 Report

IUCN SSC Cycad Specialist Group



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56

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: Achieved
- T-012** Convene at least five conservation planning meetings in priority regions for cycad conservation.
Status: Achieved

ACT

- T-004** Enhance the percentage of Extinct in the Wild and Critically Endangered Cycad species represented in assurance colonies.
Status: Achieved
- T-005** Implement genetic analysis of priority taxa to guide conservation action.
Status: Achieved
- T-008** Secure priority sites for cycad conservation.
Status: Achieved

NETWORK

- T-002** Establish the Global Cycad Conservation Consortium and ensure it is operating.
Status: Achieved
- 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: Not initiated
- T-007** Promote positive cycad conservation action stories.
Status: Achieved

Activities and results 2024-2025

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: 11
Result description: The bulk of the IUCN Red List Assessments were completed by 2023 but the group of East African cycads was omitted to allow further consultation

Microcycas calocoma in habitat, Cuba
Photo: Vanessa Handley



Cycas wadei in habitat, Philippines
Photo: Vanessa Handley



with the East African Plant Red List Authority. These assessments were completed and published in June, 2024.

T-009 Assess newly described taxa. (KSR 6)
Number of new global Red List assessments completed: 0

Result description: Red List assessments were published for 348 cycad species between 2022 and 2024. These comprised all the species recognised in 2020 when the assessment began. There are now 380 recognised species so the assessments for the 32 new species need to be completed. This has not yet been initiated and required the IUCN Red List office to upload the revised taxonomy. The assessments will be prioritised in the next quadrennium.

Research activities

T-010 Improve the evidence base for cycad conservation and management. (KSR 5)
Number of scientific publications about species research that acknowledge SSC affiliation: 50

Result description: One of the strengths of the Cycad Specialist Group has been to provide a scientific basis for conservation assessments, planning and action. Members of the Cycad Specialist Group published at least 40 papers in 2024 on subjects that are aligned with

the objectives of the Group, including describing new species, sorting out taxonomic uncertainties, undertaking genetic analyses to guide conservation actions, threat assessments, understanding drivers of decline, and identifying effective practices for species recovery. These publications bring the overall number above the 50 papers envisaged for 2021-2024.

PLAN Planning

T-006 Identify priority sites for cycad conservation. (KSR 8)

Number of technical documents to support the development of conservation plans/strategies: 17

Result description: Following a conservation planning meeting held in January, 2023 recovery plans were compiled for 14 species of *Encephalartos*. These plans complement the Biodiversity Management Plans published under the *Biodiversity Act* in South Africa. Conservation strategies have been developed for five of the 13 threatened cycad species from Colombia.

T-012 Convene at least five conservation planning meetings in priority regions for cycad conservation. (KSR 8)

Number of planning workshops convened: 5

Result description: Five conservation planning meetings were convened with participants from six priority regions for cycad conservation (Australia, China, Vietnam, South Africa, Mozambique and Zimbabwe). The meetings brought together stakeholders and species stewards with the intention of defining conservation and recovery objectives, agreeing on priority actions and determining how to accelerate conservation action.

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: 1

Result description: The assurance colonies for some of the most threatened species were strengthened, including: 400 seedlings were propagated for *Encephalartos dolomiticus* (CR), fertile seeds of *E. inopinus* (CR) obtained from assurance colonies; specimens of *E. heenanii* (EW) and plants propagated from wild harvested seed of *E. dyerianus* (CR) distributed to botanical gardens to augment *ex situ* conservation and breeding programs; the assurance



Cycad SG members and garden staff discuss *ex situ* cycad collections in Nanning, China
Photo: Vanessa Handley



Cycad conservation planning workshop in Viet Nam
Photo: Vanessa Handley



Field visit to community cycad conservation project in Zimbabwe
Photo: John Donaldson

colony for *E. heenanii* at Lotusland in the US was further strengthened through construction of a secure growing area ('Cycad Sanctuary') and the planting out of seedlings and offsets.

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

Number of technical documents provided to support conservation actions: 7

Result description: Papers on conservation genomics were published for *Dioon holmgrenii* and *Cycas candida*. An initial conservation genomics study of *Encephalartos latifrons* was also concluded, providing critical insights into the relationship between different subpopulations and informing ongoing conservation and recovery actions. In addition, four species of *Encephalartos* (*E. arenarius*, *E. horridus*, *E. lehmannii* and *E. trispinosus*) were included in a study to identify more effective genomic tools for cycad studies and the results of this work will inform the conservation of these threatened species.

