



Species

ISSUE 65

2024-2025 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 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.

Example for the recommended citation:

Foden, W. (2025). 2024-2025 Report of the Climate Change 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.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

2024-2025 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 2024-2025

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: 6

Result description: In 2024, six publications were made: (1) Ameca, EI, *et al.* (2024). 'Identifying protected areas in biodiversity hotspots at risk from climate and human-induced compound events for conserving threatened species'. *Science of The Total Environment* 938: 173192, (2) Langhammer, PF, *et al.* (2024). 'The



positive impact of conservation action'. *Science* 384,453-458, (3) Stein, BA, et al. (2024). 'Innovation in climate adaptation: Harnessing innovation for effective biodiversity and ecosystem adaptation'. *Washington, DC: National Wildlife Federation*, (4) Ding, C, Newbold, T, and Ameca, EI. (2024). 'Assessing the global vulnerability of dryland birds to heatwaves'. *Global Change Biology*, 30, e17136, (5) Sharnuud, R, and Ameca, EI. (2024). 'Taxonomy, distribution, and contemporary exposure of terrestrial mammals to floods and human pressure across different areas for biodiversity conservation in China'. *Integrative Zoology*, 19, 458-467, and (6) Preston-Allen, RGG, et al. (2024). 'Geography, taxonomy, extinction risk and exposure of fully migratory birds to droughts and cyclones'. *Global Ecology and Biogeography*, 33, 63-73.

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: 5

Result description: In 2024, we co-produced the following publications: (1) Mancini, G, et al. (2024). 'A standard approach for including climate change responses in IUCN Red List assessments'. *Conservation Biology*, 38, e14227, (2) Ameca, EI, et al. (2024). 'Identifying protected areas in biodiversity hotspots at risk from climate and human-induced compound events for conserving threatened species'. *Science of The Total Environment*, Volume 938, 173192, ISSN 0048-9697, (3) Ding, C, Newbold, T, and Ameca, EI. (2024). 'Assessing the global vulnerability of dryland birds to heatwaves'. *Global Change Biology*, 30(1), p.e17136, (4) Preston-Allen, RG, et al. (2024). 'Geography, taxonomy, extinction risk and exposure of fully migratory birds to droughts and cyclones'. *Global Ecology and Biogeography*, 33(1), pp.63-73. Ongoing support of CCVA application, including for: Bellard, C, et al. (2025). 'A framework to quantify the vulnerability of insular biota to global change'. *Peer Community Journal*, Volume 5, article no. e48. While, in 2025, we co-led the publication: Pather, K, et al. (2025). 'An assessment of the climate change vulnerability of Richtersveld plants'. MSc Thesis. University of Cape Town.

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: 8

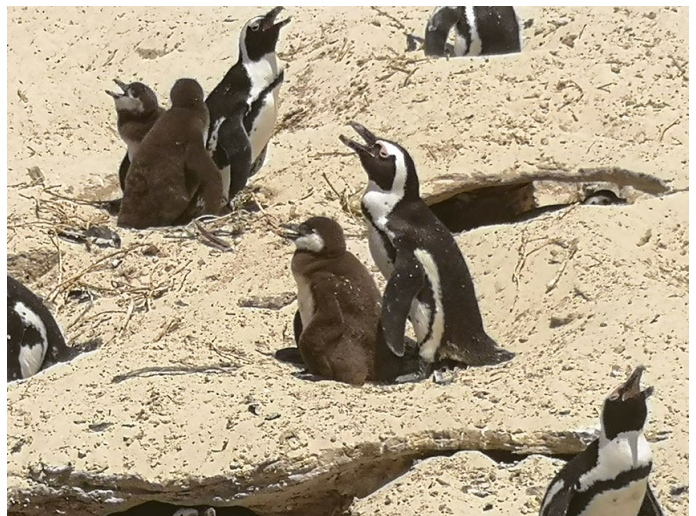
Result description: In 2024, we contributed in the following publications: (1) Stein, BA, et al. (2024). 'Innovation in climate adaptation: Harnessing innovation for effective biodiversity and ecosystem adaptation'. *Washington, DC: National Wildlife Federation*, (2) Mancini, G, et al. (2024). 'A standard approach for including climate change responses in IUCN Red List assessments'. *Conservation Biology*, 38, e14227, (3) Langhammer, PF, et al. (2024). 'The positive impact of conservation action'. *Science* 384,453-458, (4) Bellard, C, et al. (2025). 'A framework to quantify the vulnerability of insular biota to global change'. *Peer Community Journal*, Volume 5, article no. e48, (5) Ameca, EI, et al. (2024). 'Identifying protected areas in biodiversity hotspots at risk from climate and human-induced compound events for conserving threatened species'. *Science of The Total Environment*, Volume 938, 173192, ISSN 0048-9697, (6) Sharnuud, R, and



