IUCN SSC Species Survival Commission

Species

ISSUE 63

2022 Report of the IUCN Species Survival Commission and Secretariat

Stand-alone report
IUCN SSC Southern African Plant 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 each year. Each SSC 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 Stand-alone Report

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

Title of the SSC Group

Photograph(s) of the Chair / Co-Chairs

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

Logo of the SSC 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 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:
Matimele, H, Darbyshire, I, and Parbhoo, S. 2023. 2022 Report of the Southern African Plant Specialist Group. In: Nassar, JM, García, L, Mendoza, L, Andrade, ND, Bezeng, S, Birkhoff, J, Bohm, M, Canteiro, C, Geschke, J, Henriques, S, Ivande, S, Mileham, K, Ramos, M, Rodríguez, A, Rodríguez, JP, Street, B, and Yerena, E (Eds.). 2022 Report of the IUCN Species Survival Commission and Secretariat. International Union for Conservation of Nature. 6 pp.

2022 Report

IUCN SSC Southern African Plant Specialist Group

CO-CHAIR
Hermenegildo Matimele
Durrell Institute of Conservation and Ecology (DICE), University of Kent, UK; National Herbarium (LMA), Instituto de Investigação Agrária de Moçambique (IIAM), Mozambique

CO-CHAIR
Iain Darbyshire (until June 2022)
Royal Botanic Gardens, Kew, UK

CO-CHAIR
Suvarna Parbhoo (since July 2022)
South African National Biodiversity Institute (SANBI), South Africa

RED LIST AUTHORITY COORDINATOR
Hlengiwe Mtshali
South African National Biodiversity Institute (SANBI), South Africa

NUMBER OF MEMBERS
45

Mission statement

To assess the conservation status of plants endemic to Southern Africa and to ensure their sustainable use and adequate protection through mainstreaming of information pertaining to threatened plants into government policies and development planning.

Projected impact 2021–2025

In the current quadrennium, the Southern African Plant Specialist Group aims to inform and enable effective conservation and land use planning through the identification of critical species and ecosystems through multi-country red listing programmes and the documenting of critical sites for this important biodiversity, through identifying and promoting Key Biodiversity Areas and Important Plant Areas. We will deliver targeted *in situ* and *ex situ* conservation and sustainable use programmes for species identified as at particular risk from habitat change and over-exploitation across the southern African region.

Targets 2021–2025

ASSESS

T-001 Complete assessments for 50 endemic and near-endemic plant taxa in Mozambique.
Status: On track

T-002 Initiate assessments of ca. 100 endemic and near-endemic plant taxa in Malawi.
Status: Not initiated

T-003 Initiate assessments of 180 endemic and near-endemic plant taxa in Namibia.
Status: Not initiated

T-004 Complete assessments for 213 *Conophytum* taxa in South Africa.
Status: Achieved

T-006 Complete assessment of Important Plant Areas for Mozambique.
Status: On track

T-007 Complete assessment of Important Plant Areas in South Africa.
Status: On track

T-008 Complete Red List of Ecosystems assessment and second iteration Key Biodiversity Area (KBA) network for Mozambique.
Status: On track

T-018 Map ecosystem types for Namibia in preparation for Red List assessment.
Status: Not initiated

T-019 Initiate an inventory of Southern African *ex situ* cultivated plant collections of threatened species.
Status: Achieved

T-020 Develop a priority list of Southern African threatened species for *ex situ* cultivated plant collections of recalcitrant and priority critical habitat species that cannot be banked.
Status: On track

T-021 Complete assessments for 70 endemics and near endemics plant taxa in Eswatini.
Status: On track

PLAN

T-014 Contribute to *in situ* conservation planning in the Licuati and Chimanimani Important Plant Areas of Mozambique, to support improved protection for key habitats and their species.
Status: Not initiated

ACT

T-005 Develop a new area of work on sustainable use focusing on selected medicinal

