



Species

ISSUE 65

2024-2025 Report of the IUCN Species Survival Commission and Secretariat



Stand-alone report
CSS New Mexico BioPark Society

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.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

Example for the recommended citation:

Lyons, T, Walker, A, Hoffman, K, Chase, M, Lee Pipkin, P, and Baine, Q. (2025). 2024-2025 Report of the CSS New Mexico BioPark Society. In: IUCN SSC and Secretariat. *Species: Annual Report of the IUCN Species Survival Commission and Secretariat 2024-2025*. Gland, Switzerland: IUCN. 6 pp.

2024-2025 Report

CSS New Mexico BioPark Society



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Mission statement

The Center for Species Survival New Mexico, established in 2018, supports strategic species conservation across the IUCN's Species Survival Commission. From the small cacti of the desert southwest to the bees and butterflies that colour our landscape and the fishes that grace our rivers, we are committed to these organisms, no matter how small. We use tools like the IUCN Red List to produce critical baseline data that guide conservation planning and action. As of June, 2022 we have contributed to over 2,000 species-level extinction risk assessments, spanning 96 countries. This will inform conservation measures taken by the ABQ BioPark, our partners in New Mexico and conservationists worldwide.

Projected impact 2021-2025

Not stated yet.

Targets 2021-2025

ASSESS

T-002 Offer Red List trainings, in partnership with The Red List Unit, to new Centers for Species Survival, the local community and the broader IUCN SSC Network.
Status: On track

T-021 Build capacity for invertebrate specialist groups – including the Firefly Specialist Group, Butterfly and Moth Specialist Group, Wild Bee Specialist Group, and Terrestrial Invertebrate Red List Authority – to complete Global Red List assessments.
Status: On track

T-022 Build capacity for plant specialist groups – including the Medicinal Plant Specialist Group, Sonoran Plant Specialist Group, and others – to complete Red List assessments.
Status: On track

T-023 Support the reassessment of European Medicinal Plants.
Status: On track

T-024 Build capacity for the Freshwater Specialist Group to complete Red List assessments and support assessment priorities of the Freshwater Biodiversity Unit.
Status: Achieved

T-025 Support the reptile Red List reassessment for Central American species.
Status: On track

T-026 Support the Global Amphibian Assessment 3.
Status: Not initiated

PLAN

T-003 Support, in partnership with the IUCN SSC Conservation Planning Specialist Group, the development of the Assess to Plan tools and methodology for application in both global and national processes.
Status: On track



ACT

T-007 Add germplasm accessions for 10 threatened plant species not currently known to the ABQ BioPark seed bank to be held in any collections.

Status: On track

T-013 Facilitate the creation of a captive-reared population of the highly threatened Sacramento Mountains Checkerspot Butterfly at the ABQ BioPark.

Status: Achieved

T-019 Support insect monitoring programmes to work toward lowering Data Deficiency rates among Red List-assessed invertebrates.

Status: On track

NETWORK

T-004 Continue working with community partners to offer Red List trainings outside of specialist group commitments. This will further knowledge of the Red List among conservation partners, such as local

University students and faculty, government agencies and even our own ABQ BioPark staff.

Status: Achieved

T-005 Support National Reverse the Red pilot efforts, by providing technical training to taxa experts and coordinating parties involved in each step of the One Programme Charter.

Status: On track

T-006 Establish close collaborative ties with local indigenous communities and facilitate seed banking and technical support for conservation initiatives.

Status: Achieved

T-012 Support the establishment of new Centers for Species Survival by facilitating access to necessary tools such as SIS, supporting workplan development with relevant Specialist Group or National stakeholders, and ensuring regular communication between Species Survival Centers.

Status: On track

T-018 Conduct a Gap Analysis on the conservation status and needs of New Mexican species.

Status: Achieved

COMMUNICATE

T-009 Communicate the achievements of the Center for Species Survival New Mexico to the SSC Network by contributing one article per year to the SSC Quarterly Report.

Status: On track

T-011 Communicate the work of the Center for Species Survival New Mexico to taxa experts, industry professionals and the general public through webinars or presentations.

Status: On track

T-014 Create brand elements, such as a logotype, to facilitate marketing and add visibility to the Center for Species Survival New Mexico.

