



Promoting
the sustainable use
and conservation of
soil biodiversity



Vol. 2 – January 2025

Dear NETSOB members,

This is your monthly update from the International Network on Soil Biodiversity - <https://www.fao.org/global-soil-partnership/netsob/en/>. I hope to receive ideas of events from you to increase engagement and highlight the importance of soil biodiversity worldwide. I will also share updates from NETSOB working groups more often as well. Lastly, if you know someone interested in soil biodiversity who is not a member, they can join us [here](#).



★ NETSOB Vice-Chair elections – online

The term for our current Vice-Chairs and alternates is coming to an end in February. We are currently accepting nominations for (1) Vice-chair for each of the three working groups:

- Working group-1: on measurement, assessment and monitoring of soil biodiversity
- Working group-2: on sustainable use, management, and conservation of soil biodiversity
- Working group-3: on economics and policies related to soil biodiversity.

Please see below the Selection Criteria and the Terms of Reference for the Vice-Chairs. Self-nomination and re-election of current vice-chairs are allowed.

The mandate of the NETSOB Vice-chairs (and Alternates) is two-years long.

Candidates for the position of Vice-chairs of the NETSOB must meet the following criteria:

- *Should be an internationally recognized expert on soil biodiversity;*
- *Should belong to or have collaborated with international soil biodiversity networks;*
- *Should be familiar with the Convention on Biological Diversity's (CBD's) Plan of Action of the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity;*
- *Should have time to commit to the implementation of the NETSOB and the Global Soil Biodiversity Observatory (GLOSOB) work plan;*
- *Should not have any conflict of interest in regards to the objectives, data and information generated by the NETSOB and GLOSOB.*

The Vice-Chairs of each technical working group (WG) of the NETSOB will:

- I. Chair the corresponding technical WG meetings, ensure its work objectives and deliverables are met in time, and update the WG workplan when necessary;*
- II. Maintain active communication between each technical WG and the GSP Secretariat, in relation to the execution of the technical WG activities as documented in the work plan agreed upon at the launch of the technical WG;*
- III. Oversee progress and link between the NETSOB technical WGs and other Networks (including maintaining active communication);*
- IV. Report regularly about each technical WG progress to the NETSOB Chair;*
- V. Report to NETSOB of progress done and changes in the work plan at the yearly NETSOB meetings;*
- VI. Assist the NETSOB Chair in the establishment and activities of GLOSOB;*
- VII. Support the NETSOB Chair in attending other relevant network meetings and events of interest when the chairperson cannot participate;*
- VIII. WGs can meet regularly to advance the different activities as needed.*

If you are interested in running for one of the NETSOB Vice-Chairs, please send carlos.barreto@fao.org a brief bio and a CV by February 14th, 2025.

The new Vice-Chairs and Alternates of our three working groups will be announced during the Annual meeting that will be held online at the end of February. A separate e-mail with an invitation will come.

✦ **Q&A with Natalia Rodríguez Eugenio, Carlos Barreto and Jacob Parnell**

Last month we gave an interview to the journal One Earth on soil health, soil biodiversity and the GSP highlights and updates. Check it out: <https://doi.org/10.1016/j.oneear.2024.11.016>

✦ **Soil Health & One Health**

Still on the topic above, the key role of soil health in One Health was also highlighted in a recent paper published by NETSOB Chair – Brajesh Singh: <https://doi.org/10.1016/j.tim.2024.08.003>

✦ **New website**

Take a look at our updated [website](#) for new content and an updated map with all the members. Please let carlos.barreto@fao.org know if anything is missing with your information on the map.

✦ **Special Issue in Soil Organisms**

Articles written by NETSOB working group chairs and alternates will be published in a special issue in the journal [Soil Organisms](#). The issue is scheduled to be published open access on February 1st and it will include results of the WG-1 survey, bibliometric analyses on ecosystem services provided by soil biodiversity and soil microbial diversity, updates on the state of global micro-, meso-, macro- and megafauna biodiversity, a review on potential threats to soil biodiversity, and information on the Global Soil Biodiversity Observatory (GLOSOB). The article from WG3-4 on economics and soil biodiversity will be published as a white paper, so keep an eye out for that as well.

✦ **IPBES Nexus Assessment – Summary for Policy Makers**

The [Summary for Policy Makers](#) of the Thematic Assessment of the Interlinkages among Biodiversity, Water, Food and Health (Nexus Assessment) of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) approved during the IPBES 11 Plenary held in Windhoek, Namibia. Media launch recording on [YouTube](#).



I will advertise important soil biodiversity events in this space. The events below are **not** organized by FAO or NETSOB.

★ **European Geosciences Union General Assembly 2025**



The EGU General Assembly 2025 brings together geoscientists from all over the world to one meeting covering all disciplines of the Earth, planetary, and space sciences. The EGU aims to provide a forum where scientists, especially early career researchers, can present their work and discuss their ideas with experts in all fields of geoscience. The meeting will take place in Vienna, Austria & Online, 27 April–2 May 2025. There are over 35 sessions directly or indirectly related to soil biodiversity:

- BG1.3 - [Nitrogen Cycling in the Anthropocene: Microbiological Processes, Land-atmosphere-Interactions and Global Change Feedbacks: A 10 years anniversary](#)
- BG3.4 | PICO - [Complex case studies for ecosystem responses to global change, climate and hydrological extremes](#)
- BG3.13 - [Mycorrhizal fungi in forest ecosystems](#)
- BG3.14 - [Deadwood in changing forest ecosystems: A Risk or Potential for Climate Resilience?](#)
- BG4.8 - [Earth Observation Data for Wetland Dynamics and Ecosystem Monitoring](#)
- BG6.2 - [Integrating Classical and Molecular Approaches for Assessing Soil Fauna: Challenges and Applications](#)
- BG8.1 - [Ecosystem Services and Climate Extremes in Anthropocene: Interactions and Research Gaps](#)
- BG8.3 - [Nature-based solutions at the landscape scale: tackling climate and biodiversity crises together](#)
- BG8.5 - [Enhancing science-based knowledge on forests' capacities to mitigate climate change](#)
- BG8.7 | PICO - [Modeling agricultural systems under global change](#)
- BG9.1 - [Remote Sensing Applications for the Biosphere](#)

- ERE1.5 - [Advances in Sustainable Nature-Based Carbon Dioxide Removals \(CDR\) : Technical Innovations and Global Impacts](#)
- ITS3.7/BG0.6 | PICO - [Biodiversity from a Geoscience perspective](#)
- NH10.3 - [Developing a risk reduction strategy for multiple slow-onset hazards](#)
- NH11.1 - [Geo-hydrological hazards and landscape evolution in climate change scenarios](#)
- NH3.13 - [Nature-based and bio-based or inspired solutions for geohazard mitigation on slopes and streambanks](#)
- NH3.15 - [Shallow landslides: monitoring, prediction, modeling](#)
- SSS10.3 - [Modelling of soil structure and functions in response to extreme environmental events](#)
- SSS12.1 - [Soil health Intervention: Practical aspects to implement laws](#)
- SSS4.12 - [Soil biodiversity & agriculture: an intimate relationship](#)
- SSS4.13 - [Soil fauna as Engineers of Soil Sustainability in land use systems – Understanding of processes and the need of monitoring in Europe](#)
- SSS4.2 - [Plant - microbial interactions at soil interfaces: rhizosphere, detritusphere, \(bio\)-pores, and aggregates](#)
- SSS4.3 - [Arctic, Antarctic and alpine soil food web biodiversity and biogeochemical impacts](#)
- SSS4.4 - [The role of soil organisms in soil processes and functions](#)
- SSS4.7 - [Soil biodiversity and functioning in natural ecosystems](#)
- SSS4.9 - [Frontiers in soil biodiversity research – concepts, numbers, methods & more](#)
- SSS5.11 - [Interactions between minerals, organic matter, and microorganisms drive the formation and turnover of organic carbon in soil](#)
- SSS5.12 - [Biogeochemical processes controlling carbon, nitrogen, phosphorus and sulfur cycling in the soil-plant system](#)
- SSS7.1 - [Understanding biopathways of pollutants in soil-plant-systems for bioremediation and risk assessment](#)
- SSS7.5 - [Multidisciplinary tools and strategies for the management and rehabilitation of contaminated soils](#)
- SSS8.2 - [Pedodiversity: major driving factors and influences on ecosystem features](#)
- SSS9.12 - [Adaptation and resilience in agriculture: addressing climate change with science and technology](#)
- SSS9.23 - [Soil organic and inorganic carbon and nutrient measurement and modelling at various scales, and their role in the soil health from a multifaceted perspective](#)
- SSS9.6 - [Organic farming, Soil management and Healthy food](#)

✦ **International Soil Science Conference (SOILS 2025)**



The Malaysian Society of Soil Science (MSSS) will host the International Soil Science Conference (SOILS 2025) at Bertam Resort & Water Park, Penang, Malaysia, from 6th to 8th May 2025. SOILS 2025, themed “Soil Health for Sustainable Future: Bridging Soil, Agriculture, and Environmental Stewardship,” aims to foster discussions on tropical soil sustainability. This annual program is also attended by researchers, agronomists, and planters from the government and the private sector to share information related to soil management. More information at <https://www.msss.com.my/>

✦ **Ecology of Soil Microorganisms 2025 – Networking across scales**



The organizing committee is pleased to welcome you to the fifth conference on the Ecology of Soil Microorganisms to be held in Helsinki, Finland on June 15th–19th, 2025. The previous meetings attracted participants from all over the world. The ESM conference is an interdisciplinary platform addressing questions related to individual microbes (archaea, bacteria, fungi, oomycetes, protozoa and viruses), microbial communities and their ecological networks. Modern genomic, transcriptomic and proteomic methods are linked with approaches based on soil chemical, biochemical and functional analyses, exploration of soil fauna and plant ecology. They cordially invite experts from all these disciplines to join them in Helsinki to promote state-of-the-art research in the field of soil ecology and enjoy the northern midsummer madness! Check more information at https://www.lyyti.fi/p/Ecology_of_Soil_Microorganisms2025_9620/en/conference

✦ **Soils For Our Future 2025 Conference: A Gathering of Local Perspectives**



The SOILS FOR OUR FUTURE 2025 Conference brings together three conference events: 5th Global Soil Security Conference, Canadian Society of Soil Science Annual Meeting, and International Union of Soil Sciences Division 1 - Soils In Space and Time Meeting. Hosted by the Soil Conservation Council of Canada and the Manitoba Soil Science Society. With over 700 researchers, industry members, leaders of farmer organizations, graduate students and other attendees, the SOILS FOR OUR FUTURE 2025 Conference provides global perspective to today's research to sustain our future. Spanning five days, the conference provides attendees of the events to meet in plenary/technical sessions with their individual organizations and for all to come together in keynote sessions, tradeshow, posters, workshops and field tours. Check more information at <https://site.pheedloop.com/event/EVEYHOPOMAGWN/home>

✦ **VII Eurosoil 2025 & X Congreso Iberico de la Ciencia del Suelo**



The EUROSOIL is the official meeting of the European Confederation of Soil Science Societies (ECSSS), it is among Europe's most important Soil Sciences events and offers a fantastic opportunity for knowledge transfer among the Soil Sciences community. The EUROSOIL is held every four years and attracts a large audience of over 2500 participants who present their findings through oral and poster presentations across up to 10 parallel sessions. The event also features workshops, and an exhibition of products and services aimed at raising awareness in society, facilitating the exchange of ideas and information and creating business opportunities. Additionally, the Iberian Congress of Soil Sciences (CICS) will also be held during this edition of EUROSOIL. More information at <https://eurosoil2025.eu/EUROSOIL2025>

★ Global Soil Biodiversity Conference 2026



The Global Soil Biodiversity Initiative (GSBI) has hosted three previous Conferences in Dijon, France (2014), Nanjing, China (2017) and Dublin, Ireland (2023) each with 700-1000 delegates, and is the premier global conference dealing with soil biodiversity. The Local Organizing Committee is excited to welcome the world to Victoria, BC in 2026, and is preparing an exciting scientific program for the 4th Global Soil Biodiversity Conference (<https://globalsoilbiodiversity2026.org/>), which will serve as a pivotal platform for international collaboration and knowledge exchange. As Co-Chairs of the GSB 2026 Local Organizing Committee, Dr. Zoë Lindo and Dr. Carlos Barreto hope you can join them for this exciting scientific and social event. The keynote speakers are now announced:



Dr. César Marín – Full Professor at the Universidad Santo Tomás (Chile), Editor-in-Chief of the International Mycorrhizal Society Newsletter, founder and coordinator of the South American Mycorrhizal Research Network, founding member of the Global Soil Biodiversity Observation Network (SoilBON), Afro-Colombian of the Year (2019).

Dr. Janet K. Jansson – Emeritus Chief Scientist and Laboratory Fellow at the Pacific Northwest National Laboratory (United States), Past President of ISME. She is currently leading an elite group of scientific experts that use microbial strategies to help mitigate climate change and chairs a Scientific Advisory Board for a company that combines microbial inoculants and carbon sensors for soil carbon enrichment and measurement.



Dr. Maria J.I. Briones – Professor at the University of Vigo (Spain) and member of GSBI, SoilBON, and NETSOB. She has been involved in the quantification of carbon dynamics in organic soils by trying to decipher how changes in climatic conditions could affect plant-soil-organism interactions, CO₂ and CH₄ emissions and nutrient losses into the soil solution.