

IUCN SSC Center for Species Survival Fungi

Advancing global fungal conservation to strengthen biodiversity strategies for resilient ecosystems















The UAE's unique desert ecosystems host a surprisingly rich and understudied diversity of fungi, making it a vital region for advancing fungal conservation.



The CSS Fungi's mission is to champion the protection of fungi by nurturing global understanding, supporting science-based conservation, and empowering people to recognize fungi as vital to life, climate, and biodiversity.





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Who we are

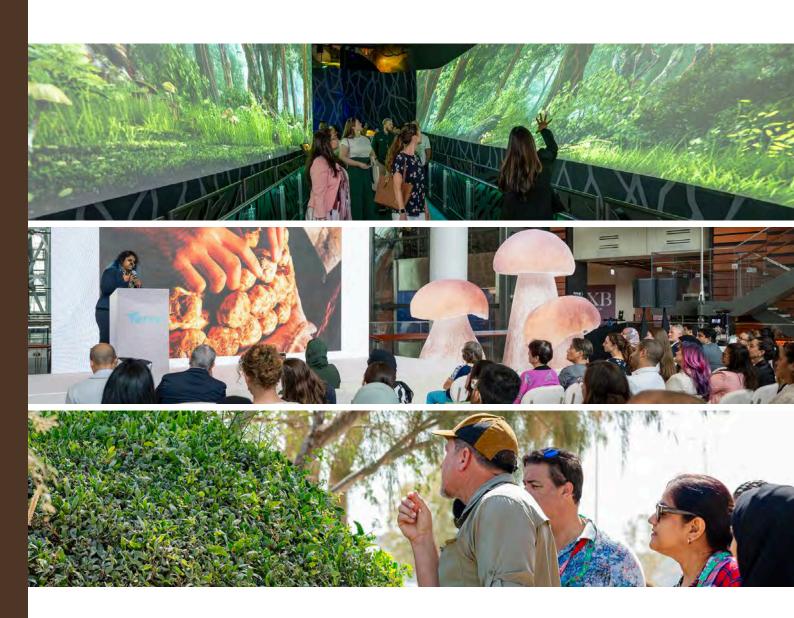
Securing our future by connecting people and institutions to safeguard fungal diversity.

The Center for Species Survival (CSS) Fungi was established by the Species Survival Commission (SSC) of the International Union for Conservation of Nature (IUCN), the IUCN SSC Fungal Conservation Committee, and Terra at Expo City Dubai.

CSS Fungi is based at Terra, Expo City Dubai, in the United Arab Emirates (UAE).

CSS Fungi combines the expertise and resources of Terra, the IUCN SSC, and the Fungal Conservation Committee to enhance the SSC's capacity to Assess, Plan, Act and influence policy for species survival.

We work in conjunction with governments, NGOs, zoos, science centers, research institutions and other environmental organizations to provide conservation expertise, research and training, and other services and deliverables in UAE and the Middle Eastern region.



We embrace CPSG's <u>Principles and Steps</u>: Plan to act, promote inclusive participation, use sound science, ensure good design and neutral facilitation, reach decisions through consensus, generate and share products quickly, and adapt to changing circumstances.

Meet our co-founders IUCN PSSC Species Survival Commission Center for Species Survival at Terra, Expo City Dubai





The International Union for Conservation of Nature (IUCN) is a membership Union composed of both government and civil society organizations. It harnesses the experience, resources, and reach of its more than 1,400 member organizations and the input of more than 17,000 experts.

This diversity and vast expertise make IUCN the global authority on the status of the natural world and the measures needed to safeguard it.

Mission: Influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

Vision: A just world that values and conserves nature.

For more information: www







What is the IUCN Species Survival Commission?

The Species Survival Commission (SSC) was established by IUCN in 1949, the year after the Union was founded. The SSC, as one of IUCN's six Commissions, works together with the Secretariat and Members to deliver the IUCN Programme and Species Strategic Plan.

Since that time, SSC has grown into a global, science-based network of thousands of volunteer experts. The Commission delivers and promotes this technical knowledge, advice and policy guidance to those who can influence the implementation of conservation action across the world. These experts are organized into different groups arranged by taxonomy, geography or disciplines, convened by the SSC in response to pressing conservation issues.

Mission: In the intersessional period of 2025 - 2029, the Species Survival Commission (SSC) enables IUCN to influence, encourage and assist societies throughout the world to conserve the integrity of biodiversity, and to ensure that the use of species is both equitable and sustainable, through:

- the provision of knowledge on status and trends of species;
- developing policies and guidelines;
- facilitating conservation planning; and
- catalysing action on the ground and in the water.

Vision: The work of SSC is guided by the Vision of: *A just world that values* and conserves nature through positive action to both prevent the loss and aid recovery of diversity of life on earth.















The Fungal Conservation Committee (FunCC) is a group of expert volunteers dedicated to the conservation of fungi. The FunCC is part of the Species Survival Commission (SSC) within the IUCN.

The FunCC serves as the focal point for fungal conservation with the SSC Steering Committee, other areas of the IUCN, the broader conservation community, policy makers, and the public. The FunCC provides support to specialist groups with expertise in fungi from specific habitats, countries, or taxonomic groups.

Mission: Raise awareness about the importance of fungi and foster action to ensure their persistence and continued benefits to the environment and society.

Vision: A world where fungi and their habitats are highly valued and conserved to the benefit of the environment and society.

For more information:







Born as the sustainability pavilion for Expo 2020, Terra has since evolved into a living hub for environmentalism, a platform to catalyze planetary action and public engagement.

Terra's approach is to grow people-powered movements through partnerships, events, and networks. It uses applied science and field research to drive impact in the conservation world and ground truths it through communities of practice. Terra cocreates, designs, and delivers nature-based solutions that support ecological health, climate change adaptation and human wellbeing in cities.

Mission: To inspire action for our planet by bridging science, culture, and community.

Vision: A world where humans and nature thrive in harmony, especially in arid and urban environments.

For more information: www







Terra's programs celebrate urban biodiversity, champion for fungi as critical to life, and explore evidence-based action like combining satellite data, drones, IoT sensors and citizen science for land, water and climate.









Terra Impact

As Terra continues to grow, a dedicated arm of the institution called Terra Impact now focuses on driving meaningful, measurable, and mission-aligned environmental programs.

Terra Impact is not just a name, but a signal of scale and structure. It reflects Terra's commitment to evolving from a beloved public pavilion into a regional leader in conservation, ecological education, and naturebased solutions.

This marks the culmination of years of learning, prototyping, and relationship-building. Now, with a growing ecosystem of partners and programs, Terra is overseeing the development of replicable models for nature-positive urban living in arid regions.

For more information: www f (O)



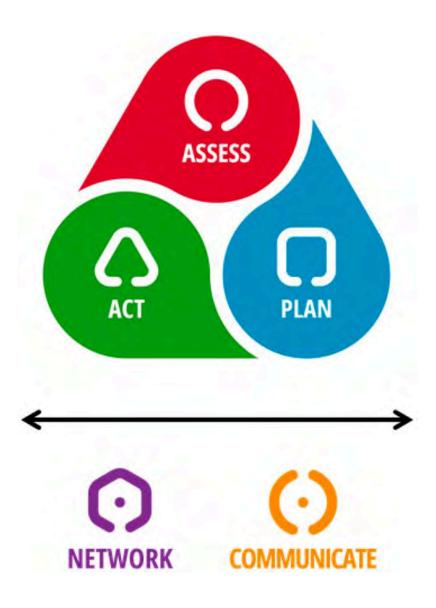




How we work

CSS Fungi is the only IUCN SSC Center for Species Survival in both the UAE and the MENA region, empowering conservation efforts through training and support to assess, plan, and act to save species.

The five objectives of the SSC integrate into the <u>Species Conservation</u> <u>Cycle</u> as the conceptual framework for its activities. Its main purpose is to guide efforts for valuing and conserving biodiversity through five essential components that are Asses, Plan, Act, Network and Communicate.

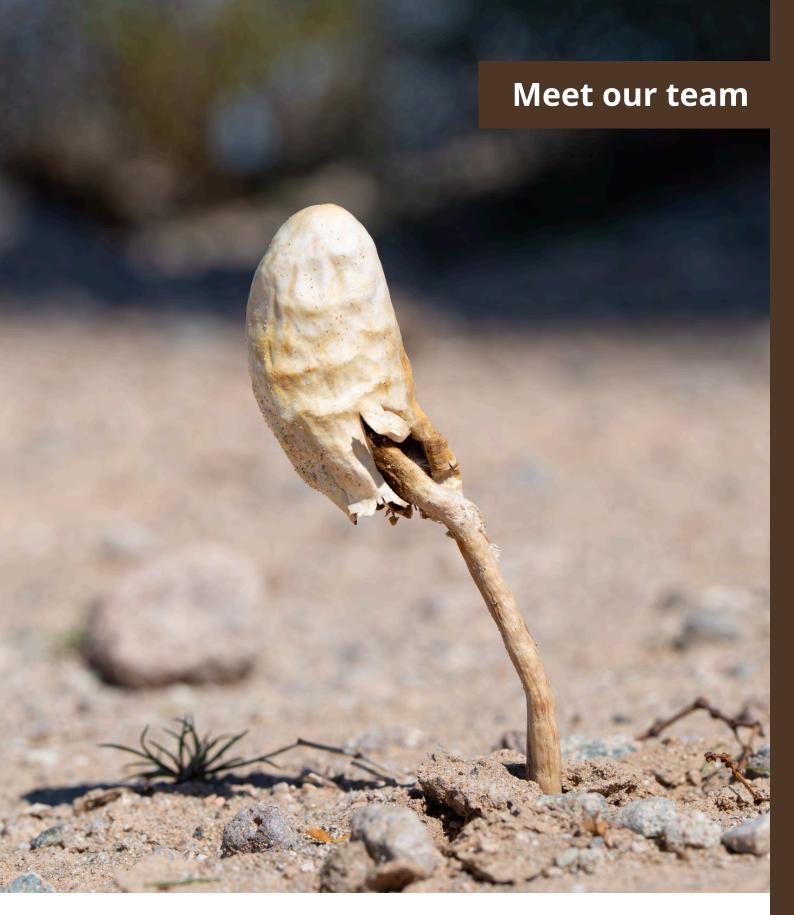


The Center's current priority within UAE, the host country, is building the nation's first Macrofungal Checklist and expanding this region's fungal database through assessments over the next two years. We plan by bringing scientists, policymakers, and communities together to design practical conservation strategies, and we act by turning these plans into training, restoration, and citizen science initiatives. At every stage, we connect people, share knowledge, and ensure fungi that is often invisible in conservation are recognized and protected as vital to healthy ecosystems. Desert fungi will no longer be an afterthought.









The CSS Fungi works together with a broad network of people and institutions united in efforts to conserve species. The Center is currently run by an officer from Terra and the Chair of the IUCN SSC FunCC.



Gregory Mueller is Chief Scientist Emeritus at the Chicago Botanic Garden and Chair of the IUCN SSC Fungal Conservation Committee. His research focuses on the evolution, ecology, and conservation of fungi, especially mushrooms, with fieldwork across the Americas, China, and Australasia. He has authored six books and over 120 peer-reviewed articles, is a past president of the Mycological Society of America, and an AAAS Fellow. Greg served as International Coordinator for Fungi at Costa Rica's Biodiversity Institute (INBio) and is a leading voice in global fungal conservation. He co-coordinates the Global Fungal Red List Initiative, chairs the Mushroom, Bracket, and Puffball Specialist Group, and serves on the board of the Fungal Diversity Survey. He is a research associate at the Field Museum and adjunct faculty at Northwestern and Southern Illinois Universities.



<u>Georgina Pereira</u> is a desert ecologist in the United Arab Emirates, specializing in mycology, fungal conservation, and environmental education. She leads the IUCN SSC CSS Fungi at Terra, Expo City Dubai, and is a member of the IUCN SSC Fungal Conservation Committee. At the Center, she spearheads projects like the UAE's first fungi checklist, the Middle Eastern Fungal Database, and supports global fungal Red List assessments. Her work bridges research, policy, and public engagement, focusing on arid land fungi, ethnomycology, and naturebased solutions for climate resilience. At Terra, she designs education programs, citizen science events, and workshops to strengthen urban biodiversity. With training in environmental law and biodiversity conservation, she integrates strategy with storytelling to raise fungi's profile in planning.

Our conservation work cannot be successful if done in isolation. We have a constantly expanding stakeholder network that partners with the Center on its many projects.

CSS Fungi is sustained through a combination of institutional support from Terra, contributions from IUCN SSC global partners, and project-specific grants and sponsorships. This blended model ensures that our core operations remain stable while allowing us to expand initiatives through collaborative funding. By diversifying our support to include research grants, conservation partnerships and philanthropic contributions, we secure the long-term resilience of the Center and the impact of our fungal conservation mission.



How we can work together

ASSESSING

- Conducting fungal Red List assessments
- Performing regional gap analyses for fungi
- Expanding biodiversity and conservation data outputs

PLANNING

- Developing species conservation action plans
- Identifying priority species and countries
- · Using planning tools to guide restoration and resilience

ACTING

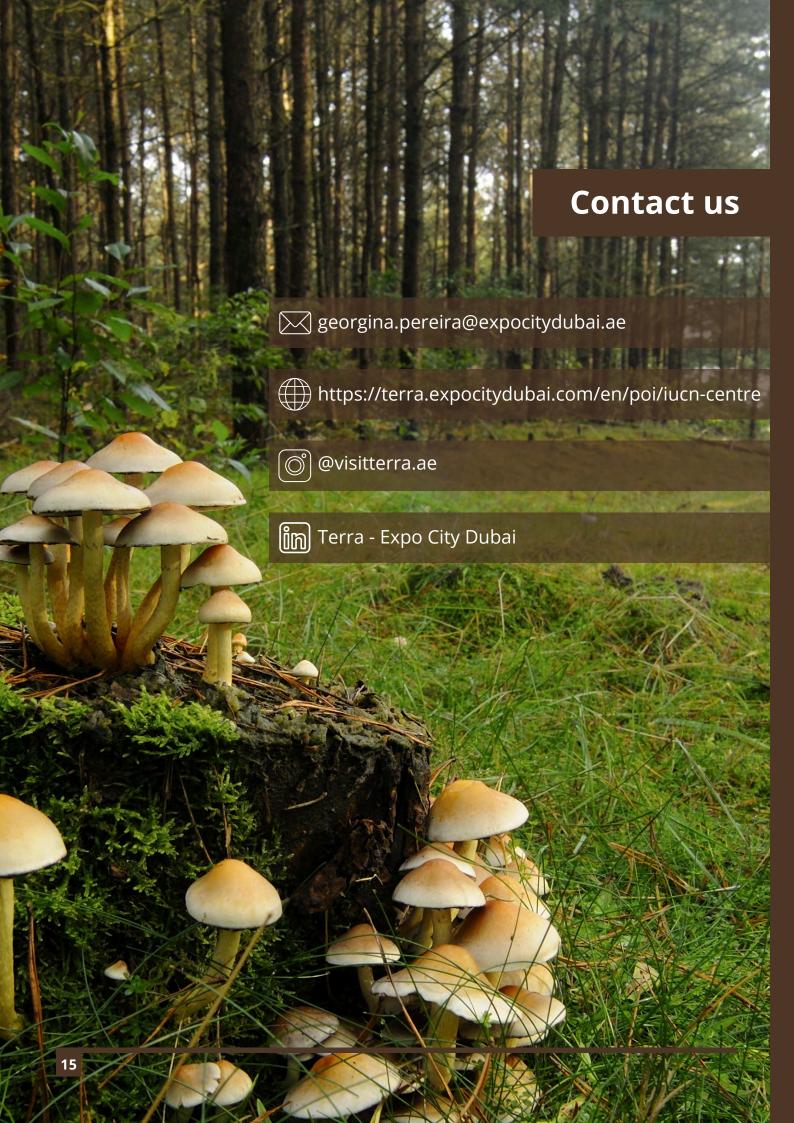
- Delivering training and capacity-building sessions
- Organizing educational workshops and technical symposiums
- Mobilizing partners for implementation of conservation actions

NETWORKING

- Building partnerships across UAE, Middle East, and globally
- Connecting stakeholders, researchers, and policymakers
- Strengthening cross-border collaboration for fungi conservation

COMMUNICATING

- · Sharing research through publications, workshops, and media
- · Promoting fungi's role in biodiversity and climate resilience
- Engaging communities and education through citizen science



If any of the following CSS Fungi pillars of focus are of interest to you, we invite you to please join us on our mission to safeguard fungi by filling this form or scanning the QR code.

- UAE's National Macrofungi Checklist
- Middle Eastern Fungal Database
- Plant-Fungi Relationships in Arid Ecosystems
- Ethnomycology in Desert Environments
- Fungal Education, Communication & Storytelling