Status: Achieved

T-015 Contribute articles on species conservation work to the New Mexico BioPark

Society's *BioScape* Quarterly Magazine.
Status: On track

T-016 Give interviews to the media on the work of the CSS New Mexico.
Status: On track

T-017 Communicate the work of the Center for Species Survival New Mexico to biologists, conservationists, and industry experts at conferences via presentations or posters.
Status: On track

T-020 Contribute conservation-themed articles to Scientific Publications.
Status: On track

Activities and results 2024-2025

ASSESS

Red List

T-002 Offer, in partnership with The Red List Unit, Red List trainings to new Centers for Species Survival, the local community, and the broader IUCN SSC Network. (KSR 6)

Number of people trained in Red List Assessment and/or Red List Trainer Training: 80

Result description: In February, 2024 Clay Meredith, Tim Lyons, and Anna Walker delivered a remote Red List Assessor Training to 25 members of the SSC Centers for Species Survival Network. In October, 2024 Janet Scott and Clay Meredith delivered an in-person Train the Red List Trainer, to around 15 people total. In December, Katie Hoffman and Tim Lyons travelled to India to build capacity for the National Red List by training 40 scientists from the Indian Ministry of Environment.

T-021 Build capacity for invertebrate Specialist Groups – including the Firefly Specialist Group, Butterfly and Moth Specialist Group, Wild Bee Specialist Group, and Terrestrial Invertebrate Red List Authority – to complete Global Red List assessments. (KSR 6)

Number of global Red List reassessments completed: 188

Result description: In June, 2024, 103 assessments Anna Walker co-authored were published – 99 Mesoamerican Wild Bees and four southeast Asian Mangrove Fireflies – and 10 assessments Anna Walker reviewed were published (all European Firefly Species). She also drafted or co-wrote 75 assessments for rare, threatened, and endemic arthropods in New Mexico. These are currently undergoing expert review.

T-023 Support the reassessment of European Medicinal Plants. (KSR 6)

Number of national Red List reassessments published: 0

Result description: Currently, all assessments in this working set have been drafted. However, they still require peer review (expected to be completed in 2025) before they can be accepted for publication on the IUCN Red List.

T-024 Build capacity for the Freshwater Specialist Group to complete Red List assessments and support assessment priorities of the Freshwater Biodiversity Unit. (KSR 6)

Number of global Red List reassessments completed: 252

Result description: This target was achieved in 2024 in collaboration with the Freshwater Fish Specialist Group and IUCN Data Science Team (Catherine Sayer).

This assessment target culminated with a *Nature* publication accepted in 2024 and expected for publication in early 2025.

T-025 Support the reptile Red List reassessment for Central American species. (KSR 6)

Number of global Red List reassessments completed: 0

Result description: Assessments were drafted and Red List Assessment Workshop was held in March, 2025. Post-workshop clean-up is underway. This working set is scheduled to be finished late summer of 2025 and submitted in the next submission cycle.

T-026 Support the Global Amphibian Assessment 3. (KSR 6)

Number of global Red List reassessments completed: 0

Result description: Coordination efforts of the GAA 3 are underway. The ASG chairs and co-chairs of Central American country representatives have been contacted. We are underway to organise the assessments of amphibian species by in country experts.

ACT

Conservation actions

T-007 Add germplasm accessions for 10 threatened plant species not currently known to the ABQ BioPark to be held in any collections seed bank. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 3

Result description: During the 2024 field season, three species were added to our germplasm collection – *Abronia bigelovii*, *Cirsium wrightii*, *Heuchera pulchella*.

T-019 Support insect monitoring programs to work toward lowering Data Deficiency rates among Red List-assessed invertebrates. (KSR 10)

Number of field seasons where monitoring for butterflies and fireflies has been carried out: 2

Result description: In 2024, we completed our fifth season of butterfly monitoring through the New Mexico Butterfly Monitoring Network. We had 31 volunteers running surveys on 36 routes. A total of 357 surveys were completed and 9,875 individual butterflies, from 113 different species, were counted. In 2024, we completed our fourth season of firefly surveys in the State of New Mexico. We again promoted the use of Firefly Atlas to monitor firefly populations and we carried out six Firefly Atlas surveys ourselves. We also visited the Chiricahua Mountains in south-eastern Arizona to document several rare firefly species that have not been observed recently. We did not find any of them.

NETWORK

Capacity building

T-004 Continue working with community partners to offer Red List trainings outside of specialist group commitments. This will further knowledge of the Red List among conservation partners, such as local University students and faculty, government agencies and even our own ABQ BioPark staff. (KSR 1)

Number of trainings offered to partner organizations: 1

Result description: Anna Walker is working with additional students at UNM in writing Red List assessments for rare and threatened arthropods in New Mexico. These assessments will inform the New Mexico Rare Arthropod Resource (NM RARe).