Prolonged drought in arid Southern Africa is leading to extensive degradation of the Succulent Karoo biodiversity hotspot
Photo: Wendy Foden



Southern Africa's succulent plants face escalating threats from poaching and climate change
Photo: Wendy Foden



Penguins face increasing heat stress, leading to nest abandonment and chick death
Photo: Nicola van Wilgen



Plant pollinator relationships are particularly vulnerable to disruption due to climate change
Photo: Fenton Cotterill

Ameca, El. (2024). 'Taxonomy, distribution, and contemporary exposure of terrestrial mammals to floods and human pressure across different areas for biodiversity conservation in China'. *Integrative Zoology*, 19, 458–467, (7) Ding, C, Newbold, T, and Ameca, El. (2024). 'Assessing the global vulnerability of dryland birds to heatwaves'. *Global Change Biology*, 30, e17136, and (8) Preston-Allen, RGG, *et al.* (2024). 'Geography, taxonomy, extinction risk and exposure of fully migratory birds to droughts and cyclones'. *Global Ecology and Biogeography*, 33, 63–73. In 2025, we submitted funding proposals to develop IUCN SSC guidelines for conservation in a changing climate.

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: 1

Result description: In 2025, funding was received from the Oppenheimer Foundation to carry out climate change restoration on two charismatic plant species in Southern Africa, and the project has begun. Implementation continues for three innovation projects that were carried out in South Africa to trial novel approaches to adapting to climate change. Including: (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](#).

NETWORK

Membership

T-009 Build and strengthen the CCSG through the acceptance and recruitment of new members to advance our program areas. (KSR 2)

Number of SSC members recruited: 4

Result description: Collaboration of four new scientists and practitioners. A funding proposal has been developed that will enable the development of IUCN climate change adaptation guidelines. This involves 10 new members, with a focus on Africa. The proposal's outcome is not yet known.

Synergy

T-006 Support the SSC on climate change-related issues. (KSR 2)

Number of collaborations with SSC community: 1

Result description: In 2024 and 2025, we assisted with climate change modelling and Red List assessments.

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: 3

Result description: The CCSG, its role and knowledge products were promoted at three events: (1) the Oppenheimer Research Conference in South Africa, this ultimately yielded funding for developing IUCN SSC Guidelines for conservation

in a changing climate, (2) a UNEP WCMC seminar on Climate Change Adaptation in conservation, and (3) the SSC Leaders Meeting, where members presented three workshops and a plenary presentation.

T-008 Communicate scientific advances to strengthen the community of practice around climate-focused conservation. (KSR 12)

Number of Species e-bulletin, Save Our Species newsletter, SSC Groups' newsletter editions produced: 4

Result description: More than 10 scientific publications communicated guidance on climate-focused conservation, and [one product](#) was the subject of an IUCN Press Release.

Acknowledgements

We thank Re:wild for hosting the CCSG 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 2024–2025:

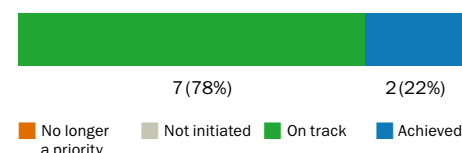
Assess: 3 (KSR 5)

Act: 1 (KSR 10)

Network: 2 (KSR 2)

Communicate: 2 (KSR 12)

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 acoreensis*)
Photo: Paulo A.V. Borges



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