



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:

Cumberlidge, N. and Crandall, K. 2024. 2023 Report of the Freshwater Crustacean Specialist Group. In: IUCN SSC and Secretariat. 2023 Report of the IUCN Species Survival Commission and Secretariat. Gland, Switzerland: IUCN. 6 pp.

IUCN SSC Freshwater Crustacean Specialist Group



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NUMBER OF MEMBERS

25

Mission statement

The mission of the IUCN SSC Freshwater Crustacean Specialist Group (FCSG) is to work towards all aspects of the long-term conservation of freshwater decapods (freshwater crabs, crayfish, freshwater shrimps and aeglids) worldwide. Specific goals are to: 1) act as the Red List Authority and to update IUCN Red List species assessments; 2) promote their long-term conservation worldwide by management of habitats and by the development of conservation strategies and, where necessary, the recovery of populations; 3) promote integrated research on biodiversity and conservation; 4) educate non-specialists about all aspects of the group, and 5) create and maintain an FCSG website that will provide up-to-date world species lists, keep track of the discovery of new species, and list the Red List status for each species.

Projected impact 2021–2025

By the end of 2025, we hope to have completed updates across the freshwater crabs, crayfishes, and shrimps, including the addition of newly described species, updates in taxonomy, and reassessments of those species in need based on lacking an initial assessment and/or new data relevant to assessments. We will identify key species in each of these three main freshwater crustacean groups – crabs, crayfishes, and shrimps – to highlight as in need of conservation priority and target conservation efforts and plan development as part of our Specialist Group. Like many invertebrate groups, the first and fundamental impediment to conservation of freshwater crustaceans is simply documenting the species and having an assessment. Thus, our focus for the next quadrennium will be also to link efforts with related IUCN Specialist Groups, especially the Cave Invertebrate, South Asian Invertebrate, Terrestrial and Freshwater Invertebrate

organismal groups as well as many of the relevant cross-cutting groups such as Asian Species Action Partnership, Climate Change Specialist Group, Biodiversity and Protected Area Task Force, Conservation Genetics Specialist Group, Conservation Planning Specialist Group and Phylogenetic Diversity Task Force.

Targets 2021–2025

ASSESS

T-002 Update Red List status of *Euastacus* based on reassessments.
Status: On track

T-007 Update crayfish taxonomy with Red List assessments where applicable.
Status: On track

T-009 Update North American Crayfish Red List.
Status: Not initiated

T-012 Update South American Crayfish Red List.
Status: Not initiated



Afrithelphusa afzelii (CR) from Sierra Leone, recently rediscovered (2021) after more than 200 years without records
 Photo: Pierre A. Mvogo Ndongo

T-013 Conduct Red List assessments for *Aegla* species (Aeglididae).
 Status: On track

T-015 Update freshwater crab taxonomy with Red List assessments where applicable.
 Status: On track

T-016 Complete a global Red List reassessment of the freshwater crabs.
 Status: Not initiated

T-018 Conduct the Socotra Freshwater Crab red listing.
 Status: On track

T-021 Conduct the assessment of *Austrapotamobius*.
 Status: On track

T-026 Conduct Red List reassessments of eight species of South African freshwater crabs.
 Status: On track

T-027 Conduct Red List reassessments of 25 species of land crabs.
 Status: On track

T-028 Conduct Red List assessment and reassessments of 15 species of freshwater crabs in Cameroon, Borneo and Mexico.
 Status: On track

PLAN

T-006 Plan reassessment meetings for the coming years: 1) crabs, 2) shrimp, 3) crayfish.
 Status: On track

T-008 Develop concepts for Marine Crustacean Specialist Group(s).
 Status: On track

ACT

T-022 Support efforts of an Ireland White-Clawed Crayfish Hatchery and additional project outputs.
 Status: Not initiated

T-024 Support letter for crab conservation in Colombia.
Status: Achieved

NETWORK

T-005 Increase membership in FCSG.
Status: On track

T-017 Training opportunities and linking with other relevant SSC groups.
Status: Achieved

T-023 Monitor Freshwater Animal Diversity Assessment (FADA) updates.
Status: On track

COMMUNICATE

T-003 Develop multiple communication channels for the FCSG.
Status: Achieved

T-014 Support Freshwater Conservation Committee communications highlighting freshwater species at risk and threats to freshwater systems.
Status: Achieved

T-019 Develop the FCSG Report 2021.
Status: Achieved

T-020 Develop the FCSF Report 2022.
Status: Achieved

Activities and results 2023

ASSESS

Red List

T-002 Update Red List status of *Euastacus* based on reassessments. (KSR 6)

Number of global Red List reassessments completed: 0

Result description: We have initiated reassessment projects for the genus *Euastacus* with colleagues in Australia.

T-007 Update crayfish taxonomy with Red List assessments where applicable. (KSR 6)

Number of new global Red List assessments completed: 2

Result description: We have initiated reassessment projects for the genus *Euastacus* with colleagues in Australia and *Austropotamobius* with colleagues from Romania and are working towards updating the remainder of the taxonomy for the remainder of the Red List assessments in 2024.

T-016 Complete a global Red List reassessment of the freshwater crabs. (KSR 6)

Number of global Red List reassessments completed: 0

Result description: Planning for a global reassessment and reassessment of the freshwater crabs has been in the planning pipeline for a while because most were done in 2009 and have not been updated since, except for a few local regions. Moving forward with this is awaiting funding. We anticipate at least two – possibly three – workshops that bring together major regions' specialists. This will need coordination with the Red List Unit in Cambridge, UK.

T-018 Conduct the Socotra Freshwater Crab red listing. (KSR 6)

Number of national Red List reassessments published: 0

Result description: On several field visits and with in-country collaborators, Dr Kay van Damme obtained field data to inform assessments of at least two species of Socotran freshwater crab. These assessments will be updated and submitted to the IUCN Red List Unit in 2024. This work is supported via an SSC Internal Grant given

to the Freshwater Conservation Committee. The Freshwater Crustacean Specialist Group has not received any new field data on the Socotran freshwater crabs from Dr van Damme, but when we do, we can use it to update the existing Red List assessments. There are just three species of two genera found in Socotra. All are endemic and these Afrotropical species belong to an Asian family (Potamidae) not one of the African families, making them phylogenetically important as well as of conservation interest.

T-027 Conduct Red List reassessments of 25 species of land crabs. (KSR 6)

Number of national Red List reassessments published: 0

Result description: Red List reassessments of 25 species of land crabs have been completed and are now ready to be submitted for publication on the IUCN Red List.

T-028 Conduct Red List assessment and reassessments of 15 species of freshwater crabs in Cameroon, Borneo and Mexico. (KSR 6)

Number of national Red List reassessments published: 0

Result description: Red List assessment and reassessments of 15 species of freshwater crabs (13 in Cameroon, one in Borneo, one in Mexico) are being updated and are awaiting publication on the IUCN Red List.

Research activities

T-015 Update freshwater crab taxonomy with Red List assessments where applicable. (KSR 5)

Updated freshwater crab taxonomy in place to support subsequent (re-)assessments of these species: Ongoing.



Afriithelphusa leonensis (CR) from Sierra Leone, recently rediscovered after almost 7 years without records
Photo: Pierre A. Mvogo Ndongo

Result description: Freshwater crab taxonomy in the Afrotropical region has been radically updated recently. In addition, new species are being described and in all parts of the world at a global rate of about 30 a year. This means that the Red List for the freshwater crabs needs to be updated, but this is only one part of the effort needed. The other aspect is that nearly all of the newly described species have not yet been assessed. This Red List update is necessary to support subsequent (re-) assessments of these species.

PLAN
Planning

T-008 Develop concepts for Marine Crustacean Specialist Group(s). (KSR 8)
Number of conservation plans/strategies developed: 0

Result description: Attended an initial kick-off meeting about a marine decapod Specialist Group under IUCN, on May 31, organised by Amanda Vincent (MCC) and Monni Bohm (Global Center for Species Survival). A Marine Crustacean Specialist Group will likely be created in 2024, pending sufficient interest by potential members.

Policy

T-006 Plan reassessment meetings for the coming years: 1) crabs, 2) shrimp, 3) crayfish. (KSR 9)
Number of documents provided to support/guide policy-making: 0

Result description: The process has temporarily stalled and is still awaiting funding. The plan for the global reassessment of the freshwater crabs has been drafted together with Catherine Sayer (IUCN).

ACT

Policy

T-024 Support letter for crab conservation in Colombia. (KSR 10)

Number of position statements addressing major drivers/emerging threats of species or population loss: 1

Result description: The Ministry of Environment, Colombia, issued the resolution 'General guidelines for the management and conservation of the species *Neostrengeria macropa*'. It includes various recommendations such as conducting baseline studies on ecology, population genetics, and behaviour concerning the invasive *Procambarus clarkii*. This involved collaboration between conservationists, the IUCN, and the Government of Colombia. It sets a precedent in Colombia concerning invertebrate freshwater conservation and community work.

NETWORK

Capacity building

T-017 Training opportunities and linking with other relevant SSC groups. (KSR 3)

Number of training sessions: 0

Result description: We have linked especially with the Freshwater Biodiversity group as well as the Biodiverse Anthropocene program at the University of Oulu in Finland to further advance the Specialist Group activities and integrate with broader within IUCN initiatives (freshwater) and beyond IUCN initiatives (Oulu).

Membership

T-005 Increase membership in FCSG. (KSR 2)

Number of SSC members recruited: 14

Result description: We now have 15 official members of the FCWG, registered via the Commission System. In 2024, we will work on getting the remaining 10 or so members signed up into the system.

COMMUNICATE
Communication

T-003 Develop multiple communication channels for the FCSG. (KSR 12)

Number of media articles mentioning IUCN Species theme: 1

Result description: The IUCN SSC Freshwater Crustacean SG Report for 2021 was completed in August of 2022 to be included in the 2021 Species Report of the SSC and GSP.

Summary of achievements

Total number of targets 2021–2025: 23

Geographic regions: 12 Global, 4 America, 1 Asia, 3 Europe, 1 Oceania

Actions during 2023:

Assess: 7 (KSR 5, 6)

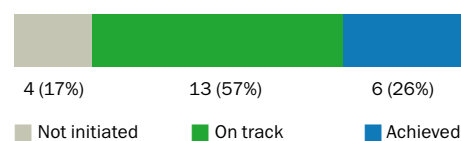
Plan: 2 (KSR 8, 9)

Act: 1 (KSR 10)

Network: 2 (KSR 2, 3)

Communicate: 1 (KSR 12)

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