Fieldwork in search of *Eriosema rufescens*, Bulembu, Eswatini
Photo: Kate Braun

Assessing seed maturity of Mozambican near-endemic shrub *Synaptolepis oliveriana*
Photo: Jo Osborne, Royal Botanic Gardens Kew

plants that are traded across borders in southern Africa.
Status: On track

T-010 South Africa seed banking programme: (1) develop priority list of South African threatened species for seed banking; (2) bank 1,000 seed collections of South African spp. of which 700 are new to the Millennium Seed Bank Partnership (MSBP); (3) seed bank illegally harvested succulent species – 45 target species. and 50 species from habitat.
Status: On track

T-011 Mozambique seed banking programme: (1) develop priority list of Mozambican threatened species for seed banking; (2) bank 700 seed collections for *ex situ* conservation of which 600 are new to the MSBP.
Status: On track

T-012 Pilot involving citizen members of the South African Botanical Society to restore priority degraded Important Plant Areas.
Status: On track

T-013 Develop an *in situ* conservation project on the *Icuria*-dominated coastal forests in Northern Mozambique.
Status: On track

T-015 Develop a species recovery programme: (1) develop a template for species recovery plans; (2) implement selected species recovery projects.
Status: On track

COMMUNICATE

T-009 Promote citizen science monitoring via the iNaturalist platform by providing training and participating in the global City Nature Challenge and Great Southern Bioblitz events.
Status: On track

Activities and results 2022

ASSESS

Red List

T-004 Complete assessments for 213 *Conophytum* taxa in South Africa. (KSR 6)

Number of new global Red List assessments completed: 1

Result description: All species in the genus *Conophytum*, a group of plants currently being hard hit by illegal wildlife trade were assessed during 2021 and 2022 and submitted to the IUCN in April 2022. These have been published and the results show that a total of 97% of the genus is listed in one of the three threatened categories, whilst 45% are listed in the highest category as Critically Endangered, meaning they are on the brink of extinction. Likely, some species have already been poached to extinction in the wild because the number of confiscated poached plants being housed at secure locations for court cases often exceeds the previously estimated total wild population size. Previously, these succulent species were not assessed on the IUCN Red List, however, they were included on South Africa's National Red List.
Since 2019, 91% of the previously listed *Conophytums* have experienced an increase in threat status, with the vast majority as a result of illegal poaching.

Planning

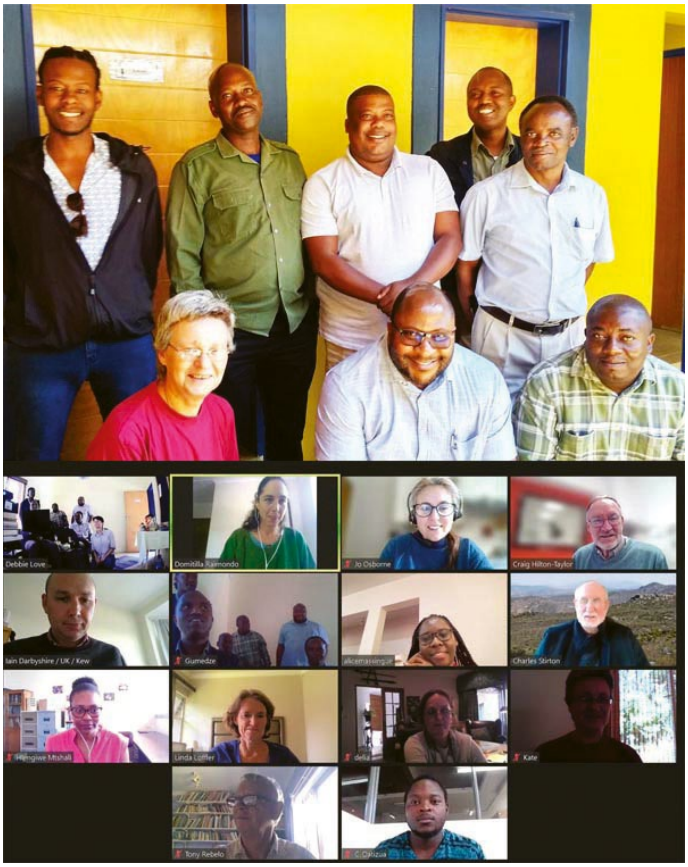
T-020 Develop a priority list of Southern African threatened species for *ex situ* cultivated plant collections of recalcitrant and priority critical habitat species that cannot be banked. (KSR 5)

Number of national priority lists developed: 0

Result description: Work has started to develop the lists of recalcitrant species for South Africa and Mozambique using Kew's

Victoria Wilman presenting at the Seed Conservation Techniques training course in Cape Town in September 2022
Photo: Jo Osborne, Royal Botanic Gardens Kew

Workshop Participants - Eswatini's endemic and near endemic Red List flora assessment
Photo: Kate Braun



Seed Information Database (https://data.kew.org/sid/sidsearch.html) and Seed storage predictor tool (https://seedcollections.shinyapps.io/seed_storage_predictor/).