T-012 Support the establishment of new Centers for Species Survival by facilitating access to necessary tools such as SIS, supporting workplan development with relevant Specialist Group or National stakeholders, and ensuring regular communication between Species Survival Centers. (KSR 1)

Number of training tools/materials created and number of CSS Partners supported: 0

Result description: Anna Walker supported onboarding for new staff at the Center for Species Survival Dublin. Tim Lyons supported onboarding for new staff at the Center for Species Survival Freshwater. Clay Meredith supported onboarding for the new staff at the Center for Species Survival Nigeria. Katie Hoffman and Tim Lyons travelled to Kolkata, India to support the Center for Species Survival: Wildlife Trust of India.



Sacramento Mountains checkerspot butterfly caterpillars on New Mexico penstemon host plant
Photo: Anna Walker

COMMUNICATE
Communication

T-011 Communicate the work of the Center for Species Survival New Mexico to tax experts, industry professionals and the general public through webinars or presentations. (KSR 13)

Number of presentations or webinars delivered: 6

Result description: In April, 2024 Anna Walker presented to the ABQ Beekeepers Association on Wild Bees. In May, 2024 Anna presented to the Albuquerque Oasis Lifelong Adventure Center on Fireflies. In August, 2024, Anna presented to the Albuquerque Oasis Lifelong Adventure Center on Butterflies. In September, 2024, the CSS NM team presented on our conservation efforts at the New Mexico BioPark Society annual member’s meeting. In May, 2024 Tim Lyons presented to the World Species Congress with a talk titled ‘Species pledge from the arid Southwestern United States’. In May, 2024 Tim Lyons presented to the IUCN US National Committee with a talk titled ‘Progressing conservation action beyond charismatic species.’

T-015 Contribute articles on species conservation work to the New Mexico BioPark Society’s BioScape Quarterly Magazine. (KSR 13)

Number of articles in the *BioScape* Magazine written by or about the work of the CSS New Mexico: 4

Result description: In 2024, four articles about the work of the CSS New Mexico

appeared in the New Mexico BioPark Society’s magazine, *BioScape*. They were titled ‘Protecting the Misunderstood: New Species Survival Officer Set to Assess Reptile Populations Across the Globe’, ‘Partnering for Plants: ABQ BioPark reaffirms its commitment to rare species’, ‘Update: Checkerspot Butterfly Conservation’, and ‘Fighting for Freshwater Fish: Tim Lyons joins dozens of Chinese academics to assess and conserve hundreds of freshwater fishes’.

T-016 Give interviews to the media on the work of the CSS New Mexico. (KSR 13)

Number of articles run by media local as well as international mentioning the work of the CSS New Mexico: 1

Result description: Tim Lyons was interviewed by KRQE on jaguar reintroduction potential in Gila National Forest.

T-020 Contribute conservation themed articles to Scientific Publications. (KSR 13)

Number of scientific publications authored on: 2

Result description: In January, 2024, Anna Walker was a coauthor on Lewis *et al.* 2024, ‘Illuminating firefly diversity: trends, threats, and conservation strategies’. In the spring of 2024, the New Mexico BioPark Society published ‘Guide to Fireflies of the Southwest’ by Anna Walker.

Scientific meetings

T-017 Communicate the work of the Center for Species Survival New Mexico to biologists, conservationists and industry experts at conferences via presentations or posters. (KSR 12)

Number of presentations delivered in scientific events: 3

Result description: In January, 2024 Anna Walker presented to the Insect Status Research Coordination Network on the IUCN SSC Specialist Group Network and getting involved in Red List assessments for invertebrates. In February, 2024 Anna presented to the Gila Symposium in a presentation titled ‘Fireflies of the Gila Wilderness’. In September, 2024 Tim Lyons presented to the Annual Conference of the Association of Zoos and Aquariums in a talk titled ‘Sustainability and species conservation go hand in hand’.

Summary of achievements

Total number of targets 2021–2025: 23

Geographic regions: 14 Global, 8 America, 1 Europe

Actions during 2024–2025:

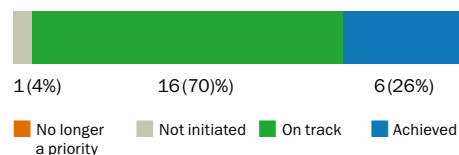
Assess: 6 (KSR 6)

Act: 2 (KSR 10)

Network: 2 (KSR 1)

Communicate: 5 (KSR 12, 13)

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 acoreesins*)
Photo: Paulo A.V. Borges



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