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

Number of areas under management for the species or group of species: 10

Result description: In addition to the sites reported in earlier years, areas under active management now include a new site secured for the conservation of *E. horridus*; collaboration with authorities at Addo Elephant National Park manage populations of *E. lehmannii*, *E. longifolius*, *E. arenarius*, *E. afer*; and sites where recovery actions – introductions, species management, monitoring – and/or community management are being implemented.



Cycad conservation planning workshop in Viet Nam
Photo: Vanessa Handley

These sites pertain to *Cycas debaoensis*, *C. diannensis*, *C. hongheensis*, *C. panzhihuaensis*, *Encephalartos manikensis* and *E. middelburgensis*).

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: 5

Result description: The Global Conservation Consortium for Cycads has gathered momentum since the initial launch meeting in January, 2023 and has been pivotal in developing and strengthening partnerships. Additional regional meetings have been held in Zimbabwe (for Zimbabwe and Mozambique), Viet Nam, China and Australia, covering some of the most important hotspots for cycad diversity. Funding for additional meetings in East Africa (Kenya, South Sudan, Tanzania and Uganda), Panama/Ecuador and a follow-up meeting in South Africa, has been secured, and these meetings are scheduled to take place in 2025. The Consortium brings together affiliates and species stewards representing organisations and individuals and creates links between people operating in countries where cycads occur and global institutions with an interest in cycad conservation.

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

Number of conferences held over a four-year cycle: 0

Result description: Following the successful international Conference held in the Philippines in 2023, Australia was

selected to host the next international Cycad Conference in 2026, returning to a three-year cycle for these meetings that was disrupted by the Covid pandemic. The planning for the 2026 meeting has commenced under the leadership of CSG members Tim Uebergang (Royal Botanic Gardens Victoria) and James Clugston (University of Western Sydney) and will likely be scheduled for August 2026.

COMMUNICATE

Communication

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

Number of communication products using innovative tools: 3

Result description: Communication on cycad conservation activities was increased through two newsletters for Southern African cycads, issued by Wild Cycad Conservancy, including a [new blog on cycad conservation issues](#). An article on the use of drone technology to survey populations of *E. dyerianus* was also published as part of a collaboration between the CSG, the Selati Wilderness Foundation, Harvard University and Wild Cycad Conservancy.

Acknowledgements

The achievements of the Cycad Specialist Group were made possible through ongoing institutional support from the Montgomery Botanical Center, as well as the institutions who employ and support the work of CSG members. We are very grateful for donations and grants from the Indianapolis Zoo, San Diego Zoo and Wildlife Alliance, Gregory Family Trust, Institute of Museum

and Library Services (US) and the Mohamed Bin Zayed Fund, which have enabled the CSG to ramp up conservation planning and action activities. We also acknowledge and celebrate the dedication of many species' champions and stewards across the world.

Summary of achievements

Total number of targets 2021–2025: 12

Geographic regions: 9 Global, 2 Africa, 2 America, 2 Asia

Actions during 2024–2025:

Assess: 3 (KSR 5, 6)

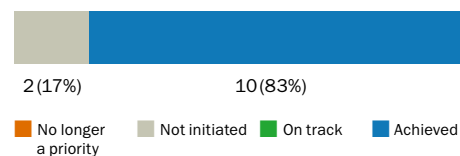
Plan: 2 (KSR 8)

Act: 3 (KSR 10)

Network: 2 (KSR 1, 3)

Communicate: 1 (KSR 13)

Overall achievement 2021–2025:



Suweon Treefrog
(*Dryophytes suweonensis*)
Photo: Amael Borzee



Marsh Cinquefoil
(*Comarum palustre*)
Photo: Magnus Goransson



Phallus aureolatus
Photo: Juliano Baltazar



Eurasian Griffon (*Gyps fulvus*)
Photo: Andre Botha



Black Rhino (*Diceros bicornis*)
Photo: Save The Rhino Trust Namibia



Azores Nursery Spider
(*Pisaura acoreesins*)
Photo: Paulo A.V. Borges



Black and White Snapper
(*Macolor niger*)
Photo: David B. Snyder