Policy

T-007 Complete assessment of Important Plant Areas in South Africa. (KSR 6)

Number of national plans incorporating Key Biodiversity Areas in their spatial planning: 60

Result description: The Important plant areas of South Africa have been identified using the standardised criteria outlined by Darbyshire *et al*. (2017). To date, the Important Plant Areas that satisfied the requirements for Criterion A, B, and C have been identified across the country.

ACT

Conservation actions

T-010 South Africa seed banking programme: (1) develop priority list of South African threatened species for seed banking; (2) bank 1,000 seed collections of South African species of which 700 are new to the Millennium Seed Bank Partnership (MSBP); (3) seed bank illegally harvested succulent species – 45 target species and 50 species from habitat. (KSR 10)

Number of threatened species benefited directly or indirectly by sustainable use programmes: 763

Ntsakisi Masia, SANBI (right) and Zelia Malate, IIAM (left) assessing *Helichrysum* seeds during Seed Conservation Techniques training in Mozambique
Photo: Jo Osborne, Royal Botanic Gardens Kew

Result description: *Ex situ* seed collections made from January to December 2022 (763 species), with 361 new to the seed bank collections, 18 targeted *Conophytum* succulent species and 36 species from the Karoo Biome habitat.

T-011 Mozambique seed banking programme: (1) develop priority list of Mozambican threatened species for seed banking; (2) bank 700 seed collections for ex situ conservation of which 600 are new to the MSBP. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 57

Result description: Seeds of 57 Mozambican plant species were collected for *ex situ* conservation this year, bringing the overall total to 84 collections since the start of this quadrennium, including 34 species new to the MSB, one threatened species and eight endemic species. A two-week Seed Conservation Techniques training course was held in Mozambique in November 2022 bringing together trainers and participants from Kew, SANBI and IIAM Millennium Seed Bank Partnership. A priority list for seed banking is in progress.

T-012 Pilot involving citizen members of the South African Botanical Society to restore priority degraded Important Plant Areas. (KSR 10)

Number of actions addressing major drivers/emerging threats of species or population loss: 60

Result description: Now that the Important Plant Areas of the country have been identified, we are now in the process of writing up reports to aid in prioritizing sites for five branches of the Botanical Society of South Africa across the country to conduct conservation intervention activities specific to the important plant areas occurring within their regions.

T-015 Develop a species recovery programme: (1) develop a template for species recovery plans; (2) implement selected species recovery projects. (KSR 10)

Number of threatened species benefiting from *in situ* conservation action: 1

Result description: *Tulbaghia cominsii* (CRPE) project was initiated and is in progress; germination protocols are currently being developed through germination trials with the ultimate aim of restoring in the wild.

COMMUNICATE

Communication

T-009 Promote citizen science monitoring via the iNaturalist platform by providing training and participating in the global City Nature Challenge and Great Southern Bioblitz events. (KSR 13)

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

Result description: An 8-week training was facilitated online in preparation for participating in the global City Nature Challenge event. The objective of this 4-day event is to motivate people to find and record wildlife in urban areas using the Bioblitz methodology, with participants from South Africa (13), Botswana (five), and Zimbabwe (two). The City Nature Challenge yielded 83,275 observations of 5,232 plant species. Several plant taxa of conservation concern were recorded as well.

Summary of achievements

Total number of targets 2021–2025: 19

Geographic regions: 19 Africa

Actions during 2022:

Assess: 3 (KSR 5, 6)
Act: 4 (KSR 10)
Communicate: 1 (KSR 13)

Overall achievement 2021–2025: