



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 trans-versal 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:

Macadam, C. and Schmidt-Kloiber, A. 2024. 2023 Report of the Mayfly, Stonefly and Caddisfly 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 Mayfly, Stonefly and Caddisfly Specialist Group



SOCIAL MEDIA AND WEBSITE

X: @IUCN_riverflies

CO-CHAIR

Craig Macadam

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Invertebrate
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BOKU – University of
Natural Resources &
Life Sciences, Vienna,
Austria

RED LIST AUTHORITY

COORDINATOR

**Lyndall Pereira da
Conceicao**

Natural History
Museum, London, UK

NUMBER OF MEMBERS

18

Mission statement

The mission of our group is to promote the conservation of mayfly, stonefly and caddisfly species and their habitats around the world. Our goal is to raise awareness of these small but important insect orders and undertake Red List assessments to inform practical conservation activities.

Projected impact 2021–2025

The conservation status of mayfly, stonefly and caddisfly species and the threats to their populations will be better understood and initial plans for conservation action will be identified.

Targets 2021–2025

ASSESS

T-005 Conduct European comprehensive assessment of 1,600 Trichoptera species.
Status: Not initiated

T-006 Digitise and collate details from ca. 90,000 Ephemeroptera, Plecoptera and Trichoptera specimens contained in museum collections, with a focus on Africa.
Status: Achieved

T-007 Collate other datasets on African mayflies, stoneflies, and caddisflies.
Status: Not initiated

T-008 Prepare for South African comprehensive assessment of Ephemeroptera: Baetidae in 2025.
Status: Not initiated

T-009 Prepare for South African comprehensive assessment of Trichoptera: Leptoceridae.
Status: Not initiated

T-010 Collate data for sampled global assessment of 1,500 species of Ephemeroptera.
Status: Not initiated

PLAN

T-011 Undertake training in conservation planning to allow the development of conservation plans for species once they have been assessed.
Status: Not initiated

NETWORK

T-001 Continue to grow membership on a geographical basis as we undertake regional assessments.
Status: On track

T-002 Host Ephemeroptera/Plecoptera Session at the 2021 Symposium for European Freshwater Sciences (SEFS21).
Status: Achieved

T-003 Deliver session at Trichoptera conference.
Status: Achieved

T-004 Deliver session at Ephemeroptera/Plecoptera symposium.
Status: Achieved

COMMUNICATE

T-012 Develop a series of outreach seminars to raise awareness of mayfly, stonefly and caddisfly species and their conservation needs.
Status: Achieved

T-013 Develop our online presence on social media and Specialist Group web pages.
Status: Achieved

T-014 Organise an awareness-raising campaign in connection with World Rivers Day annually.
Status: On track

Activities and results 2023

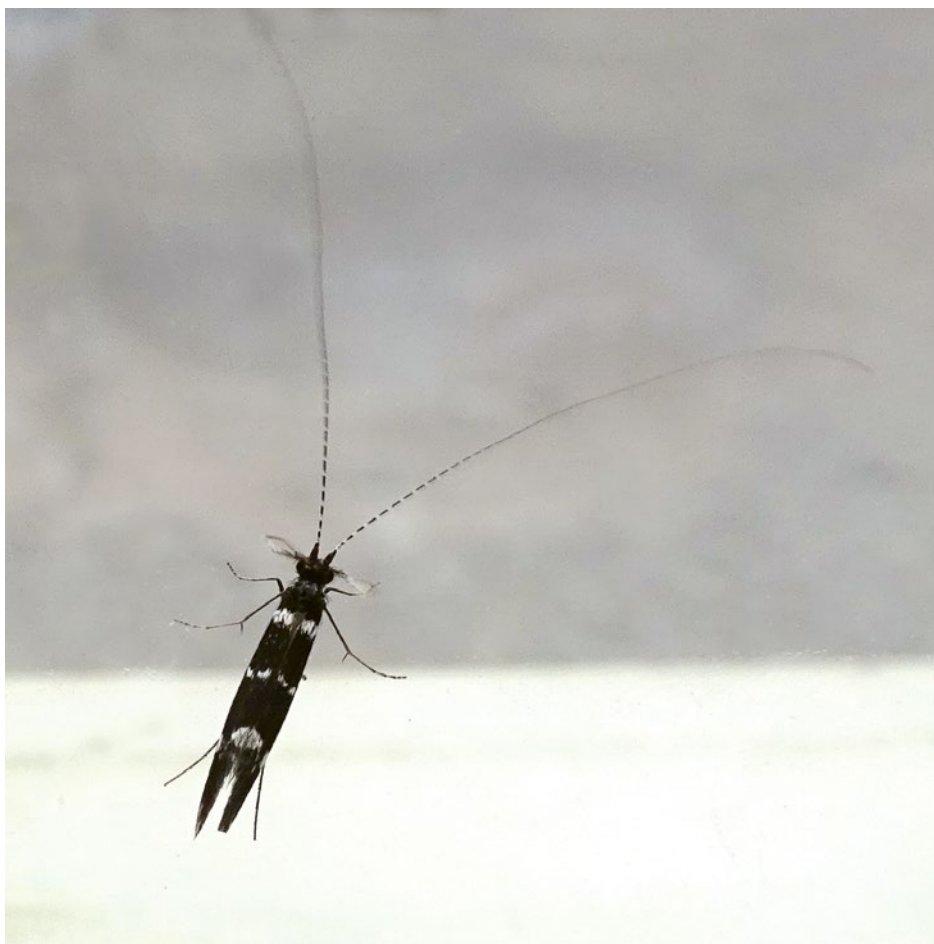
ASSESS

Research activities

T-006 Digitise and collate details from ca. 90,000 Ephemeroptera, Plecoptera and Trichoptera specimens contained in museum collections, with a focus on Africa. (KSR 5)

Number of specimens digitised: 5,231

Result description: Up to 90,231 specimens have now been photographed at the Natural History Museum, UK, with around 18,000 being photographed by the



Adult of the caddisfly *Leptocerus interruptus*
Photo: Wolfram Graf/Astrid Schmidt-Kloiber

Africa Museum, Belgium, and Museum für Naturkunde, Germany. Data transcription is completed for all specimens at the Natural History Museum, London.

COMMUNICATE
Communication

T-012 Develop a series of outreach seminars to raise awareness of mayfly, stonefly and caddisfly species and their conservation needs. (KSR 13)

Number of SSC members' presentations developed in relation to specific taxonomic groups: 2

Result description: Numerous outreach activities focused on the mayfly, stonefly and caddisfly species and their conservation have been undertaken. Specific talks given focused on the impacts of climate change on aquatic insects, and the identification and conservation of mayflies.

T-013 Develop our online presence on social media and Specialist Group web pages. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 10

Result description: We have continued to develop our online presence, particularly on X (@IUCN_riverflies) where we regularly post/repost information about our target

species and the threats they face. This included contributing to publicity around the Fantastic Freshwater report and promoting World Biodiversity Day.

T-014 Organise an awareness-raising campaign in connection with World Rivers Day annually. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 1

Result description: For the 2023 World Fish Migration Day we promoted our cartoon highlighting that mayflies, stoneflies and caddisflies also need free-flowing rivers to ensure their populations can thrive.

Acknowledgements

Thanks are due to BOKU and Buglife for supporting the Co-Chairs. In addition, the Co-Chairs would like to thank the staff of the SSC for their ongoing assistance and encouragement. In particular, we would like to thank Monni Bohm and Sérgio Henriques from the Global Centre for Species Survival for their support throughout the year.

Summary of achievements

Total number of targets 2021–2025: 14

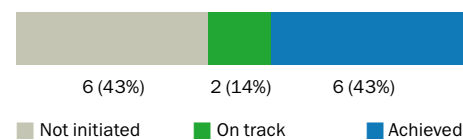
Geographic regions: 9 Global, 3 Africa, 2 Europe

Actions during 2023:

Assess: 1 (KSR 5)

Communicate: 3 (KSR 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