

## 2021 Report

# IUCN SSC Fungal Conservation Committee











DEPUTY CHAIR Giuliana Furci Fungi Foundation Inc., 716 Marcy Avenue, Brooklyn, NY 11216 US

### **Mission statement**

The Fungal Conservation Committee (FunCC) aims to raise awareness of the importance of fungi and the need to conserve them, enhance coordination among the fungal and the broader conservation communities, and foster action.

### Projected impact 2021–2025

Assess the extinction risk of fungal species to inform conservation planning and action for species in most need.

### Targets 2021–2025 ASSESS

**T-004** Coordinate and support Fungal Specialist Groups to produce and submit 3,000 global assessments.

**T-010** Support Fungal Specialist Groups to produce 200 national assessments.

**T-011** Work with scientists at Kew, Albuquerque BioPark, or others to refine and modify the artificial intelligence system developed and being utilised for rapidly sorting species into Data Deficient, Least Concern or need for detailed assessment.

**T-012** Compile annotated bibliography of conservation mycology. Put a list of publications together and agree on controlled vocabulary for topic terms.

NUMBER OF MEMBERS



Yoshimuriella sp. Photo: Bibiana Moncada





Calostoma cinnnabarina Photo: Aida Vasco

Calostoma cinnnabarina Photo: Gabriel Vasco

T-013 Refine research agenda for conserva- NETWORK tion mycology.

T-014 Compile list of fungi with threat assessments, not just those on the IUCN Red List but for national and regional lists.

T-015 Review new research findings, especially on population genetics and utility of environmental sampling, to update fungal Red List guidelines including more emphasis on microfungi.

### PLAN

T-017 Work with countries and regions to develop national strategies for conservation of fungi.

T-018 Investigate and strategise integrating fungi into Multilateral Environmental Agreements and other multinational policies.

T-019 Produce Assess to Plan species assessments focused on Fungi.

### ACT

T-016 Work with national and regional agencies, landowners/land trusts and corporations that manage land to include fungi in conservation planning.

T-020 Initiate and/or enhance existing conservation action plans.

T-021 Enhance ex situ and in situ conservation and sustainable use initiatives.

T-022 Produce intervention letters and policy recommendations to address specific needed actions.

T-001 Create regional conservation fungal networks/working groups as a partnership among the five Fungal Specialist Groups.

T-002 Add additional members to the FunCC as additional thematic needs are identified.

T-003 Identify potential new Fungal Specialist Groups, either taxonomic, thematic or geographic, and propose formation if appropriate leadership is available.

T-007 Continue to build capacity within Fungal Specialist Groups across the Species Conservation Cycle, communication and other issues.

T-008 Continue building capacity within the mycological community through symposia, short courses and workshops.

### COMMUNICATE

T-005 Develop and implement a communication strategy engaging all members of the FunCC including a logo, website and social media.

T-006 Work with fungal NGOs and associations, conservation agencies, etc., on campaigns to highlight importance of fungi, include fungi when talking about biodiversity (fauna, flora, funga), and incorporate fungi in conservation initiatives and land management decisions, education initiatives, etc.

T-009 Raise awareness and importance of conservation initiatives and action within the mycological community through symposia, short courses and workshops.

### Activities and results 2021 ASSESS **Red List**

T-004 (KSR 6)

Number of new global Red List assessments completed: 200

Result description: Red List workshops were held in Brazil, Chile, Europe, Southeast Asia and the US, resulting in nearly 200 new assessments - some of which are published, others in the queue.

### **Research activities**

T-011 (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 0

Result description: A grant proposal was submitted for a pilot project to develop a computer-based toolkit that will significantly improve efforts to assess the conservation status of fungi. The pilot project will provide the opportunity to build and test the toolkit, a necessary step before it can be rolled out globally, by focusing on the 20,000+ mushrooms and other macrofungal species reported from the US and Canada.



Leotia sp. Photo: Aida Vasco



Diploschistes scruposus Photo: Jessica Allen

### PLAN Policy

T-018 (KSR 9)

### Number of documents provided to support/ guide policy making: 2

Result description: Efforts were focused on getting fungi recognised in conservation policies, strategies and laws: (1) the Flora, Fauna, Funga initiative was led by Deputy Chair, Giuliana Furci, and the foundation she leads (https://www.faunaflorafunga. org/). The initiative resulted in a number of media stories and culminated in IUCN SSC and Re:wild joining together to call for conservation organisations to recognise Kingdom Fungi on par with Plants and Animals (https://www.iucn.org/news/ species-survival-commission/202108/ rewild-and-iucn-ssc-become-first-globalorganizations-call-recognition-fungi-onethree-kingdoms-life-critical-protecting-andrestoring-earth); (2) a letter was published in Science calling for including all fungi in biodiversity plans (https://science.sciencemag.org/content/373/6553/403.1); (3) efforts were made to get additional organisations to fully incorporate fungi in their work, including NatureServe.

### NETWORK Capacity building

T-007 (KSR 2)

# Number of people trained in assessment tools: 100

**Result description**: Capacity building courses were held for interested mycologists in Brazil, Chile, Colombia, Europe, Southeast Asia (participants from 7 countries), Thailand and the US.

### T-007 (KSR 2)

# Number of people trained in conservation planning: 2

**Result description:** Members of the FunCC participated in the Conservation Planning Specialist Group's Facilitating Species Conservation Planning Workshop.

### T-007 (KSR 2)

# Number of people trained in communication skills: 0

**Result description:** Initial discussions were held with the Global Center for Species Survival Public Relations Specialist to organise a communication training course.

### T-008 (KSR 2)

Number of symposia, short courses, and workshops for the wider mycological community: 8

**Result description:** A number of workshops were organised across the mycological community, including in Brazil, Colombia and the US.

### Membership

T-002 (KSR 2)

### Number of SSC members recruited: 0

**Result description:** Additional members were identified with expertise in environmental law, sustainable use and from Africa, an unrepresented region. Invitations to be part of the FunCC will be made in 2022.

### T-003 (KSR 2)

### Number of new SSC groups established: 0

**Result description:** Discussions were started about the creation of the Colombian Fungal and the Brazilian Fungal Specialist Groups. The Colombian group has made good progress with appropriate leadership and potential members identified.

### Synergy

T-001 (KSR 4)

### Functioning network identified and beginning to address regional needs: no longer a priority

**Result description:** This target is no longer a priority. Considering progress with the



Cyathus sp. Photo: Aida Vasco

Colombian Fungal Specialist Group, it was decided to focus efforts on the creation of new Specialist Groups, which will include specialists from the existing five Fungal Specialist Groups.

### COMMUNICATE

### Communication

T-005 (KSR 13)

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

**Result description:** A website was created (https://www.iucn-fungi.org/) and a Twitter account was set up (https://twitter.com/IUCNfungi), which reached over 337 followers in less than six months. A communication strategy will be developed in consultation with the Global Center for Species Survival Public Relations Specialist.

T-005 (KSR 13)

### Logo created: 1

Result description: A logo was developed, engaging all members of the FunCC. T-006 (KSR 13)

Higher visibility of fungi: ongoing

**Result description:** The Flora, Fauna, Funga initiative was led by Deputy Chair,

Giuliana Furci, and the foundation she leads (https://www.faunaflorafunga. org/). The initiative resulted in a number of media stories and culminated in IUCN SSC and Re:wild joining together to call for conservation organisations to recognise Kingdom Fungi on par with Plants and Animals (see https://www.iucn.org/news/ species-survival-commission/202108/ rewild-and-iucn-ssc-become-first-globalorganizations-call-recognition-fungi-onethree-kingdoms-life-critical-protecting-andrestoring-earth).

### Acknowledgements

The Fungal Conservation Committee is thankful to the Mohamed bin Zayed Species Conservation Fund for funding and the IUCN Red List Unit for their support with the extinction risk assessments of fungi. We would also like to thank Royal Botanic Gardens, Kew for collaborating in the development of tools and procedures to accelerate the number of fungal species published in the Red List. Fungi Foundation has been a key partner and leader in fungi conservation, especially with the Flora, Fauna, Funga initiative in 2021, calling for mycological inclusive language and the recognition of the Kingdom Fungi on par with Plants and Animals. Our final acknowledgments go to the Indianapolis Zoo and its Global Center for Species Survival, mainly through the support of the Plants and Fungi Conservation Coordinator.

### Summary of achievements

Total number of targets 2021-2025: 22

Geographic regions: 22 Global Actions during 2021:

Assess: 2 (KSR 5, 6) Plan: 1 (KSR 9) Network: 7 (KSR 2, 4) Communicate: 3 (KSR 13)

Overall achievement 2021-2025:

