



Species

ISSUE 62

2022 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 each year. Each SSC 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 Stand-alone Report

Stand-alone reports summarize the activities conducted and results generated by each group member of the SSC. Following, is the structure of the stand-alone report and the contents under each session.

Title of the SSC Group

Photograph(s) of the Chair / Co-Chairs

Group information

Includes names of Chair / Co-Chairs, Vice-Chairs, Deputy Chairs, Red List Authority Coordinators and Program Officers, their institutional affiliations, number of members and social networks currently active.

Logo of the SSC 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 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.

Example for the recommended citation:

Lindeman, K and Samoilys, M. 2023. 2022 Report of the Snapper, Seabream and Grunt Specialist Group. In: Nassar, JM, García, L, Mendoza, L, Andrade, ND, Bezeng, S, Birkhoff, J, Bohm, M, Canteiro, C, Geschke, J, Henriques, S, Ivande, S, Mileham, K, Ramos, M, Rodríguez, A, Rodríguez, JP, Street, B, and Yerena, E (Eds.). 2022 Report of the IUCN Species Survival Commission and Secretariat. International Union for Conservation of Nature. 6 pp

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

IUCN SSC Snapper, Seabream and Grunt Specialist Group



CO-CHAIR

Ken Lindeman

Sustainability Studies Program, Florida Institute of Technology, Melbourne, Florida, US

CO-CHAIR

Melita Samoilys

CORDIO East Africa, Mombasa, Kenya

RED LIST AUTHORITY

COORDINATOR

Barry Russell

Museum and Art Gallery of the Northern Territory, Darwin, Australia

NUMBER OF MEMBERS

70

SOCIAL MEDIA AND WEBSITE

Website: <https://www.iucn.org/commissions/ssc-groups/fishes/snapper-seabream-and-grunt-specialist-group>

Mission statement

To achieve global conservation and sustainable use of snappers, seabreams, grunts and associated reef fish species through the application of improved scientific knowledge and community engagement to management decision making.

Projected impact 2021–2025

For the 550 species in the Snapper, Seabream and Grunt Specialist Group (SSG SG), we intend to generate impacts via 18 Conservation Targets that will reverse population declines through improved practices in fisheries management. These impacts will include the identification of regional bycatch hotspots, improved spawning aggregation management, increased use of fisher knowledge in science and decision making, improved taxonomic knowledge to enhance management, identification of regional bycatch hotspots, and awareness of the ecological and economic values of these species.

Targets 2021–2025

ASSESS

T-004 Complete global Red List reassessments of approx. 60 species in the Caesionidae, Haemulidae, Lutjanidae and Nemipteridae families subject to high fishing pressure and bycatch.
Status: On track

T-005 Complete global Red List reassessments in the family Sparidae with a focus on restricted range, endemic South African species, the most threatened of the SSG SG species.
Status: On track

T-015 Publish an assessment of climate change impacts on haemulid, lutjanid, lethrinid and nemipterid species.
Status: On track

T-016 Publish a paper that clarifies currently problematic haemulid taxonomy and phylogeny.
Status: On track

PLAN

T-006 Support spawning site conservation initiatives with Regional Fisheries Management Organisations (RFMOs) and NGOs in at least two regions, in part by increased graduate student research.
Status: On track

T-007 Develop a Specialist Group Bycatch Reduction Workgroup, identify regional hotspots and identify possible actions.
Status: On track

T-008 Review fishery management alternatives for South African sparids using IUCN Conservation Action Plan protocols with national partners.
Status: On track

ACT

T-010 Implement priority recommendations from the IUCN Fisher Knowledge Guidelines with citizen science initiatives for advances in the management of SSG SG species.
Status: On track

T-011 Develop identification guides for: (a) common SSG fishery species, and (b) early life stages of common snapper and grunt species.
Status: On track

T-012 Provide technical consultations — e.g. on a Fishery Management Plan for a government agency, letters of support for science-based rulemaking — annually to support actions by fishery organisations working on SSG conservation.
Status: On track

T-019 Conduct climate change vulnerability assessment on selected SSG SG species, e.g. impacts of coastal habitat degradation on lutjanid, haemulid and lethrinid species.
Status: On track

NETWORK

T-001 Ensure 20% of Specialist Group members are formally trained as Red List assessors by 2022.
Status: On track

T-002 Ensure 15% of Specialist Group members are formally trained in species conservation planning by 2024.
Status: On track



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

T-003 Establish at least one formal partnership or strategic alliance to provide financial support.

