



Species

ISSUE 64

2023 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 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:

Losey, J. 2024. 2023 Report of the Ladybird 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 Ladybird Specialist Group



CHAIR
John Losey
Cornell University,
Ithaca, US

**RED LIST AUTHORITY
COORDINATOR**
Antonio Soares
University of the
Azores, Autonomous
Region of the Azores,
Portugal

NUMBER OF MEMBERS
51

Mission statement

Our mission is to implement a global conservation plan through, at least, one site managed as a ladybird preserve and/or multiple redistribution releases in each region, inform researchers and conservation specialists within and beyond the Specialist Group on the utilisation of the completed phylogeny as a guide for developing ladybird conservation strategies, establish links with other groups and individuals working towards similar objectives and where there may be cross - overs in areas such as red listing, conservation planning, and reintroductions.

Projected impact 2021–2025

Not stated yet.

Targets 2021–2025

ASSESS

T-001 Write a publication on the roadmap for ladybird conservation and recovery.

Status: Achieved

T-002 Conduct collaborative extinction risk assessment of Palearctic ladybirds.

Status: On track

T-007 Develop a scientific research project towards improving the accuracy of ladybird species Red List.

Status: On track

NETWORK

T-004 Participation in an international meeting.

Status: Achieved

T-006 Participating in a networking event with the broader scientific community.

Status: Achieved

COMMUNICATE

T-003 Provide Red List training to young conservationists.

Status: Achieved

T-005 Produce a Special edition in a scientific journal on the diversity and importance of ladybirds.

Status: On track

Activities and results 2023

ASSESS

Research activities

T-001 Write a publication on the roadmap for ladybird conservation and recovery. (KSR 5)

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

Result description: The publication '[A roadmap for ladybird conservation and recovery](#)' was submitted to the journal *Conservation Biology* and accepted for publication on 30 May 2022.

T-002 Conduct collaborative extinction risk assessment of Palearctic ladybirds. (KSR 6)

Number of species that have been assessed through the different tools: 0

Result description: Experts were engaged and steps were taken to initiate this KSR in 2024.

T-007 Develop a scientific research project towards improving the accuracy of ladybird species Red List. (KSR 6)

Development and publication of new tools to increase Red List quality: 0

Result description: Specialist Group members are developing machine learning methods to generate annual reduction rates for four native species, including *Coccinella novemnotata* in North America, and assess them under criteria A. This approach could be applied to other rare ladybug species as well.

NETWORK

Synergy

T-004 Participation in an international meeting. (KSR 3)

Number of network events attended by specialist group members: 50

Result description: In 2023, António Onofre Costa Miranda Soares presented on the 'Benefits and Risks of Exotic Biological Control Agents' at the 5th IOBC-WPRS group

Ladybird species from Pombal, Portugal
Photo: Sergio Henriques



Seven-spot Ladybird (*Coccinella septempunctata*)
in Czech Republic
Photo: Sergio Henriques

meeting combined with IOBC-Global group (11-14 de September, University of Aveiro, Aveiro, Portugal) and engaged with an international scientific audience on the conservation of ladybirds.

T-006 Participating in a networking event with the broader scientific community. (KSR 2)

Number of network events attended by members of the group: 1

Result description: The Chair participated in the XXVI International Congress of Entomology (July 17-22, 2022, Helsinki, Finland) and had the opportunity to engage the broader entomological community.

**COMMUNICATE
Communication**

T-003 Provide Red List training to young conservationists. (KSR 13)

Number of SSC members' presentations developed in relation to specific taxonomic groups: 1

Result description: The Chair gave a class during which 17 students were trained to use the Red List and were involved in assessing the extinction risk of 17 North American Ladybird species for the first time.

Scientific meetings

T-005 Produce a Special edition in a scientific journal on the diversity and importance of ladybirds. (KSR 12)

Number of scientific events in which the members participated: 0

Result description: António Onofre Costa Miranda Soares and Helen E. Roy are collaborating on the writing of 'Advances in Understanding of the Ecology and Biodiversity of Coleoptera: Coccinellidae' towards the assessment of the conservation status of the most threatened species of this group.

Acknowledgements

We would like to thank Sergio Henriques, the Invertebrate Conservation Coordinator at Global Center for Species Survival, Indianapolis Zoo for support with grant applications and reporting.

Summary of achievements

Total number of targets 2021–2025: 7

Geographic regions: 6 Global, 1 America

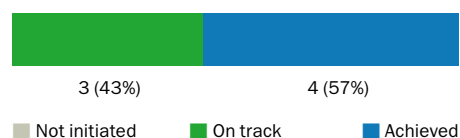
Actions during 2023:

Assess: 2 (KSR 6)

Network: 1 (KSR 3)

Communicate: 2 (KSR 12, 13)

Overall achievement 2021–2025:





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