

"Insights into the functioning of the forest ecosystem under pressure - lessons learned from 40 years of the Sanasilva Inventory and 30 years of the LWF Programme "



on Tuesday 17 June 2025, 9:00-17:00 Englersaal at the
Swiss Federal Research Institute WSL, Zürcherstrasse 111
8903 Birmensdorf

With Sanasilva and the Long-term Forest Ecosystem Research (LWF), Switzerland has been participating for 40 years in one of the longest and most comprehensive cooperation programmes for forest condition assessment and forest ecosystem research in Europe. The workshop on the occasion of this anniversary offers the opportunity to get to know the measurement methods in detail during a tour of our WSL research facilities in the morning. Findings about the condition and processes in our forests are presented and discussed through posters and oral presentations. We invite participants to take part in a preliminary survey, discussion stands and a final plenary discussion on the requirements and needs of a future LWF. The Workshop presentation will be held in German, French or English, with keywords displayed in one of the other languages.

Recent publications

Schweizerischen Zeitschrift für Forstwesen (SZF special issue 02-2025) '30 years of Long-term Forest Ecosystem Research:

<https://www.szf-jfs.ch/en/archive/02-2025>

Swiss Forest Report 2025 (results on Sanasilva, air and water quality, soil)

<https://www.wsl.ch/waldbericht2025>

Anniversary report '40 years of ICP Forests'

<https://icp-forests.thuenen.de/plots-and-data/publications/anniversary-reports>

Jahrbuch Wald und Holz (with Sanasilva results):

<https://www.bafu.admin.ch/bafu/de/home/themen/wald/publikationen-studien/publikationen/jahrbuch-wald-und-holz.html>

ICP Forests Condition Report 2024:

http://www.icp-forests.org/pdf/ICPFforests_TR2024.pdf

Further publications, see:

<https://www.lwf.ch/de/publikationen>



(Photos: A. Schweizer, C. Hug, M. Schmitt, P. Waldner, M. Walser, ICP Forests and WSL)



Event programme

08:00 - 09:00 **Door opening & registration**

Part 1 Origin and current form of ICP Forests (Sanasilva, LWF)

09:00 - 09:30 Welcome and opening (M. Schaub and P. Waldner)

09:30 - 11:15 Organized tours on the WSL campus on concepts and partners of the LWF programme (LFI/NFI, Sanasilva, TreeNet, LWF Test, Training and Demonstration Facility, LWF Lab, Pedothek, MODOEK)

11:15 – 12:00 Poster Pitch (short poster announcements, Session Chair: M. Schaub)

12:00 - 13:00 **Lunch break and poster session**

Teil 2 Results and reflection

13:00 - 15:15 Welcome WSL Directorate (C. Hegg), FOEN (M. Reinhard), Chair ICP Forests (M. Ferretti), LWF Programme (A. Gessler)
 40 years of ICP Forests (M. Ferretti et al.)
 Waldzustand anhand 40 jährlichen Sanasilva-Inventuren (S. Hunziker et al.)
Forest Condition based on 40 years of Sanasilva-Inventory
 Luftbelastung und Nährstoffkreisläufe (P. Waldner, A. Thimonier, K. Meusburger, M. Schaub, P. Vollenweider et al.)
Air pollution and nutrient cycles
 Waldwachstum unter ändernden Umweltbedingungen (S. Etzold, R. Zweifel, K. Meusburger, et al.)
Forest growth under changing environmental conditions
 Kohlenstoffkreisläufe im Wald (F. Hagedorn et al.)
Carbon cycling in forests
 Diversität der Bodenvegetation und Einflussfaktoren (T. Wohlgemuth, A. Thimonier, et al.)
Diversity of ground vegetation and influence factors
 Verknüpfung LFI, Sanasilva und LWF (E. Thürig et al.)
Linking NFI, Sanasilva and LWF
 Zukunftsvisionen Waldökosystem-Forschung (A. Gessler, C. Fischer, M. Ferretti, et al.)
Visions for long-term forest research

15:15 - 16:00 Poster session and individual discussions (flip-charts).

16:00 - 16:30 Plenary discussion on the expectations towards the future LWF Programme

16:30 Apéro



Posters

Colin Bloom et al.	Towards near real-time drought stress assessment in Europe's temperate forests – Comparing remote sensing time series with continuous in-situ tree-level measurements
Arun Bose et al.	Decreasing water availability in Swiss forest soils
Jessica Cuartero et al.	Unearthing soil mesofaunal (collembolan) diversity across European forests
Markus Didion et al.	Foliage biomass and turnover dynamics estimation and plausibilisation at the national scale – the role for forest carbon stock changes
Andreas Dietzel et al.	High-resolution seasonal soil moisture maps for Swiss forests
Margaux Duborgel et al.	How stable are soil organic carbon pools
Dominik Fawcett, Petra D'Odorico	Narrow-band spectral indicators of vegetation functioning across scales: From trees to forests
Iris Feigenwinter et al.	Treibhausgasmessungen in Davos
Iris Feigenwinter et al.	Carbon flux dynamics of a subalpine spruce forest in Switzerland over 26 years
Aline Frossard, Han Xingguo	Greenhouse gas fluxes and microbial functions in Alpine soils along an altitudinal gradient
Andrin Gross et al.	Exploring a cost-effective eDNA air sampling method for the monitoring of fungi in Swiss forests
Claudia Guidi et al.	Improving litterfall estimation in European forests through long-term forest monitoring data
Jen-How Huang et al.	Mercury Biogeochemistry in Davos Seehornwald
Stefan Hunziker et al.	Long-term forest ecosystem research programme LWF - Overview
Marco Lehmann et al.	Unravelling interactions of climate and N dynamics in European forest ecosystems (UnICaN)
Mirko Lukovic et al.	AI-assisted time-series analysis tools
Anita Nussbaumer et al.	Early fruit abortion in European beech: The role of extreme weather events
Eléonore Perret et al.	Regeneration dynamics in Swiss forests
Marcus Schaub et al.	Die Forschungsplattform Pfynwald / La plate-forme de recherche du Bois de Finges
Marcus Schaub et al.	Das VPDrought - Experiment / L'expérience VPDrought
Eva Seitler, Mario Meier et al	Atmospheric nitrogen deposition in Switzerland
Ross Shackleton et al.	Developing protocols for integrated monitoring - comparing traditional measures and mobile laser scanning (MLS)
Volodymyr Trotsiuk et al.	30 years of LWF Data: From forest plots to public dashboards
Pierre Vollenweider et al.	L'ozone et ses effets en forêt
Peter Waldner et al.	Do changes in carbon and nitrogen pools in soils of five Level II plots reflect the measured input and output fluxes?

Registration

Registration via Ticketino (<https://www.ticketino.com/de/event/-/201916>) is closed, but it is still possible on site or by email (addressed to peter.waldner@wsl.ch) for participation in the morning sessions, afternoon sessions, or the whole day.

Posters

Posters will be displayed in the Engler-Saal. Each poster can be introduced with 1-2 slides during the poster pitch (1-2 min). Please send 1–2 slides in advance to peter.waldner@wsl.ch.

Stakeholder survey on the LWF and Sanasilva inventory

We would like to take advantage of this anniversary to reflect on the LWF Programme. We therefore kindly invite all stakeholders to take part in an on-line survey which will be circulated via email before the event. Your feedback and suggestions are important for us and will be discussed during the plenary session and considered for shaping the future of LWF.

Mentimeter-Survey: <https://www.menti.com/al6zepkpbfn>

Organizing committee

Long-term Forest Ecosystem Research Programme LWF, Switzerland

Forest Soils and Biogeochemistry, Swiss Federal Research Institute WSL, Switzerland

Forest Dynamics, Swiss Federal Research Institute WSL, Switzerland

The SwissForestLab

We look forward to seeing you at the celebration of 30 years of the LWF Programme and 40 years of the Sanasilva inventory!

The workshop organizers and the SFL executive office

Swiss Federal Research Institute for Forest, Snow and Landscape Research WSL

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8903 Birmensdorf

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