



SEOSAW Newsletter - January 2026

Happy 2026, SEOSAW family!

This is a bumper news edition, including updates from our Scientific Steering Committee (SSC), the release of SEOSAW's updated Science Plan and news from the field.

And while you're easing back into work, why don't you browse the SEOSAW research completed in 2025 (Section 8 of this newsletter)

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1. News from the scientific steering committee – Operationalising the vision of an African-based network

The SEOSAW [scientific steering committee \(SSC\)](#) meets regularly to guide the work of the SEOSAW office. Some key new developments:

1. Office funding. The SEOSAW office is currently based at University of Edinburgh (Penny Mograbi) and U. Witwatersrand (Jone Fernando). To date, the office has mostly been funded by UK-based research projects like [SECO](#) and the original SEOSAW grant, but we have been trying to develop new streams of funding. This has been quite successful recently, with support now coming from many different projects with PIs all over the world (listed below). This funding has allowed us to recruit a SEOSAW data officer at Wits (Jone Fernando); run capacity building efforts including workshops and placements for African early career researchers and practitioners; and provide support for field campaigns. This is an amazing team effort from the SSC and has made sure that SEOSAW is much more resilient to the ups and downs of research funding.
2. The co-chairs (Sally Archibald and Casey Ryan) and have been discussing their term lengths and the need to hand over some of their institutional knowledge and responsibilities in a phased way. To support this, we would like to recruit a 3rd co-chair based in Africa. If you are that person or know of that person, let us know! If PSPs are in your blood, don't fight it, just join us :)
3. SEOSAW's vision is an African-managed network. One practical way of developing multiple SEOSAW nodes is to decentralise some of the databases that the office

manages. Vera de Cauwer (NUST, Namibia) and Justice Muvengwi (WITS, South Africa) are championing the way forward by hosting the taxonomy and small stems & shrubs databases, respectively. We are in the process of restructuring the existing database to accommodate the separate database nodes. If you are interested in managing other parts of the the SEOSAW databases (including groundlayer biomass, coarse woody debris, soils, traits) please do contact us.

Grants that are now supporting the SEOSAW office

1. Max Rietkerk & Mariska te Beest. ERC Synergy grant “RESILIENCE: Pathways of resilience and evasion of tipping in ecosystems” (2025 onwards)
2. Tom Pugh, ERC Advanced grant “Trees2Globe: Global reanalysis for a forest carbon sink in flux”. (from end of 2026)
3. Carla Staver. MacMillan Foundation grant: “Plots and Capacity building at Mpala Research Centre”. (2026-2029)
4. Mũsingo Mbuvi & Casey Ryan. British Council grant. “DryCap: Building capacity for drylands monitoring”. (2025-2027.
5. Casey Ryan & Kyle Dexter, UK NERC Large Grant “SECO: Resolving the current and future carbon dynamics of the dry tropics”. (until May 2027)

If you would like to share any thoughts with us on any of the above, contact Penny (penny.mograbi@ed.ac.uk), Casey (casey.ryan@ed.ac.uk) & Sally (sally.archibald@wits.ac.za)

2. SEOSAW Science Plan

We have a new [Science Plan](#)! Up to now we’ve been guided by the inception plan of 2018 but our in-house experts in the SSC have crafted an updated guide to what the current and important questions, for science and policy reasons, that should be addressed in the next five year phase of SEOSAW.



1 - The SEOSAW Science Plan 2025 key themes (outer ring) and cross-cutting themes (central ring).

This is a living and interactive document, so feel free to leave your comments and suggestions. We hope that this is something that inspires your own thinking on exciting topics you could address using the amazing resources in the network.

3. Science Seminar invitation – 21 January 2026

Please join us at our next science meeting:

SEOSAW Research Showcase - the latest updates from SEOSAW-associated researchers

Date: Wednesday, 21 January 2026

Time: 10:00 - 12:30 UCT

Virtual room: <https://ed-ac-uk.zoom.us/j/84084503261> Passcode: KyWQHH2z

Agenda

Feel free to share this meeting with your colleagues and students— these meetings are open to anyone!

If you have any questions or require further information, please do not hesitate to contact Penny (penny.mograbi@ed.ac.uk). We look forward to seeing you there.

4. **Zambia Permanent Vegetation Plots Workshop** – Prof Sally Archibald (WITS) & Prof. Stephen Syampungani (Copperbelt University)



On 12 September 2025, FEFA's Principal Investigator Prof. Sally Archibald (University of Witwatersrand) and Prof. Stephen Syampungani (Copperbelt University, Zambia), an Oliver Tambo Africa (ORTACHI) Research Chair, co-led a SEOSAW workshop held at CBU in Zambia. About 20 participants from Zambia and southern Africa gathered to review the status of permanent sample plots (PSPs) for long-term vegetation monitoring. The workshop focused on strengthening Zambia's PSP network, positioning CBU as a hub for SEOSAW activities, and fostering improved data use and collaboration. It highlighted the importance of linking researchers and institutions within Zambia and across the region to enhance ecological monitoring.

The workshop report and summary of presentations can be found [here](#), including an inventory of long term plots across Zambia. Prof Justice Muvengwi of the University of Witwatersrand, led a discussion on establishing a strategic focus for SEOSAW in Zambia, identifying long term plots datasets which could be included in the SEOSAW database, and initiatives for building capacity to use the compiled database. Colleagues from CIFOR and the Zambian Forestry Department reiterated that this initiative would help with implementation and policy in the country.





5. New plots in Zimbabwe gazetted forests and communal land – Praxedes Rukuni (WITS)

Praxedes (Vimbai) Rukuni, a new Ph.D student supervised by Dr Justice Muvengwi (WITS), has established 8 new 1 ha PSPs in Zimbabwe's Zambezi teak (*Baikiaea plurijuga*) woodlands, including 5 in gazetted woodlands (Gwampa & Gwaai state forests) and 3 in communal lands. (Nkayi & Lupane villages). Most of SEOSAW's PSPs are in relatively protected landscapes, so the additional plots in lived-in landscapes are a welcome addition to increasing the representativeness of the network's plots.

Zambezi Teak forests occur on deep Kalahari Sand soils. The main canopy tree species is *Baikiaea plurijuga* with an understory dominated by multi-stemmed *Combretum* thickets that form lianas in the top of the canopy. Other tree species that occur in these woodlands include: *Schinziophyton rautanenii*, *Baphia massaiensis*, *Acacia nigrescens*, *Senegalia ataxacantha*, *Strychnos madagascariensis*.

The communal land woodlands have varying levels and types of resource use, while the gazetted forests have been protected from fire, but harvested for high value timber. Elephants occur in these woodlands.



2 - Vimbai Rukuni



3 - Hazards in the field



4 - Jone Fernando Junior (WITS) and Aaron Chinofunga (Zimbabwe Forestry Commission) collecting soils during the SEOSAW-ZFC field workshop at Gwampa State Forest in June 2025





5 - Measuring groundlayer biomass



6 - Zimbabwe Forestry Commission-SEOSAW team during the Gwampa workshop (from top left clockwise: Abigail Mlotshwa (ZFC) , Praexedes Rukuni (WITS), Penny Mograbi (SEOSAW – Edinburgh), Obert Komichi (ZFC), Siphon Kumba (ZFC), Aaron Chinofunga (ZFC), Jone Fernando Junior (SEOSAW – WITS), Edwin Nyamugadza (ZFC)

6. Bio-Bridge project (Kenya-Tanzania): PI – Dr Itambo Malombe (National Museum of Kenya)

National Museums Kenya (NMK – PI: Dr. Itambo Malombe) in partnership with University of Dar es Salaam (co-I: Dr. Catherine Masao), SEOSAW (Dr. Penny Mograbi), Nature Kenya (Dr. Paul Gacheru) and Kenya Forest Service has been implementing the project on **'Strengthening the capacity of local communities to conserve threatened species in the eastern coastal forest biodiversity hotspot'** since June 2025. The one-year project was funded by the **Briobridge Initiative of the United Nations Convention on Biological Diversity (CBD)**

The project activities have been implemented successfully over the last six months, including the establishment of 2 new SEOSAW PSPs in the coastal forests of Kenya and Tanzania. Using these inventory data, Nature Kenya concluded that these forests meet the IUCN evaluation criteria of a Key Biodiversity Area. The project also hosted two community workshops which included training on the role of indigenous knowledge in biodiversity conservation and monitoring as well as an introduction to PSP establishment and data collection.

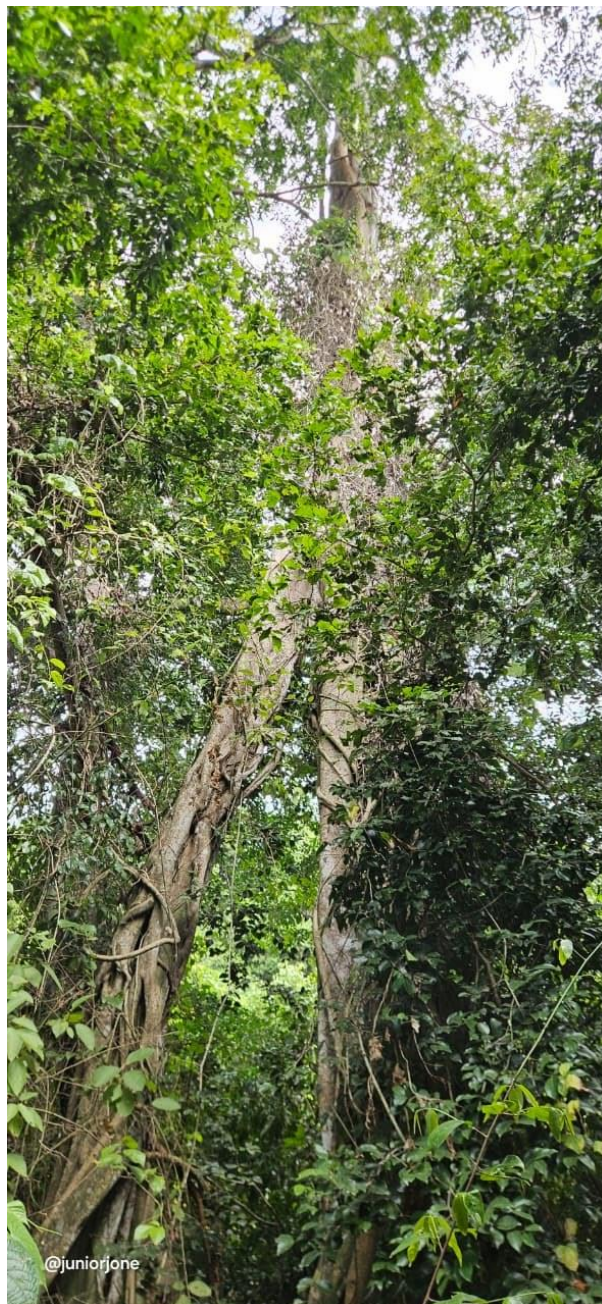
The project closure meeting will be held on 19-20 January 2026 in Kwale county, Kenya.



7 - Dr. Malombe and the NMK field team in Kaya Muhaka



8 - Jone Fernando Junior presenting to the Kwale county community





7. 15 Years of PSP Data Collection in Tanzania - Oliver McFarlane (U.Edinburgh) & Thomas Malima (SUA)

From September to December 2025, 21 PSPs in Kilwa, Tanzania were re-censused by a team led by two new PhD students: **Thomas Malima** from the Sokoine University of Agriculture (supervised by Dr Wilson Mugasha) and **Oliver McFarlane** from the University of Edinburgh (supervised by Prof Casey Ryan).

The field campaign marked the 5th census for 13 of the PSPs and 6th census for 5 PSPs - extending the data collection period to 15 years!

The work was run in collaboration with long-time SEOSAW partners, Mpingo Conservation and Development Initiative (MCDI) led by Makala Jasper (CEO), Mussa Shija (PSP Lead), and Yuvenal Pantaleo (Project Manager).

Along with the re-census campaign, the team were involved in the maintenance of 6 long-term phenology cameras initially set up in 2023 in 3 PSPs across savanna, miombo, and dry forest landscapes as part of a pantropical Phenochange project led by Dr Desiree Ramos (Sao Paula State University) and Prof Kyle Dexter (Università di Torino).



9 - Field Team Group Photo (non-exhaustive): (Right-Left) (Top) Thomas Malima, Oliver McFarlane, Mussa Shija, Ramaghan Matimbanya, Abdullah Mpulu, Andrew Daniel (Bottom) Mkoyola Mkoyola, Yuvenal Pantaleo.



10 - Miombo PSP



11 - Savanna PSP



12 - Yuvenal Pantaleo and Mussa Shuji conduting stem census



13 - Dry Forest PSP



14 - Field Team Group Photo (non-exhaustive): (Right-Left) (Top) Casey Ryan, Oliver McFarlane, Isaak Mesisin, Thomas Malima, Mussa Shija (Bottom) Mkoyola Mkoyola, Abdullah Mpulu.



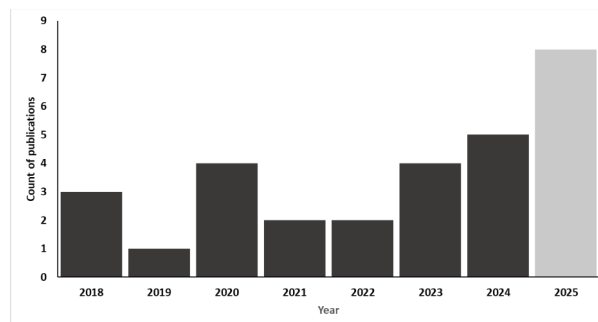
15 - Phenology Camera in a Miombo PSP



16 - Tagged Trees in a Miombo PSP

8. SEOSAW research from 2025

2025 was a great year for SEOSAW papers & student graduations! Keep an eye out on upcoming papers as we have plenty in preparation and in review that will be coming out shortly. Well done to all the researchers who have contributed to these efforts!



17 - Figure 1 from [SEOSAW's Science Plan](#). The numbers of SEOSAW publications since inception of the network. The total for 2025 is provisional based on accepted publications up to 22 December 2025.

- Diesse et al. 2025. Quantifying unseen woody biomass and diversity in understorey trees and shrubs at the extremes of water availability in the Miombo ecoregion. *Forest Ecosystems*. <https://doi.org/10.1016/j.fecs.2025.100302>

- Hua et al. 2024. Site-specific nutrient data reveal the importance of soils in driving the mycorrhizal make-up of woody vegetation. *Global Ecology and Biogeography*. <https://onlinelibrary.wiley.com/doi/full/10.1111/geb.13936>
- Lucy Wells. 2025. Unexplored transitions between forests and savannas in Africa. PhD Thesis. University of Edinburgh. <https://era.ed.ac.uk/handle/1842/35593>
- Mathew Rees. 2025. Unexplored transitions between forests and savannas in Africa. PhD thesis. University of Edinburgh.
- Tendry Nandrasanjafy. 2025. Tapia woodlands on a human disturbance gradient. MSc thesis. University of Antananarivo.
- Williams et al. 2025. Precipitation–fire functional interactions control biomass stocks and carbon exchanges across the world's largest savanna. *Biogeosciences*. <https://doi.org/10.5194/bg-22-1597-2025>
- Rodríguez-Veiga et al. 2025. Loss of tropical moist broadleaf forest has turned Africa's forests from a carbon sink into a source. *Nature Scientific Reports*. <https://doi.org/10.1038/s41598-025-27462-3>
- Muledi et al. 2025. Allometric Equations for Aboveground Biomass Estimation in Wet Miombo Forests of the Democratic Republic of the Congo Using Terrestrial LiDAR. *Environments*. <https://doi.org/10.3390/environments12080260>
- Carreiras et al. 2026. Determinants of L-band backscatter in dry tropical ecosystems: implications for biomass mapping. *Remote Sensing of Environment*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5035787

(Let Penny know if any SEOSAW papers are missing from this list)

9. What is SEOSAW?



SEOSAW comprises a network of scientists and also a network of vegetation survey plots across southern and eastern Africa. Members of SEOSAW conduct diverse research and come from a variety of institutions (academic, government, private, etc.), but are unified by a shared interest in the changing socio-ecology of woodlands and savannas.

The long-term goal of SEOSAW is to understand the response of African woodlands to global change.

SEOSAW is managed communally, and the scope of SEOSAW's activities is open to change as the network and its members' research interests develop. SEOSAW's main purpose is to connect researchers and their data, and to facilitate collaborative research via standardised methods and a curated, accessible database. Anybody is welcome to become part of SEOSAW, by contributing data or expertise, or by using the SEOSAW dataset for their research.

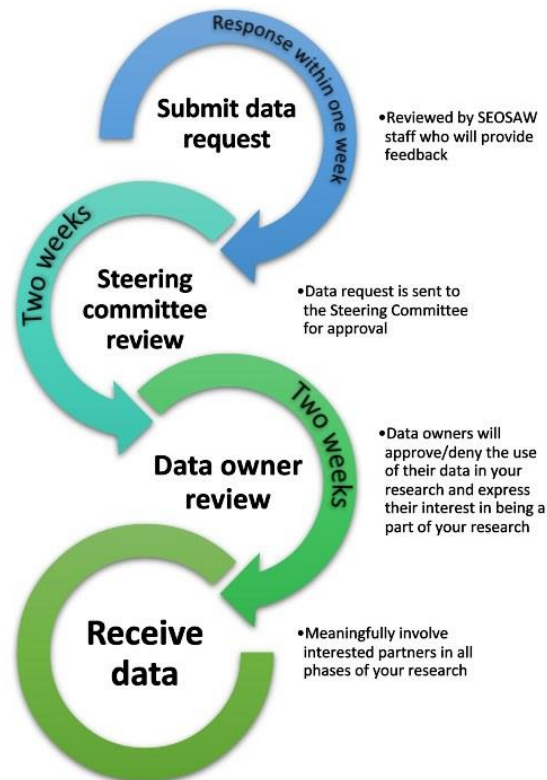
10. Who owns the data?



SEOSAW data belong to the people who collected it. SEOSAW oils the wheels by standardising the data and storing it in a common database, but the intellectual property belongs to whoever puts the data in, and the data can only be used by others with the owner's permission, and for specific purposes.

Anyone can request to use some or all of the SEOSAW data (see [here](#)). However, we put most of our energy into supporting SEOSAW network members and researchers in the region to make full use of the opportunities the SEOSAW offers. Typically this allows us to scale up our research from site-specific analyses to regional analyses that use data from across all of the woodlands. Or it allows us to use multiple data sets that are hard for one person or group to be expert in (e.g. soils, grass and tree data).

11. Request the SEOSAW data



We want the SEOSAW database to be as open and used as possible! If you have science questions, we have data and people willing to help you draft a data request!

To access the SEOSAW data, we require you to draft a data request which is reviewed by the SEOSAW steering committee first and then the data owners. This process takes about a month. The SEOSAW office is here to make this process as easy as possible for you, and will assist you in formulating your data request.

If you are interested, please answer the questions in this [document](#) and get in touch via the [contact form](#) if you would like to use the SEOSAW dataset. A sample of the dataset is freely available [here](#) to help you formulate your data request.