Status: On track

COMMUNICATE

T-013 Create a Communications Workgroup to provide information across multiple media platforms on global, regional and local Specialist Group activities.

Status: On track

T-014 Publish a short review article on the need for improved taxonomy to improve management and conserve fisheries of the over 550 SSG species.

Status: On track

T-017 Provide public presentations and webinars on SSG SG Red Listing or conservation activities at national/transnational events with partners.

Status: On track

T-018 Expand technical content and create three regional photo image galleries on the SSG SG website.

Status: On track

Activities and results 2022

ASSESS

Red List

T-004 Complete global Red List reassessments of approx. 60 species in the Caesionidae, Haemulidae, Lutjanidae and Nemipteridae families subject to high fishing pressure and bycatch. (KSR 6)

Number of global Red List reassessments completed: 31

Result description: With many SG members, we continued to finalise the first Red List assessments of all remaining SSG species. In 2022, working with the Marine Biodiversity Unit, we finalized and submitted 31 more species of lutjanids,

nemipterids, and haemulids to the IUCN Red List. Many members have worked on the assessment and review stages of this long-term work, largely now on the Indo-Pacific.

Research activities

T-016 Publish a paper that clarifies currently problematic haemulid taxonomy and phylogeny. (KSR 5)

Number of scientific publications about species research that acknowledge SSC affiliation: 0

Result description: Initial scoping and preliminary data gathering continues. The red listing process itself is revealing many taxonomic challenges among the Haemulidae — more than any other family in the SSG SG currently. A needed review of the species-level validity of many nominal species is underway. Re-assessment of the phylogenies of genera of Haemulids is being accomplished for both the Plectorhinchinae and the Haemulinae and will constitute substantial components of this paper.

PLAN

Planning

T-006 Support spawning site conservation initiatives with Regional Fisheries Management Organisations (RFMOs) and NGOs in at least two regions, in part by increased graduate student research. (KSR 8)

Number of conservation plans/strategies developed: 0

Result description: Scoping of virtual workshops for spawning aggregation science and management of SSG species continued. The assembly of a project team began in late 2022. A substantial fishers' knowledge component (Quadrennium Target 10 of the SG) is being included to advance

information transfer and sustainable use. Multiple SG members in differing regions continued their work with RFMO, other government agencies, and NGOs on spawning science and management issues.

T-007 Develop a Specialist Group Bycatch Reduction Workgroup, and identify regional hotspots and possible actions. (KSR 8)

Bycatch Reduction Workgroup identifies possible conservation actions: 0

Result description: The bycatch/byproduct workgroup worked to obtain species data. Progress towards the identification of priority fisheries and potential conservation actions continues. There are representatives from approx. ten global regions. A substantial database for all six families and many regions has been developed. Several regions have had detailed discussions on bycatch and byproduct fisheries and data limitation issues. There have also been topical, pan-region discussions, e.g. sustainability certification regimes and SSG species. Relevant fisheries are multispecies and data-poor in many regions. The importance of bycatch issues for SSG species varies substantially by family and region.

T-008 Review fishery management alternatives for South African sparids using IUCN Conservation Action Plan protocols with national partners. (KSR 8)

Number of conservation plans/strategies updated: 3

Result description: Work by expert South African members continued to reassess the Red List status of more than 15 threatened or near threatened sparid species. This includes JARA assessments of six commercial species with sufficient data. Several threatened sparid species, including EN and CR, have drafts prepared for final review after the draft accounts for



Two Striped Sweetlips (*Plectorhinchus albobittatus*), juvenile, Haemulidae, Guam
Photo: David B. Snyder



Three Striped Whiptail (*Pentapodus trivittatus*), Nemipteridae, Palau
Photo: David B. Snyder

all species are completed. These revised risk-extinction findings will be available to RFMOs for potential application in species management strategies.

ACT

Conservation actions

T-010 Implement priority recommendations from the IUCN Fisher Knowledge Guidelines with citizen science initiatives for advances in the management of SSG SG species. (KSR 10, 11)

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

Result description: SG members produced a presentation and early paper at the 2022 Gulf and Caribbean Fisheries Institute meeting on the use of sustainable fishing leaders to advance conservation, with a focus on almost 20 years of Gladding Memorial Award winners around the Greater Caribbean. Categories of fisher knowledge and contributions to management by GMA winners as sustainable fishing ambassadors have been initially stratified with continuing analysis underway. Other activities are in progress in several other regions.

Number of intervention letters addressing major drivers/emerging threats of species or population loss: 0

Result description: We are encouraging the use of best practices in Florida Keys from a variety of published and unpublished sources, not only specific guideline documents.

Number of communities benefited from sustainable use programmes: 0

Result description: Not enough information to assess this fully. The southeast US spawning reserves are potentially benefiting several cities in the Carolinas and elsewhere. We will develop more information on this type of FK-associated management, along with examples from other regions, including the Indo-Pacific.

T-012 Provide technical consultations — e.g. on a Fishery Management Plan for a government agency, letters of support for

science-based rulemaking — annually to support actions by fishery organisations working on SSG conservation. (KSR 10)

Number of species with increased or prevented decrease in population or range size, as a result of conservation actions: 0

Result description: We are working on the actions needed to obtain this type of information. This requires more information from QTs such as T-006, T-007, T-009, and T-011 on spawning, bycatch, and climate impacts. For management, these fisheries are routinely data limited. Therefore, measuring the effectiveness of MPAs, which is routinely done, provides an alternative for understanding population changes. Further associated work is in progress.

Technical advice

T-011 Develop identification guides for: (a) common SSG fishery species, and (b) early life stages of common snapper and grunt species. (KSR 10)

Number of technical consultations provided to support conservation actions: 3

Result description: We continued to assemble folders of identification documents by region and family for SSG species around the globe for website regional identification folders. The SSG SG's web structure was changed substantially in 2022 and plans to add web pages with regional identification guides were postponed until 2023 or early 2024. Many species identifications were made for various institutions including NGOs, government agencies, and universities. This work included some editing and review of regional identification guides (e.g. Nemipteridae (Threadfin Breams) in Trawled Fishes of Southern Indonesia and Northwestern Australia; Kailola and Gloerfelt-Tarp 2022).

T-012 Provide technical consultations — e.g. on a Fishery Management Plan for a government agency, letters of support for science-based rulemaking — annually to support actions by fishery organisations working on SSG conservation. (KSR 10)

Number of technical consultations provided to support conservation actions: 3

Result description: The SSG SG submitted a comment letter addressing several SG targets on the Proposed NOAA (US) Rule for the Management Review of the Florida Keys National Marine Sanctuary, addressed to the NOAA Office of National Marine Sanctuaries. The proposed actions involve over two dozen species of snappers, grunts, and porgies/seabreams. Comments included the following on Conservation Areas in the Tortugas South Ecological Reserve: "We endorse the Preferred Alternative in terms of extending the Tortugas South reserve to the west by one mile along its current length. This expansion encompasses additional deep-water habitat west of the Riley's Hump site that is known to support important reef habitats and fish spawning aggregations". The SSG SG has also consulted on technical issues including signing the 'Act Now to Begin Reversing Bio Diversity Loss by 2023' statement. This statement informs countries on why they should not weaken the Global Biodiversity Framework of the Convention on Biological Diversity at the pending COP15 meeting. The focus points include: (a) the 2030 deadline should not be abandoned in COP15 negotiations, and (b) robust quantitative targets on reversing biodiversity decline, reducing pressures and addressing equity should be retained. In addition, technical consultations by SG members to support species conservation included over one hundred identifications of SSG species by SG member experts in many regions of the globe.

T-019 Conduct climate change vulnerability assessment on selected SSG SG species, e.g. impacts of coastal habitat degradation on lutjanid, haemulid and lehrinid species. (KSR 10)

Number of technical consultations provided to support conservation actions: 2

Result description: In 2022, consultations were provided on climate-related conservation work on SSG species in East Africa including experimental trials with artisanal

Plectorhynchus vittatus, Comoros Islands
Photo: M. Samoily



fishers to modify hook sizes to reduce the capture of juvenile lethrinids (emperors). Lethrinids occur across multiple habitats and therefore are potentially more resilient to loss of coral reef habitat caused by global warming. This also includes work with basket-trap fishers to reduce the capture of juvenile snappers and emperors by increasing trap mesh sizes, with positive results in terms of effects and fisher adoption. Separately, technical consultations were provided to various partners in terms of climate change and habitat degradation (e.g., East Florida's Indian River Lagoon Climate Change Website at <https://irlclimate.org/>).

NETWORK

Capacity building

T-001 Ensure 20% of Specialist Group members are formally trained as Red List assessors by 2022. (KSR 2)

Number of people trained in assessment tools: 2

Result description: Continued biannual distribution of Red List training information to all members.

T-002 Ensure 15% of Specialist Group members are formally trained in species conservation planning by 2024. (KSR 2)

Number of people trained in conservation action: 3

Result description: At least three members received training in Species Conservation Planning in 2022. These SSG members attended one or more sessions of the SCP training on Virtual Population analysis. The members were from Colombia, Bangladesh and the US.

Synergy

T-003 Establish at least one formal partnership or strategic alliance to provide financial support. (KSR 1)

Number of potential funding partners established and maintained: 0

Result description: Formal funding is under development among several productive informal partnerships and potential new

partners. This focus includes support for our spawning science and conservation initiatives and, also, our Red List initiatives. When our full membership was surveyed to solicit interest in assisting with funding efforts, this target had the lowest response rate. We are working to expand funding efforts with select members and partners as feasible.

COMMUNICATE

Communication

T-013 Create a Communications Workgroup to provide information across multiple media platforms on global, regional and local Specialist Group activities. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 0

Result description: This process was slowed by time and funding limitations, and health issues affecting leaders. We are focusing more on potential partnerships with select marine science media consultants via associated projects. Progress is expected in 2023 with substantial increases in digital communications of SSG science and conservation products among the SG membership.

T-017 Provide public presentations and webinars on SSG SG Red Listing or conservation activities at national/transnational events with partners. (KSR 13)

Number of communication products using innovative tools: 0

Result description: To optimise knowledge transfer as we begin to report on differing priority quadrennium targets, we will deploy new media outlets in development. A prominent example target is the virtual spawning aggregation science and fishers' knowledge workshop on several families of SSG species (quadrennium targets T-006 and T-010).

T-018 Expand technical content and create three regional photographic image galleries on the SSG SG website. (KSR 13)

Number of new regional photo galleries on SSG SG website: 0

Result description: The SSG SG continued to gather geographically and phylogenetically representative photographs for galleries for web pages that will be added to the SG's website. Other web content updates, e.g. the SSG SG's Red List summary table, and additions, e.g. content for regional identification guides, are also being gathered.

Acknowledgements

We thank the members of the Snapper, Seabream and Grunt Specialist Group, from more than 30 countries, for their input and effort among the regions. We value the assistance of the Steering Committee members of the SSG SG: Annadel Cabanban, Kafayat Fakoya, Rehka Nair, Stephen Newman, Francis Nunoo, Jose Tavera, Winston Cowie, Monica Valle, and Michelle Tishler. Christi Linardich, Gina Ralph, and Kent Carpenter of the Marine Biodiversity Unit provided important assistance with all stages of the Red List work. Thanks also to Amanda Vincent and the IUCN Marine Conservation Committee.

Summary of achievements

Total number of targets 2021–2025: 18

Geographic regions: 15 Global, 2 Africa, 2 America

Actions during 2022:

Assess: 2 (KSR 5, 6)

Plan: 3 (KSR 8)

Act: 7 (KSR 10, 11)

Network: 3 (KSR 1, 2)

Communicate: 3 (KSR 13)

Overall achievement 2021–2025:

