



# Species

ISSUE 64

## 2023 Report of the IUCN Species Survival Commission and Secretariat



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## 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.

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### 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.

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### 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.

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## 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.

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### Title of the group

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### Photograph(s) of the Chair/Co-Chairs

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### 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.

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### Logo of the group

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### Mission statement

Includes the mission of the group.

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### 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.

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### 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).

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### 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).

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### Acknowledgements

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

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### 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

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### Example for the recommended citation:

Foden, W. 2024. 2023 Report of the Climate Change Specialist Group. In: IUCN SSC and Secretariat. *2023 Report of the IUCN Species Survival Commission and Secretariat*. Gland, Switzerland: IUCN. 4 pp.

## 2023 Report

# IUCN SSC Climate Change Specialist Group



**CHAIR**  
Wendy Foden  
Cape Research  
Centre, South African  
National Parks, South  
Africa

**NUMBER OF MEMBERS**  
62

### Mission statement

The IUCN SSC Climate Change Specialist Group (CCSG) aims to support and strengthen nature conservation in a changing climate.

### Projected impact 2021–2025

The IUCN SSC Climate Change Specialist Group is a global network of more than 60 leading scientists and conservation professionals dedicated to supporting and strengthening nature conservation in a changing climate. We work to promote a deeper understanding of climate change, its impacts, and the responses required to protect biodiversity in this rapidly changing world. To accomplish these objectives, we have structured our activities around five main themes: 1) Understanding impacts; 2) Assessing vulnerability; 3) Developing adaptation responses; 4) Informing policy, and 5) Supporting the Species Survival Commission (SSC).

### Targets 2021–2025

#### ASSESS

**T-001** Document, attribute, and monitor climate change impacts on species.  
Status: On track

**T-002** Improve the use and understanding of species vulnerability to climate change and CCVA methodology, including for Red List and Green List assessments.  
Status: Achieved

**T-003** Advance understanding of climate adaptation by evaluating conservation actions and their efficacy and improving linkages to species conservation planning.  
Status: On track

#### PLAN

**T-005** Inform IUCN policy and outreach on climate change issues.  
Status: On track

#### ACT

**T-004** Develop and recommend adaptation measures to climate change and monitor their effectiveness.  
Status: Achieved

#### NETWORK

**T-006** Support the SSC on climate change-related issues.  
Status: On track

**T-009** Build and strengthen the CCSG through the acceptance and recruitment of new members to advance our program areas.  
Status: On track

#### COMMUNICATE

**T-007** Share scientific advances from the CCSG community and beyond to facilitate uptake, invite collaborations, promote best practices, and incentivise discussion around key issues and timely events.  
Status: On track

**T-008** Communicate scientific advances to strengthen the community of practice around climate-focused conservation.  
Status: On track

### Activities and results 2023

#### ASSESS

##### Research activities

**T-001** Document, attribute, and monitor impacts of climate change on species. (KSR 5)

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

Result description: CCSG Chair Wendy Foden was a contributing author on the IPCC's 6<sup>th</sup> Assessment report. Publication: Parmesan, C. *et al.* (2022). 'Terrestrial and Freshwater Ecosystems and Their Services'. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Pörtner, H.O. (eds.)]. Cambridge University Press, Cambridge,

Researchers in South Africa's Tankwa Karoo trial a shader with the aim of cooling the ground during heat waves so that birds can land to drink  
Photo: Dian Spear



Ex situ conservation provides the only safely net against extinction of several Namib desert succulent plants. The CCSG assisted with a project to build a temperature-controlled net house is a stronghold against climate change  
Photo: Keith McNair



UK and New York, NY, US, pp. 197–377. Chapter 2, building on prior assessments, provides a global assessment of the observed impacts and projected risks of climate change to terrestrial and freshwater ecosystems, including their component species and the services they provide to people. Where possible, differences among regions, taxonomic groups and ecosystem types are presented. Adaptation options to reduce risks to ecosystems and people are assessed.

**T-002 Improve the use and understanding of species vulnerability to climate change and CCVA methodology, including issues related to Red List and Green List assessments.** (KSR 5)

Number of scientific publications about species research that acknowledges SSC affiliation: 2

Result description: Red List assessments for Southern Africa's Tree Aloes and from the genus *Conophytum* were carried out, with a particular focus on assessing species' vulnerability to climate change.

**T-003 Advance understanding of climate adaptation by evaluating conservation actions and their efficacy and improving linkages to species conservation planning.** (KSR 5)

Number of scientific publications about species research that acknowledge SSC affiliation: 0

Result description: Plans to work with the University of Cambridge's [ConservationEvidence.org](http://ConservationEvidence.org) were delayed by a lack of funding. New plans are in place to source funding.

**PLAN**

**Policy**

**T-005 Inform IUCN policy and outreach on climate change issues.** (KSR 9)

Number of policies where SSC members provided technical input: 3

Result description: Steering Committee member Victoria Romero represented IUCN on issues related to UNFCCC and CBD, gathering input from the Group as needed. Members provided input into policies within their own countries, e.g. Mexico, UK, US, and South Africa.

**ACT**

**Conservation actions**

**T-004 Develop and recommend adaptation measures to climate change and monitor their effectiveness.** (KSR 10)

Number of actions addressing major drivers/emerging threats of species or population loss: 3

Result description: Three innovation projects were carried out in South Africa to trial novel approaches to adapting to climate change. These included: (1) [Preventing plant extinctions in the Richtersveld, South Africa](#), (2) [Improved nesting, management, and monitoring for African penguins in South Africa](#), and (3) [Managing microclimates for southern yellow-billed hornbills in the Kalahari Desert, South Africa](#).

**COMMUNICATE**

**Communication**

**T-007 Share scientific advances from the CCSG community and beyond to facilitate uptake, invite collaborations, promote best practices and incentivise discussion around key issues and timely events.** (KSR 12)

Number of communicational events implemented: 5

Result description: CCSG members presented at the following events: (1) US's National Climate Change Adaptation meeting in the US, presenting a talk and workshop on how to make climate change adaptation more innovative; (2) Species on the Move in Florida, including on the role of protected areas in climate change adaptation, as well as running a workshop on climate anxiety, and (3) An "art meets climate science" event was held in which South African youth were given a lecture on climate change, mentored through climate-anxiety and encouraged to share their stories and feelings through art.

**Acknowledgements**

We thank the Yorkshire Zoo and the IUCN SSC Chair's Office for ongoing financial and logistical support.

**Summary of achievements**

Total number of targets 2021–2025: 9

Geographic regions: 8 Global, 1 Africa

Actions during 2023:

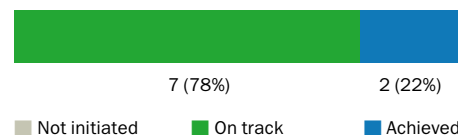
Assess: 3 (KSR 5)

Plan: 1 (KSR 9)

Act: 1 (KSR 10)

Communicate: 1 (KSR 12)

Overall achievement 2021–2025:



Legend: Not initiated (grey), On track (green), Achieved (blue)



*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