Break-out session descriptions

Morning

Session title	Description	Session organisers
A: Plural value creation for healthy soils through landscape approaches	Healthy soils provide ecosystem services to different stakeholders in a landscape. However, farmers are not always incentivised to farm in a way that optimize soil health for all stakeholders involved. "How can stakeholders come together to show the value of healthy soils and help farmers create more healthy soils?" that is the leading question of our discussion today. We look at two exemplary landscape approaches: Living labs, and Land Commons. We explore the role of these landscape approaches in regional transition processes for soil health.	Edwin Alblas (SSG), Arno Foppe (SSG), Jochen Froebrich (WENR)
B: WUR perspectives on soil carbon sequestration: productive disagreement?	In this session, we invite researchers who work on the relation between soil carbon sequestration and climate change mitigation, to share their perspectives on this topic. The session builds on the perspectives introduced during the plenary session and explores, through dialogue, how scientific disagreement on this topic can be productive.	Marlies van Ree (WENR), Esther Ronner (WENR), Anna Edlinger (WENR)
C: Exploring soil–human interactions: from soil data to management decisions and social interactions	This breakout session connects the journey *from soil information to management to social impacts*. It starts with insights from Africa on Soil Information Systems (SIS), showing how structured frameworks transform soil data into actionable knowledge for decision-making. Building on this, research from the Netherlands on cover crops and agroforestry is used to explore how changes in farming systems create interconnected trade-offs that are in different ways important to different stakeholders. Finally, experiences from Southeast Asia explore how social relations shape the adoption of sustainable soil practices, highlighting the realities faced by oil palm smallholders. Together, these perspectives reveal how data, practice, and people interact to sustain soil health.	Rosa de Vos (PSG), Maria- Franka Dekkers (PSG) Chrow Khursid (PSG)
D: Contaminant cocktails	Measuring, modelling and policy for contaminant mixtures: we will explore who works on what; the current state of the art; where we want to go next, and what is necessary for that. The goal is to interact and get to know each other, but also to get insights in the dilemmas and requirements in evaluating contaminant cocktails (leading to a follow-up position paper or project proposal?).	Anna Huang (WENR), Vera Felix da Graca Silva (ESG)

Afternoon

Session title	Description	Session organisers
E: Peat soils in transition	Peat meadows currently cause large greenhouse gas emissions. What solutions can extensification and water table management offer? Alternatively, how could these systems transition to other land uses or management? In this session, we will explore the environmental and socio-economic impacts of these options together using a case study from The Netherlands as an example.	Erne Blondeau (ESG), Dorian Behling (ESG), Idse Hoving (ASG)
F: Fertilisers: good, bad, or it depends?	Fertilizers are critical for soil fertility and food security, yet a major driver of climate change and pollution. In intensive farming regions like Europe or North America, excess nutrients drive emissions and water contamination, while in sub-Saharan Africa nutrient shortages perpetuate low yields and potentially cause land expansion. Organic alternatives promise sustainability, but face competition and logistical hurdles, leaving synthetic fertilizers indispensable for now. Nitrogen, essential for crop growth and carbon sequestration, lies at the heart of this paradox. This session explores the good and the bad of synthetic fertilizers, the most promising alternatives, and how priorities and constraints differ across scales and regions.	Chantal Hendriks (WENR), Abdul Mossa (ISRIC), Jan Verhagen (WPR)
G: Interoperable soil data	An interactive session on interoperable soil data, with examples of data from very diverse sources: effect of soil microplastics on soil structure and effect of soil enzymes on soil carbon storage. The Soilwise team will present some guidance and tools on how to make your soil data interoperable. The approach builds on the Obervations, Measurements & Samples standard of the Open Geospatial Consortium, which captures for each observation; the property, the unit of measure, and the procedure. We hope to hear your feedback on the need of interoperable soil data, and the effectiveness of the suggested approach.	Paul van Genuchten (ISRIC), Monne Weghorst (ESG), Keiji Jindo (PSG)
H: Is soil life too complicated? Connecting perspectives across disciplines	Soil biota are essential for soil functioning and health, but their diversity and complex interactions make them challenging to assess, predict, and manage. Is soil life really too complex to grasp? Which approaches can help us better understand and work with this complexity across disciplines? Following a short introduction, participants will join guided discussion rounds on topics such as modelling, ecotoxicology, soil management, biotic interactions, citizen science, and monitoring. A final interactive exchange will bring together key insights from the discussions.	Desalegn Etalo (PSG), Esperanza Huerta Lwanga (ESG), Laura Riggi (WENR), Luciana Chavez Rodriguez (ESG), Giulia Bongiorno (ESG), Anna Edlinger (WENR)