



# Species

ISSUE 63

## 2022 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 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.

---

### Example for the recommended citation:

Goettsch, B, and Majure, L. 2023. 2022 Report of the Cactus and Succulent Plants 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. 4 pp.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

## 2022 Report

# IUCN SSC Cactus and Succulent Plants Specialist Group



**CO-CHAIR**  
Bárbara Goettsch  
Global Species  
Programme, IUCN,  
Cambridge, UK



**CO-CHAIR**  
Lucas Majure  
University of Florida,  
Florida, US

**RED LIST AUTHORITY  
COORDINATOR**  
Raúl Puente  
Desert Botanical  
Garden, Phoenix,  
Arizona, US

**NUMBER OF MEMBERS**  
49

**SOCIAL MEDIA AND WEBSITE**  
Facebook: @iucn.cssg  
Instagram: @iucn\_cssg  
Twitter: @CcssgSsc

### Mission statement

The mission of the Cactus and Succulent Plants Specialist Group (CSSG) is to contribute to the conservation of cactus and succulent plants through a better understanding of their taxonomy, ecology, and threats.

### Projected impact 2021–2025

Our projected impact on species conservation status is 1,468 reassessments of cacti and 135 new assessments of other succulents including *Dudleya* and *Pachypodium*.

### Targets 2021–2025

#### ASSESS

**T-005** Assess the extinction risk of 67 species of *Agave sensu lato* (including 35 *Manfreda*, 17 *Polianthes*, 14 *Agave* and one *Prochyanthes*), seven *Hesperaloe* and 23 *Fourcraea*.  
Status: On track

**T-006** Assess the extinction risk of 46 species of *Dudleya*.  
Status: Not initiated

**T-007** Re-assess the extinction risk of 1,477 species of *Cactaceae*.  
Status: On track

**T-009** Assess the extinction risk of 22 species of *Pachyphytum*.  
Status: Not initiated

**T-010** Conduct a taxonomic review of *Cactaceae*.  
Status: Achieved

**T-015** Produce a scientific publication on the global assessment of *Agave*.  
Status: Not initiated

**T-016** Produce a scientific publication on the global assessment of *Yucca*.  
Status: Not initiated

#### PLAN

**T-011** Organise *Copiapoa* Workshop.  
Status: On track

#### ACT

**T-014** Ensure repatriation of *Copiapoa* seized in Italy.  
Status: Achieved

#### NETWORK

**T-001** Identify focal expert in the illegal trade of succulents.  
Status: Achieved

**T-002** Review membership and expand the taxonomic and geographic representation of the group by inviting 15 new experts with an emphasis on increasing the representation of members from the Americas, particularly aiming for women and people under 35.  
Status: Achieved

**T-004** Enhance collaboration with at least two plant Specialist Groups.  
Status: Achieved

### COMMUNICATE

**T-017** Increase the CSSG presence in social media platforms to 5,000 per platform.  
Status: On track

**T-018** Publish the CSSG annual bilingual communication and newsletter.  
Status: Achieved

### Activities and results 2022

#### ASSESS

##### Red List

**T-005** Assess the extinction risk of 67 species of *Agave sensu lato* (including 35 *Manfreda*, 17 *Polianthes*, 14 *Agave* and one *Prochyanthes*), seven *Hesperaloe* and 23 *Fourcraea*. (KSR 6)

Number of new global Red List assessments completed: 0

Result description: Assessments for 14 species of *Agave* are in progress, and we expect these to be published in 2023.

**T-007** Re-assess the extinction risk of 1,477 species of *Cactaceae*. (KSR 7)

Reassess the extinction risk of 1,477 species of *Cactaceae*: 0

Result description: During this year, we have continued to work on the reassessment of 45 cactus species of the Chilean genus *Copiapoa* and 237 cactus species of the Sonoran Desert. The assessments for *Copiapoa* will be published in 2023.



Copiapoa de Carrizal Bajo (*Copiapoa dealbata*)  
in situ in Quebrada La Higuera, Atacama, Chile  
Photo: Pablo C. Guerrero

## Research activities

### T-010 Conduct a taxonomic review of Cactaceae. (KSR 5)

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

Result description: Affiliation to the CSSG was acknowledged in three scientific publications, covering climate change impacts, conservation planning and illegal trade of succulent plants.

## PLAN

### Planning

#### T-011 Organise Copiapoa Workshop. (KSR 8)

Number of conservation plans/strategies developed: 0

Result description: The CSSG, in collaboration with the Chester Zoo in the UK, the Conservation Planning Specialist Group, Concepción University in Chile, and the Chilean Ministry of the Environment, organised a set of workshops in 2022 leading to a Conservation Action Plan for the Chilean cactus genus *Copiapoa*. The Plan will be published in 2023.

## NETWORK

### Membership

**T-002 Review membership and expand the taxonomic and geographic representation of the group by inviting 15 new experts with an emphasis on increasing the representation of members from the Americas, particularly aiming for women and people under 35. (KSR 2)**

Number of SSC members recruited: 6

Result description: In 2022, we welcomed six new members. Currently, the CSSG has 49 members, and we expect to invite

other experts from a list that we have been curating over the past years. Membership will continue to be expanded in 2023. Our membership is composed of 30 men and 19 women, from 14 countries in Europe (12 members), Mexico, Central America, and the Caribbean (12 members), North America (13 members) and South America (12 members).

### Synergy

#### T-004 Enhance collaboration with at least two plant Specialist Groups. (KSR 2)

Enhance collaboration with at least two plant Specialist Groups: 2

Result description: The CSSG is continuing the reassessment of the Cactaceae family. For this, the CSSG is teaming up with the Sonoran Desert Plant Specialist Group to start reassessing the approximately 246 cactus species distributed in the Southwest US and northwestern Mexico. We are collaborating with the Southern African Plant Specialist Group to address concerns surrounding the illicit trafficking of succulent plants. The CSSG is collaborating with the Conservation Planning Specialist Group on a workshop to develop the conservation action plan for *Copiapoa*, a cactus genus endemic to Chile. The CSSG is collaborating with Yuley Encarnación, the Cactaceae specialist for Hispaniola, to begin reassessments of species endemic to the island.

## COMMUNICATE

### Communication

**T-017 Increase the CSSG presence in social media platforms to 5,000 per platform. (KSR 13)**

Increase the CSSG presence in social media platforms to 5,000 per platform: 3,391

Result description: The CSSG had 3,391 followers across its three platforms (Facebook, 1,502; Instagram, 1,502; Twitter, 784) for 2022.

#### T-018 Publish the CSSG annual bilingual communication and newsletter. (KSR 12)

Number of media articles mentioning IUCN Species theme: 1

Result description: While the CSSG did not publish its newsletter in 2022 due to a staff transition, it is resuming its communication activities in 2023. The CSSG was mentioned in an interview with CBS News on the impacts of climate change on cacti.

## Acknowledgements

We would like to thank the generosity of our host institution, the Desert Botanical Garden in Phoenix, Arizona, USA, as well as our donors B. Willow (US) and Summer Rayne Oakes (US).

## Summary of achievements

**Total number of targets 2021–2025: 14**

**Geographic regions: 11 Global, 3 America**

**Actions during 2022:**

Assess: 3 (KSR 5, 6, 7)

Plan: 1 (KSR 8)

Network: 2 (KSR 2)

Communicate: 2 (KSR 12, 13)

**Overall achievement 2021–2025:**

