



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.

Example for the recommended citation:

Chau, M.M. and Goodale, U.M. 2024. 2023 Report of the Seed Conservation Specialist Group. In: IUCN SSC and Secretariat. 2023 Report of the IUCN Species Survival Commission and Secretariat. Gland, Switzerland: IUCN. 6 pp.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

2023 Report

IUCN SSC Seed Conservation Specialist Group



CO-CHAIR
Marian M. Chau
Kalehua Seed
Conservation
Consulting, Hawaii,
US; Terraformation,
Hawaii, US



CO-CHAIR
**Uromi Manage
Goodale**
Xi'an Jiaotong-
Liverpool University,
Suzhou, China

**RED LIST AUTHORITY
COORDINATOR**
Dustin Wolkis
National Tropical
Botanical Garden,
Kalaheo, Hawaii, US

PROGRAMME OFFICER
Charlotte Ely
Botanic Gardens
Conservation
International, England,
UK

NUMBER OF MEMBERS
103

SOCIAL MEDIA AND WEBSITE

Facebook: [IUCN Seed Conservation Specialist Group](#)

X: [@IUCN_Seeds](#)

Website: <https://seedconservationsg.org/>

Mission statement

The mission of the Seed Conservation Specialist Group (SCSG) is to promote seed conservation by providing a network for knowledge sharing in different ecosystems around the world and aiding in prioritisation, capacity building and development of best practices.

Projected impact 2021–2025

By the end of 2025, we expect that the network established by SCSG in the last quadrennium will continue to identify gaps, not only in expertise but also in the seed conservation of vulnerable species. We are purposely prioritising diversity and expanding our efforts to encourage improvements to seed banking processes in underrepresented IUCN statutory regions of Africa, Eastern Europe, North and Central Asia, Meso- and South America, Oceania and East Asia. Through gap assessments, guidelines for seed conservation, other publications, and the growth of our network, we hope that our efforts will contribute towards at least a 15% increase in species from each ecological region being conserved for the future through effective seed banking.

Targets 2021–2025

ASSESS

T-006 Complete and publish a regional and topical gap analysis of seed conservation expertise.

Status: Achieved

T-007 Assess Red List data on *ex situ* actions for plant species – prioritising those with urgent needs – and work with taxonomic and regional plant Specialist Groups/Red List Authorities to improve inclusion of seed conservation in Red List assessments.

Status: Not initiated

T-008 Enhance the existing Botanic Gardens Conservation International PlantSearch database by seeking SCSG members to help update data.

Status: On track

T-009 Using the Botanic Gardens Conservation International PlantSearch database, conduct a gap analysis on taxonomic representation in seed conservation.

Status: Not initiated

T-010 Assess the feasibility and potential for a global database on seed conservation research, best practices and needs, prioritising threatened species.

Status: Not initiated

T-011 Increase the visibility of SSC by including SSC affiliation in relevant publications by SCSG members.

Status: Achieved

ACT

T-012 Create IUCN Guidelines on Seed Conservation in English, linking to existing resources created by SCSG members and other organisations.

Status: Not initiated

T-013 Begin translating the Guidelines on Seed Conservation into other languages.

Status: Not initiated

NETWORK

T-001 Actively recruit SCSG members, especially from underrepresented regions and Key Biodiversity Areas, to achieve global membership.

Status: Achieved

T-002 Increase engagement of our members by creating Seed Conservation Specialist Group (SCSG) committees for quadrennium targets.

Status: On track

T-003 Explore fundraising options and develop a plan to start a Non-Governmental Organisation.

Status: On track

T-004 Work with the Plant Conservation Committee to identify a Focal Point for



Xi'an Jiaotong-Liverpool University PhD student Siqi Liu observing seed maturation of orchids in Huaping Town, Leye County, Guangxi Province, China
Photo: Siqi Liu

Seed Conservation in seed-plant and ex situ-related Specialist Groups and Red List Authorities.

Status: Achieved

T-005 Expand the Seed Conservation Directory of Expertise to include underrepresented regions.

Status: On track

COMMUNICATE

T-014 Create the SCSG Newsletter.

Status: On track

T-015 Improve the SCSG website.

Status: On track

T-016 Increase the SCSG web and social media presence.

Status: Achieved

T-017 Offer annual SCSG Membership meetings within broader scientific conferences, or as virtual meetings.

Status: On track

Activities and results 2023

ASSESS

Research activities

T-006 Complete and publish a regional and topical gap analysis of seed conservation expertise. (KSR 5)

Number of scientific publications about species research that acknowledge SSC affiliation: 1

Result description: In 2023, we published [one opinion piece](#) on the importance of seed banks in Science Letters.

T-008 Enhance the existing Botanic Gardens Conservation International PlantSearch database by seeking SCSG members to help update data. (KSR 6)

Number of institutions with updated BGCI species lists: 0

Result description: An upgraded version of PlantSearch is being implemented and will be released in 2024. Once released SCSG members will be encouraged to include/update seed bank data.

T-011 Increase visibility of SSC by including SSC affiliation in relevant publications by SCSG members. (KSR 5)

Number of scientific publications about species research that acknowledge SSC affiliation: 3

Result description: In 2023, we tracked three publications in which authors provided SCSG and SSC affiliation, for a total of 19 in this quadrennium. Although we have reached our goal of 10 publications, we will continue to promote and track this goal throughout the quadrennium.



Seeds of the orchid *Holcoglossum kimballianum*
Photo: Siqi Liu



Display of native Hawaiian plants, fruits, and seeds of 'akia (*Wikstroemia uva-ursi*), ma'o (*Gossypium tomentosum*), and 'ilima (*Sida fallax*) at an outreach event at the Bishop Museum Seed Bank, Honolulu, Hawai'i
Photo: Marian Chau

NETWORK

Membership

T-001 Actively recruit SCSG members, especially from underrepresented regions and Key Biodiversity Areas, to achieve global membership. (KSR 2)

Number of SSC members recruited: 1

Result description: We maintained a steady membership with 103 members this year, including a new member from the underrepresented statutory region of South America.

Synergy

T-003 Explore fundraising options and develop a plan to start a Non-Governmental Organisation. (KSR 1)

Number of 'in-kind' partnerships established and maintained: 0

Result description: In 2023, we maintained two in-kind partnerships that have supported the work of the Co-Chairs, and we expect these two partnerships to continue throughout this quadrennium.

T-004 Work with the Plant Conservation Committee to identify a Focal Point for Seed Conservation in seed-plant and ex situ-related Specialist Groups and Red List Authorities. (KSR 3)

Number of Seed Conservation focal points designated: 0

Result description: Continuing to collaborate with Cátia Canteiro, Plant and Fungi Conservation Coordinator, we were open to communication with Focal Points for Seed Conservation in 13 SSC Specialist Groups, and we collaborated directly with the Conservation Genetics SG on drafting the IUCN Species Survival Commission Biobanking Guidelines.

COMMUNICATE

Communication

T-015 Improve the SCSG website. (KSR 12)

Maintain number of annual visitors to the SCSG website: 1,147

Result description: In 2023, we had 1,147 unique visitors to the SCSG website.

Maintain number of annual page views on the SCSG website: 1,996

Result description: In 2023, we had 1,996 page views on the SCSG website.

T-016 Increase the SCSG web and social media presence. (KSR 12)

Increase in social media followers: 52

Result description: In 2023, we added 22 members to our Facebook Group and 30 followers to our X account. At the end of 2023, we had a total of 569 Facebook Group members and 275 X followers.

T-017 Offer annual SCSG Membership meetings within broader scientific conferences, or as virtual meetings. (KSR 12)

Number of meetings held: 1

Result description: In 2023, we held one membership meeting at the National Native Seed Conference in Washington, D.C.

Acknowledgements

We are truly grateful to all the affiliated organisations of our Seed Conservation Specialist Group Executive Committee for supporting us in the work we do in the Specialist Group. We thank BGCI for serving as the Secretariat for SCSG, hosting our Directory of Expertise, and contributing staff time. We also thank Instituto de Investigaciones Agropecuarias, Kalehua Seed Conservation Consulting, National

Tropical Botanical Garden, Terraformation, and Xi'an Jiaotong-Liverpool University for contributing staff time towards the SCSG targets. We are also grateful to the IUCN SSC Chair's Office, the Global Center for Species Survival, and the Commission on Ecosystem Restoration for coordinating to achieve SCSG targets. We especially thank Jon Paul Rodríguez and Cátia Canteiro for their support in achieving SCSG targets.

Summary of achievements

Total number of targets 2021–2025: 17

Geographic regions: 17 Global

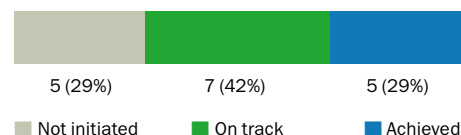
Actions during 2023:

Assess: 3 (KSR 5, 6)

Network: 3 (KSR 1, 2, 3)

Communicate: 4 (KSR 12)

Overall achievement 2021–2025:



Lactifluus neotropicus
Photo: Aida Vasco



Sternberia lutea
Photo: Hayri Duman



Tetra Parnaiba
Photo: Karina Molina



Egretta rufescens
Photo: Ernesto Gómez



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



Nothobranchius fuscotaeniatus
Photo: Csenge Nagy



Trioceros hoehnelii
Photo: Christopher V. Anderson

