



2022 Report of the IUCN Species Survival Commission and Secretariat



Stand-alone report IUCN SSC Butterfly and Moth Specialist Group 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.

ASSESS ACT PLAN

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.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

Example for the recommended citation:

Bohm, M, and Jordan, M. 2023. 2022 Report of the Butterfly and Moth 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.



2022 Report

IUCN SSC Butterfly and Moth Specialist Group



SOCIAL MEDIA AND WEBSITES Facebook: IUCN SSC Butterfly & Moth Specialist Group Twitter: @ IUCNButterflySG

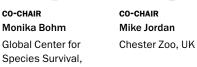


CO-CHAIR

US

Indianapolis Zoo.

Indianapolis, Indiana,



Mission statement

The mission of the IUCN SSC Butterfly and Moth Specialist Group is to increase knowledge on the taxonomy, ecology and conservation status of butterflies and moths around the world and promote their long-term conservation.

Projected impact 2021–2025

Increased awareness of butterfly and moth status through assessment and outreach; increased action in butterfly conservation through establishment of action plans (e.g. swallowtails); increased capacity for species assessment and conservation planning within the Specialist Group.

Targets 2021–2025 ASSESS

T-003 Create a global inventory of butterfly monitoring schemes and available time series data (with collaborators) to help us assess data gaps and capacity needs and build a Living Planet Index for butterflies. Status: On track

T-007 Support the development of national or regional Red List assessments for butterflies and moths and improve linkages between national Red Lists and the global

RED LIST AUTHORITY COORDINATOR Monika Bohm Global Center for Species Survival, Indianapolis Zoo, Indianapolis, Indiana, US

NUMBER OF MEMBERS 43

IUCN Red List (facilitate upload of assessments from national Red Lists to the global IUCN Red List). Status: On track

T-009 Complete a first global assessment of 1,500 species for a sampled Red List Index of butterflies. Status: Not initiated

T-010 Publish on status and trends of the world's butterflies and moths (e.g., World Swallowtail assessment, Sampled Red List Index, key moth group). Status: Not initiated

T-011 Engage with Key Biodiversity Area processes, feeding butterfly and moth data into the process. Status: Not initiated

T-016 Complete assessments of at least 100 key moth species, e.g., Emperor Moths.

Status: On track

T-017 Identify additional priority groups for assessment and conservation planning, e.g., Green Status, Red List, Climate Change assessment. Status: Not initiated

T-019 Complete the Global Swallowtail Assessment. Status: On track

T-020 Hold a one-day online IUCN Red List workshop for the Migratory Monarch Butterfly (Danaus plexippus ssp. plexippus). Status: On track

T-022 Assess five species of Polyommatus from the Caucasus as the first step towards a regional Red List and conservation planning in the region. Status: On track

PLAN

T-004 Conduct a conservation planning workshop for swallowtails and produce a conservation plan for the group. Status: Not initiated

T-012 Engage in at least two cross-taxon initiatives to increase group capacity in conservation planning. Status: Not initiated

ACT

T-015 Develop guidance on the use of Lepidoptera farming for sustainable community development. Status: Not initiated

NETWORK

T-002 Increase the global reach of the group to include a diversity of members covering at least 40 countries. Status: On track



Blue Triangle (Graphium sarpedon), part of the Global Swallowtail assessment (LC) Photo: Shawan Chowdhury

T-005 Develop regional subgroups to focus on regional Assess-Plan-Act. Status: On track

T-006 Carry out capacity building for red listing within the group via training work-shops/online Red List training courses. Status: On track

T-018 Develop partnerships with relevant organisations (e.g., Butterfly Conservation, eButterfly) to improve access to conservation-relevant data, and coverage and capacity of monitoring of Lepidoptera. Status: On track

COMMUNICATE

T-013 Improve communications with the membership and a wider audience through newsletters, blogs, Facebook and Twitter presence, podcasts, etc., with two major outputs per year around which engagement can be focused (e.g., around World Swallowtail Day, publication of scientific outputs, etc.). Status: On track

T-014 Develop a group website to showcase work and as a hub for distributing information and sharing resources. Status: Not initiated

T-021 Deliver annual outreach activities with partner organisations. Status: Not initiated

Activities and results 2022 ASSESS

Red List

T-007 Support the development of national or regional Red List assessments for butterflies and moths and improve linkages between national Red Lists and the global IUCN Red List (facilitate upload of assessments from national Red Lists to the global IUCN Red List). (KSR 6)

Number of new national Red List assessments published: 3

Result description: We supported the upload and review of species assessments stemming from national Red List processes in South Africa, Korea and Kenya over the past year.

T-016 Complete assessments of at least **100** key moth species (e.g. emperor moths). (KSR 6)

Number of new global Red List assessments completed: 39

Result description: Assessments for 39 species of moths were published on the IUCN Red List during 2022: 30 from Hawai'i (with Albuquerque BioPark) and nine from Korea (via South Korea National Red List project, reviewed by IUCN SSC Butterfly and Moth SG).

T-019 Complete the Global Swallowtail Assessment. (KSR 6)

Number of new global Red List assessments completed: 15

Result description: In 2022, 15 assessments were published on the IUCN Red List. In collaboration with our partners at ZSL, we have managed to increase processing capacity for the remainder of the assessments. At least another 200 assessments have already been drafted and are now going through final sign-off.

T-020 Hold a one-day online IUCN Red List workshop for the Migratory Monarch Butterfly (*D. plexippus* ssp. *plexippus*). (KSR 5)

One-day online workshop held: 1

Result description: In response to a petition enquiry about the Migratory Monarch assessment, we organised and held a one-day online Red List workshop for the species to discuss the assessment as published in July and identify potential missing data sources in the assessment (and evaluate whether they would change the assessment). Twenty-two invitees participated in the workshop on December 15, and we are now producing a report on the workshop.

Research activities

T-003 Create a global inventory of butterfly monitoring schemes and available time series data (with collaborators) to help us assess data gaps, and capacity needs and build a Living Planet Index for butterflies. (KSR 5)

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

Result description: We held two meetings of the butterfly monitoring subgroup throughout the year; we also welcomed Holly Mynott from Butterfly Conservation as one of our newest members, to drive forward the butterfly indicator project across organisations. We further helped to initiate a project to collate species inventories from across the globe, as part of a post-doctoral research study of one of our members.

NETWORK

Membership

T-002 Increase the global reach of the group to include a diversity of members covering at least 40 countries. (KSR 2)

Number of SSC members recruited: 4 Result description: In 2022, the group welcomed four new members from four countries. The group now has 43 members representing 24 countries.

T-005 Develop regional subgroups to focus on regional Assess-Plan-Act. (KSR 2)

Number of regional subgroups established: 0

Result description: We held a meeting to discuss the formation of a South Asia/ Southeast Asia regional subgroup.

Capacity building

T-006 Carry out capacity building for red listing within the group via training workshops/ online Red List training courses. (KSR 2)

Number of people trained in assessment tools: 10

Result description: We held two online Red List Training Workshops, for Eastern and Western time zones respectively. The first one, from March 29 to April 1, was aimed at East Asian time zones, and in total, six members of the group completed the training course. The second workshop was held in December 5-8, aimed at Western time zones, and in total, four members completed the training. The workshops were led by Anna Walker from Albuquerque BioPark and Monika Bohm (Co-Chair) and involved members from two other Specialist Groups (Wild Bees and Firefly).

T-018 Develop partnerships with relevant organisations (e.g., Butterfly Conservation, eButterfly) to improve access to conservation-relevant data, and coverage and capacity of monitoring for Lepidoptera. (KSR 3) Increased number of collaborations: Ongoing.

Result description: We continued our collaborative work with relevant organisations throughout the year, including Butterfly Conservation, Butterfly Conservation Europe, Vlinderstichting (Netherlands), the Living Planet Index team at ZSL, and the Centre for Ecology and Hydrology (UK) through the development of a proposal to expand the Living Planet Index method to include butterflies. We also held two meetings of the butterfly monitoring subgroup, which includes these organisations, throughout the year; we also welcomed Holly Mynott from Butterfly Conservation as one of our newest members, to drive forward the butterfly indicator project across organisations.

COMMUNICATE Communication

T-013 Improve communications with the membership and a wider audience through newsletters, blogs, Facebook and Twitter presence, podcasts, etc., with two major outputs per year around which engagement can be focused (e.g., around World Swallowtail Day, publication of scientific outputs, etc.). (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 2

Result description: In 2022, we produced two digital communications. One was a Red List update, highlighting the various species and assessment processes involved. We also worked with the Global Center for Species Survival to produce a blog post about the publication of the migratory monarch butterfly assessment (https://www. indianapoliszoo.com/gcss/migratory-monarchs-endangered/), which was published in July 2022 and received a lot of media attention.

T-013 Improve communications with the membership and a wider audience through newsletters, blogs, Facebook and Twitter presence, podcasts, etc., with two major outputs per year around which engagement can be focused (e.g. around World Swallowtail Day, publication of scientific outputs, etc.). (KSR 12)

Number of Species e-bulletin, Save Our Species newsletter, SSC Groups' newsletter editions produced: 2

Result description: Internally, we produced two IUCN SSC Butterfly and Moth Specialist Group newsletter editions in 2022. Externally, we worked with the Global Center for Species Survival on a blog post highlighting the publication of the monarch and migratory monarch Red List assessments (https://www.indianapoliszoo.com/ gcss/migratory-monarchs-endangered). We also produced an article on the Specialist Group for the News of the Lepidopterists' Society: Bohm, M (2022). 'Lepidoptera in the Species Survival Commission: (re-)introducing the IUCN SSC Butterfly and Moth Specialist Group'. News of the Lepidopterists' Society 64(3), 138-140. This article is available at: https://images.peabody.yale.edu/lepsoc/nls/.

Scientific meetings

T-013 Improve communications with the membership and a wider audience through newsletters, blogs, Facebook and Twitter presence, podcasts, etc., with two major Migratory Monarch Butterfly (*D. plexippus* ssp. *plexippus*). Red List assessment of this species and its subspecies was part of the Specialist Group's work in 2021 Photo: Peter Hall



Parnassius hardwickii copulating at Hirpura Wildlife Sanctuary, Shopian, Kashmir Himalayan Region, India Photo: Riyaz Ahmad



outputs per year around which engagement can be focused (e.g., around World Swallowtail Day, publication of scientific outputs, etc.). (KSR 12)

Number of scientific events in which the members participated: 1

Result description: Monika Bohm and Anna Walker gave a webinar on the Migratory Monarch assessment process and outcome (83 participants on the day); the webcast is available online: https://epri.webex.com/recordingservice/ sites/epri/recording/747dd8822c7d-103bad690050568186a3/playback). The webinar was organised and hosted by EPRI's pollinator programme (https://www. epri.com/events/BA11492A-30B4-4BBC-A9CE-CA7F2397B50D).

Acknowledgements

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Summary of achievements

Total number of targets 2021–2025: 20 Geographic regions: 17 Global, 2 America, 3 Asia, 1 Europe

Actions during 2022:

Assess: 5 (KSR 5, 6) Network: 4 (KSR 2, 3) Communicate: 3 (KSR 12, 13)

Overall achievement 2021-2025:

