

FUNGI FOUNDATION RECOMMENDATIONS FOR SBSTTA-28 – UN CONVENTION ON BIOLOGICAL DIVERSITY (UN CBD)

Twenty-eighth meeting of the Subsidiary Body on Scientific, Technical & Technological Advice (SBSTTA28) Nairobi, Kenya. 27th July–1st August 2026.

Fungi are fundamental to ecosystem functioning, biodiversity conservation, climate regulation, soil health, sustainable livelihoods and human well-being¹. Despite their essential ecological roles, fungal biodiversity remains significantly underrepresented within international biodiversity policy and the implementation of the Kunming–Montreal Global Biodiversity Framework (KMGBF).

Recent scientific advances have highlighted the critical role of mycorrhizal fungal networks as belowground systems that connect life above and below ground. By regulating the exchange of nutrients and carbon between plants and soils, these networks support ecosystem integrity, resilience, terrestrial carbon sinks and climate regulation²³⁴. Emerging fungal biodiversity spatial data also provide new science-based opportunities to support the implementation of the Kunming–Montreal Global Biodiversity Framework by strengthening conservation planning, informing climate mitigation strategies and enhancing ecosystem restoration efforts.

Since the launch of the **Pledge for Fungal Conservation at CBD COP 16**⁵, important progress has been achieved. During the twenty-seventh meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 27), references to fungal biodiversity were incorporated into the recommendations on the agenda **item 9 Biodiversity and Agriculture** and the agenda **item 6(b) Strategic review of and updates to the expanded programme of work on forest biodiversity**⁶. These outcomes represent an important milestone in strengthening the integration of fungi within the Convention on Biological Diversity (CBD) and demonstrate growing recognition of **Fungi** as essential components of biodiversity conservation and ecosystem resilience.

SBSTTA 28 provides a timely opportunity to build on this progress by strengthening references to fungal biodiversity across additional agenda items under consideration. The

¹ Corbu, V. M., Gheorghe-Barbu, I., Dumbravă, A. Ș., Vrâncianu, C. O., & Șesan, T. E. (2023). Current Insights in Fungal Importance—A Comprehensive Review. *Microorganisms*, 11(6), 1384. <https://doi.org/10.3390/microorganisms11061384>

² Van Nuland, M.E., Averill, C., Stewart, J.D. et al. Global hotspots of mycorrhizal fungal richness are poorly protected. *Nature* 645, 414–422 (2025). <https://doi.org/10.1038/s41586-025-09277-4>

³ Li, T., Phillips, R.P., Rillig, M.C., Angst, G., Kiers, E.T., Bonfante, P., Eisenhauer, N., & Liu, Z. (2025). Mycorrhizal allies: synergizing forest carbon and multifunctional restoration. *Trends in Ecology & Evolution*, 40(10), 983–994. <https://doi.org/10.1016/j.tree.2025.07.004>

⁴ Stewart, J.D., Ramirez, D.X., Leon-Reyes, A., Barriga, N., Llerena, S., Manley, E.T., and Weedon, T.J. (2026). Land Use Change Reshapes Climate-Driven Diversity Patterns of Tropical Arbuscular Mycorrhizal Fungi. *Molecular Ecology*, 35(2), e70253. <https://doi.org/10.1111/mec.70253>

⁵ <https://www.ffungi.org/campaign/fungal-conservation-pledge>

⁶ <https://www.cbd.int/meetings/SBSTTA-27>

recommendations presented in this paper aim to support Parties in incorporating fungal considerations into the CBD negotiation process through practical and science-based proposals that build upon existing decisions, contribute to the effective implementation of the KMGBF, and pave the way for further progress at CBD COP17.

GENERAL RECOMMENDATIONS

- **Recognize fungal biodiversity as an integral component of sustainable wildlife management**, acknowledging the ecological, cultural and socio-economic contributions of wild **fungi** to ecosystem health, restoration, sustainable livelihoods and Nature's Contributions to People.
- **Strengthen the integration of fungal biodiversity into the updated Programme of Work on Protected Areas** by recognizing the importance of **belowground ecological processes**, ecological connectivity and emerging science-based approaches that support the implementation of Target 3 of the Kunming–Montreal Global Biodiversity Framework.
- **Promote the use of the best available scientific knowledge and innovative tools** to identify and prioritize areas of particular importance for biodiversity, ecosystem functions and ecosystem services, including underrepresented ecosystems **and areas supporting belowground ecological networks** to enhance conservation planning, protected areas management and restoration efforts.

SBSTTA28 Agenda Item 6. Sustainable Wildlife Management.

Document CBD/SBSTTA/28/5/Rev.1

The Fungi Foundation welcomes the draft **Global Guidance on the Sustainable Management of Wildlife Applicable to Multiple Species and Multiple Practices** and supports its adoption as an important contribution to the implementation of the Kunming–Montreal Global Biodiversity Framework (KMGBF).

Given fungi's essential ecological, cultural and socio-economic roles, we encourage Parties to ensure that fungal biodiversity is explicitly reflected throughout the implementation of sustainable wildlife management. This includes recognizing fungi as wild species that contribute to ecosystem health, restoration, sustainable livelihoods and Nature's Contributions to People.

To strengthen the implementation of the guidance, Parties are encouraged to:

- Recognize fungal biodiversity as an integral component of sustainable wildlife management.
- Promote the sustainable use and conservation of wild fungi alongside other components of biodiversity.

- Ensure that fungi are consistently reflected throughout the implementation of the Global Guidance.
- Promote coordinated implementation of the guidance across sectors responsible for wildlife management, ecosystem restoration and biodiversity conservation.

SBSTTA27 Agenda Item 7. Strategic Review and Update of the Programme of Work on Protected Areas.

Document CBD/SBSTTA/28/6

The strategic review of the Programme of Work on Protected Areas presents an important opportunity to incorporate science-based evidence approaches since its adoption in 2004. Among these approaches, increasing evidence demonstrates that fungal biodiversity and belowground ecological processes are fundamental for maintaining ecological integrity, ecosystem resilience, ecological connectivity and successful ecosystem restoration⁷.

The Fungi Foundation therefore encourages Parties to strengthen the updated Programme of Work by recognizing the contribution of fungal biodiversity and incorporating emerging scientific approaches that support the implementation of Target 3 of the KMGBF.

Parties are encouraged to:

- Integrate belowground ecological processes as an essential component of ecological networks integrity and ecosystem resilience.
- Encourage the use of emerging scientific evidence and innovative spatial planning tools to identify areas of particular importance for biodiversity conservation.
- Promote the incorporation of fungal biodiversity into conservation planning, monitoring and management of protected and conserved areas.
- Strengthen climate-resilient protected area planning by recognizing the contribution of belowground biodiversity to ecosystem adaptation and long-term resilience.

Annex I sets out specific text proposals.

⁷ Cornwallis, C.K., Van Nuland, M.E., Wengmann, A., Manley, B.F., Elhance, J., Stewart J.D., Daws, C., Venturini, A.M., Hynson, N.A., PEay, K.G., Kiers, E.T., West, S.A. (2026). Symbiotic fungi underlie the regeneration potential of island rainforests. *Current Biology*, 36(10), 2496–2506. <https://doi.org/10.1016/j.cub.2026.03.087>

Annex I. Specific Text Proposals

Agenda Item 6 Sustainable Wildlife Management. Document CBD/SBSTTA/28/5/Rev.1

Proposal 1 – Species Groupings

- **Original text**

Species groupings: the guidance applies to wild species across terrestrial, inland water, marine and coastal ecosystems, including aquatic animals, terrestrial animals, trees and other plants, including algae, and fungi.

- **Suggested amendment**

Species groupings: the guidance applies to wild species across terrestrial, inland water, marine and coastal ecosystems, including aquatic ~~animals~~, **and** terrestrial animals, trees and other plants, ~~including algae, and fungi~~, and algae.

- **Rationale**

This amendment improves consistency by recognizing fungi as a distinct biological kingdom within the list of species groupings addressed by the guidance.

Proposal 2 – Recommendation Paragraph 3

- **Original text**

3. Invites Parties to promote the coherent and coordinated implementation of the global guidance across relevant sectors dealing with the management of wildlife.

- **Suggested amendment**

3. **Encourages** ~~Invites~~ Parties to promote the coherent and coordinated implementation of the global guidance across relevant sectors involved in wildlife management.

- **Rationale**

Using "**Encourages**" raises ambition to integrate The Global Guidance on Sustainable Wildlife management, considering these are voluntary.

Agenda Item 7 Strategic Review and Update of the Programme of Work on Protected Areas. Document CBD/SBSTTA/28/6

Proposal 1 – Recommendation Paragraph 3

- **Original text**

3. Invites Parties and other Governments to take into account the updated programme of work on protected and conserved areas in the development and implementation of actions to meet the targets of the Framework.

- **Suggested amendment**

3. Encourages ~~Invites~~ Parties and other Governments to ~~take into account~~ **integrate** the updated programme of work on protected and conserved areas into the development and implementation of actions to meet the targets of the Framework, in particular Target 3.

- **Rationale**

Replacing “*take into account*” for “*integrate*” strengthens implementation while remaining consistent with CBD terminology.

Proposal 2 – Recommendation Paragraph 6(c)

- **Original text**

6 c) To compile a synthesis report on best practices to meet Target 3 of the Framework and implement the programme of work on protected and conserved areas, with particular focus on the following areas:

- **Suggested amendment**

6 c) To compile a synthesis report on **Stakeholders’ experiences, best practices and emerging innovative tools** to ~~meet~~ **support the achievement of** Target 3 of the Framework and implement the programme of work on protected and conserved areas.↵

- **Rationale**

This amendment broadens the scope of the synthesis report to include innovative scientific approaches and stakeholders’ experiences generated since the adoption of the original Programme of Work.

Proposal 3 – Paragraph 6(c)(vi)

- **Original text**

6 (c)(vi) The identification and prioritization of areas of particular importance for biodiversity, ecosystem functions and ecosystem services, including underrepresented ecosystems.

- **Suggested amendment**

6 (c)(vi) The identification and prioritization of areas of particular importance for biodiversity, ecosystem functions and ecosystem services, including underrepresented ecosystems **and areas supporting belowground ecological networks.**

- **Rationale**

The proposed text stresses that areas supporting belowground ecological networks are critical to strengthen the identification of areas of particular importance for biodiversity, ecosystem functions and ecosystem services, such as carbon drawdown, while supporting the implementation of Target 3 through the use of the best available scientific evidence.

Proposal 4 – Paragraph 6(c)(viii)

- **Original text**

6(c)(viii) Ecological networks, climate-informed corridor design, large-scale ecological connectivity, and transboundary conservation, including in urban and peri-urban contexts;

- **Suggested amendment**

6(c)(viii) Ecological networks, climate-informed corridor design, large-scale ecological connectivity, **including belowground ecological processes**, and transboundary conservation, including **those** in urban and peri-urban contexts.

- **Rationale**

Belowground ecological processes are fundamental to ecological connectivity, ecosystem integrity and climate resilience and should be recognized within the updated Programme of Work.

Proposals on complementary activities of Protected and Conserved Areas Programme of work

Proposal 5 – Complementary Activity (Target 2)

Suggested amendment

2. Promote the restoration of degraded ecosystems within and beyond protected and conserved areas, including buffer zones, ~~and~~ ecological corridors **and belowground ecological processes**, including through the development of criteria for identifying priority restoration areas and approaches for measuring restoration success, ensuring a socially inclusive and gender-responsive implementation of the restoration efforts, as appropriate.

Proposal 6 – Complementary Activity (Target 3)

Suggested amendments

5. Facilitate the compilation and dissemination, through the clearing-house mechanism and relevant platforms, including the Target 3 Community of Practice and the Peace and Biodiversity Dialogue Initiative, of practical frameworks, guidance, **emerging innovative tools**, case studies and best practices to support the implementation of Target 3 of the Framework, including the definition and prioritization of areas of particular importance for biodiversity, ecological networks, climate-informed corridor design, large-scale ecological connectivity, **including belowground ecological processes**, other effective area-based conservation measures and transboundary conservation.

8. Strengthen the application of contemporary approaches to ecological integrity and ecological connectivity in the planning and management of protected and conserved areas, including through the development and implementation of ecological networks, climate-informed

corridor design, and connectivity, **including belowground ecological processes**, across large-scale terrestrial, freshwater and marine systems.

9. Strengthen the integration of climate change considerations, **including those related to belowground ecological processes**, into the planning and management of protected and conserved areas, to: (a) minimize the impacts of climate change and climate response measures, including through adaptive management and resilience-building approaches; and (b) integrate protected and conserved areas as part of nature-based solutions and/or ecosystem-based approaches to contribute to climate change mitigation, adaptation and disaster risk reduction

Proposal 7 - Complementary Activity (Target 5)

Suggested amendment

12. Provide guidance on addressing and managing the use of wild species within protected and conserved areas, where such use occurs, in a manner that mitigates risks to biodiversity and human health, is consistent with site-specific conservation objectives and zoning and contributes to addressing the legality, sustainability and safety of use across relevant stages of the use chain, including through the application of One Health risk assessment frameworks, **while respecting the rights and traditional territories of Indigenous People and Local Communities**, as appropriate.

Proposal 8 – Complementary Activity (Target 8)

Suggested amendments

15. Strengthen the integration of climate change considerations, **including those related to belowground ecological processes**, into planning and management, including through nature-based solutions and/or ecosystem-based approaches for mitigation, adaptation and disaster risk reduction.

16. Promote climate-informed system design that anticipates future range shifts, including by identifying climate refugia, connectivity corridors and areas of future biodiversity importance, **taking into account emerging innovative tools and the best available science-based evidence**.

Proposal 9 – Complementary Activity (Target 21)

Suggested amendment

31. Strengthen the application of advances in biodiversity monitoring, data management and knowledge-sharing through targeted capacity-building on reporting and the use of technology, including **spatial prioritization tools and** remote sensing, to improve **identification**, monitoring, evaluation and decision-making on **biodiversity conservation**.