



Species

ISSUE 65

2024-2025 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 that were generated during 2024 (full year) and 2025 (first quarter), 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:

Camino Vilaró, M, and Kryvomaz, T. (2025). 2024-2025 Report of the Chytrid, Zygomycete, Downy Mildew and Myxomycete Specialist Group. In: IUCN SSC and Secretariat. *Species: Annual Report of the IUCN Species Survival Commission and Secretariat 2024-2025*. Gland, Switzerland: IUCN. 6 pp.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

2024-2025 Report

IUCN SSC Chytrid, Zygomycete, Downy Mildew and Myxomycete Specialist Group



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NUMBER OF MEMBERS
26

SOCIAL MEDIA AND WEBSITES

Facebook: [Slime Mold Identification & Appreciation](#)

Instagram: [@hongosymyxos](#)

Website: www.cybertruffle.org.uk/moulds/index.htm

Mission statement

The mission of our IUCN Specialist Group is to promote the conservation of chytrids, downy mildews, myxomycetes and zygomycetes.

Projected impact 2021–2025

Activities and results focused on improving knowledge and necessity about the diversity and conservation on myxomycetes through various research projects, including publications and conferences in international events. The analysis of species and threats in microorganisms allows for progress in the assessment of myxomycetes using the IUCN criteria. Incorporating topics into educational programmes, participation in research fairs and designing brochures are intended to raise awareness for lesser-known groups needing protection.

Targets 2021–2025

ASSESS

T-001 Study climate change impact on myxomycetes, chytrid, zygomycetes and downy mildews.

Status: Achieved

PLAN

T-004 Analyse population trends and threats, and assess species using the IUCN Red List criteria and determine conservation actions for chytrids, zygomycetes, downy mildews and myxomycetes.
Status: Achieved

ACT

T-002 Advance the conservation activity for chytrids, zygomycetes, downy mildews and myxomycetes.
Status: Achieved

NETWORK

T-003 Organise a network of specialists and stakeholders for discussing conservation problems for 'lower fungi' and for exchange of successful protection measures.
Status: Achieved

COMMUNICATE

T-005 Promote the conservation of different groups of living organisms that were not considered to be in danger before but are in need of protection today.
Status: Achieved

Activities and results 2024-2025

ASSESS

Research activities

T-001 Study climate change impact on myxomycetes, chytrids, zygomycetes and downy mildews. (KSR 5)

Number of scientific publications about species research that acknowledges SSC affiliation: 7

Result description: (1) Camino Vilaró, MC, Ramírez Palomino, K. (2024). 'Myxomycetes species from Cuba'. Version 1.16. *Instituto de Geografía Tropical*; (2) Camino Vilaró, MC. (2024). 'Fungi and related organisms in the IUCN: studies case in Myxomycetes'. Conference in Mycology meeting, National Botanical Garden, La Habana, Cuba; (3) Camino Vilaró, MC, Castro Hernández, L, Mena Portales, J, Abreu Herrera, Y. (2024). 'Myxomycetes in localities of the Bamburanao mountain, Cuba'. VI International Convention Trópico 2024, V Congreso de Biodiversidad y Ecología Tropical; (4) Camino Vilaró MC, et al. (2024). 'Assessment of the conservation status of fungal and Myxomycetes'. VI International Convention Trópico 2024, V Congreso de Biodiversidad y



Triptych cover design on diversity and conservation of Myxomycetes for environmental education activities and for the protected areas. Contains photos and texts in spanish and english
Design: Mayra Camino, Yudisleidys Abreu, Lázaro Castro, María A. Castañeira

Ecología Tropical; (5) Abreu Herrera, Y, Camino Vilaró, MC, Arriagada Escamilla, C. (2024). 'Diversity of Myxomycetes in the protected wild area of the Araucanía Region, Chile'. International Convention Trópico 2024, V Congreso de Biodiversidad y Ecología Tropical; (6) Camino Vilaró, MC, Kryvomaz, T. (2024). 'IUCN SSC. Chytrid, Zygomycete, Downy. Mildew and Myxomycete. Specialist Group: results and impacts 2021-2024'. 5th Leaders' Meeting IUCN Species Survival Commission, Abu Dhabi, and (7) Cejas Rodríguez, F, et al. (2024). 'Incorporation of information on cuban species into the Global Biodiversity Information Facility (GBIF)'. International Convention Trópico 2024.

PLAN

Planning

T-004 Analyse population trends and threats, and assess species using the IUCN Red List criteria and determine conservation actions for chytrids, zygomycetes, downy mildews and myxomycetes. (KSR 8)

Number of conservation plans/strategies developed: 2

Result description: (1) Assessment of another eight myxomycetes species to the IUCN Red List of Cuba, two of them Critically Endangered (CR), one Endangered (EN) and one Vulnerable (VU), and (2) Update of the Red List of myxomycetes species for Cuba based on the species categorised in 2024.

ACT

Policy

T-002 Advance the conservation activity for chytrids, zygomycetes, downy mildews and myxomycetes. (KSR 10)

Number of position statements addressing major drivers/emerging threats of species or population loss: 3

Result description: In 2024, we established (1) collaboration with specialists from the National Center for Protected Areas focused on analysing the gaps in the representation of Funga (including myxomycetes) in protected area, and (2) synergy between botanist, mycologists and zoologists of different institutions to study the ecosystem where the palm *Coccothrinax borhidiana* grows, assessed as Critically Endangered (CR) by the Cuban Plant Specialist Group. In this locality exists the only population of this palm in the world. In 2025, we had an expedition with botanists, mycologists and zoologists to the locality of *C. borhidiana*.

NETWORK

Capacity building

T-003 Organise a network of specialists and stakeholders for discussing conservation problems for 'lower fungi' and for exchange of successful protection measures. (KSR 2)

Number of people trained in assessment tools: 5

Result description: We achieved the following: (1) Discussion with non-mycological specialists on the treatment of fungi in the IUCN for species assessment; (2) Presentation of myxomycetes case studies at the conference 'Fungi and related organisms in the IUCN'; (3) Analysis and discussion of myxomycetes species assessments at the project workshop (Implementation of actions of the Strategy for the Conservation of Fungal Diversity in Cuba); (4) Continue building capacity

during field expeditions with conservation workers in protected areas, and (5) Continue training for mycorrhizal specialists to evaluate species, based on experience in the evaluation of microscopic species.

COMMUNICATE

Communication

T-005 Promote the conservation of different groups of living organisms that were not considered to be in danger before but are in need of protection today. (KSR 13)

Number of communication products using innovative tools: 6

Result description: In 2024 and 2025, our communication efforts included: (1) Continuation of the educational program for primary education (4th, 5th and 6th grades). The program includes the use of teaching materials depending on the grade and age of the children; (2) An Instagram account (@hongosmyxos) was created for social spread and increase the public awareness; (3) Inclusion of myxomycetes in the XVIII Research Fair (FIUFRO 2024, University of La Frontera) with exhibition of samples under the stereoscopic microscope; (4) Inclusion of Myxomycetes in the course 'Exploring the secrets of life' (Proenta-UFRO 2024, University of La Frontera); (5) Second photography contest for university students and publication the results, and (6) Printing of the second version of Polyptych on diversity and conservation of myxomycetes for their distribution in the Environment and Development International Convention (2025).

Perichaena depressa
Photo: Mayra Camino Vilaró

Punta Guanós is a terrestrial ecosystem currently being studied with botanists, mycologists and zoologists. In this locality exists the only population of *Coccothrinax borhidiana* in the world, a species assessed as Critically Endangered
Photo: Jorge A. Sánchez Rendón



Expedition to Punta Guanós with botanist, mycologists and zoologists to the locality of *Coccothrinax borhidiana*, endemic and threatened specie
Photo: Héctor M. Díaz Perdomo

Acknowledgements

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Zoo for the direct attention and collaboration always. We would also like to thank to Environment Agency (AMA), Ministry of Science, Technology and Environment (CITMA) in Cuba for its support for the project "Implementation of actions of the Strategy for the Conservation of Fungal Diversity in Cuba" (2022-2024) Code PS211LH003-028 approved by the Program "Sustainable use of the components of Biological Diversity in Cuba". Our final acknowledgments go to the volunteer experts who made all this work possible.

Summary of achievements

Total number of targets 2021–2025: 5

Geographic regions: 5 Global

Actions during 2024-2025:

Assess: 1 (KSR 5)

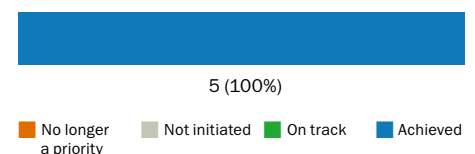
Plan: 1 (KSR 8)

Act: 1 (KSR 10)

Network: 1 (KSR 2)

Communicate: 1 (KSR 13)

Overall achievement 2021–2025:



Suweon Treefrog
(*Dryophytes suweonensis*)
Photo: Amael Borzee



Marsh Cinquefoil
(*Comarum palustre*)
Photo: Magnus Goransson



Phallus aureolatus
Photo: Juliano Baltazar



Eurasian Griffon (*Gyps fulvus*)
Photo: Andre Botha



Black Rhino (*Diceros bicornis*)
Photo: Save The Rhino Trust Namibia



Azores Nursery Spider
(*Pisaura acoreensis*)
Photo: Paulo A.V. Borges



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