About FWBON

The Freshwater Biodiversity Observation Network (FWBON) is a global community of practice, unified in the goal to improve biodiversity observations in freshwaters. FWBON is a thematic network within the Group on Earth Observations Biodiversity Observation Network (GEO BON). We contribute to building the global capacity for monitoring freshwater biodiversity and conducting assessments. Essential Biodiversity Variables (EBVs) serve as a conceptual framework underpinning the activities of GEO BON and thus also FWBON. The EBV framework is also used to support monitoring and reporting changes to targets of the draft Post-2020 Global Biodiversity Framework (GBF), the Sustainable Development Goals (SDGs) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). To achieve our goals, we apply an inclusive approach, reaching out to colleagues working in all regions of the globe and in diverse backgrounds, which explicitly includes Indigenous Knowledge.

First in-person meeting of FWBON Coordination Committee held in Davos, Switzerland

The Coordination Committee (Co-Chairs and Regional Coordinators) of FWBON held their first in-person meeting 21-25 June 2022 in Davos Switzerland, in conjunction with the World Biodiversity Forum (26 June to 1 July 2022). The 3-day workshop provided the opportunity for Coordination Committee members to discuss and prioritise short- and long-term goals of FWBON, identify regional and global projects to support those goals, and develop an action-oriented approach to ensure the work of FWBON is relevant and contributes to GEO BON’s vision of a Global Biodiversity Observation System (GBIOS). It was an excellent opportunity to share ideas and to build a strong collaborative relationship within the Coordination Committee.

As part of the workshop process, the Coordination Committee refined the objectives and worked towards a new Implementation Plan for the period 2022-2026. Ideas discussed included building the strength of the FWBON network; developing recommendations for harmonised freshwater biota sampling protocols; facilitating and mobilising data access, sharing/publishing, and interoperability; contributing to regional and global indicators and reporting structures; creating products useful for sound management of freshwater ecosystems and their catchments; and positioning FWBON as a global leader and source of expertise in freshwater biodiversity monitoring and assessment.
Regional Coordinators will engage with the FWBON membership for input and assistance as the Implementation Plan is developed, and we look forward to collaborating with members of our network to achieve these goals.

FWBON releases Science Brief in advance of COP15

The United Nations (UN) Biodiversity Conference, 15th meeting of the Conference of the Parties (COP15) to the UN Convention on Biological Diversity (CBD) is taking place December 7-19 in Montreal, Canada, with representatives meeting to discuss targets and actions required to protect global biodiversity. Discussions will centre around the Post-2020 Global Biodiversity Framework (GBF), which was developed to provide goals for biodiversity conservation and restoration, as well as to guide global actions to monitor and report on biodiversity trends. In advance of this meeting, Eren Turak from FWBON led a team of 21 experts and practitioners to create a Science Brief to help inform negotiations on the Post-2020 GBF. The goal of this brief was to draw attention to the limited focus on inland water ecosystems and lack of freshwater-relevant targets in the GBF, as well as the need for greater support for freshwater diversity monitoring, reporting, and data mobilisation. The science brief includes ten key messages related to the wording of GBF targets and recommendations to support global efforts to meet those targets for freshwaters. The Science Brief is freely available from the GEOBON website at [https://geobon.org/wp-content/uploads/2022/12/InlandWaters_Brief.pdf](https://geobon.org/wp-content/uploads/2022/12/InlandWaters_Brief.pdf) as is an opinion piece [https://geobon.org/new-science-editorial-about-monitoring-biodiversity/](https://geobon.org/new-science-editorial-about-monitoring-biodiversity/) from the GEOBON Co-Chairs on the need for globally harmonised monitoring for the Post-2020 GBF.
Membership update

Within the past year we have expanded our membership across all regions, expanding from 340 members in 2021 to approximately 388 members in 2022. Expansion has improved regional representation (see map, next page), including an increase in Africa of 22 members (bringing the total in Africa to 50 members). The majority of the global members are from academic institutions; however, we hope to continue to increase membership from other sectors. Members include experts in freshwater species, genetic, and ecosystem diversity, with specialists in a number of fields that will be important for helping FWBON meet our objectives. As FWBON projects develop, we hope to get involvement from members to ensure our work is built on a strong foundation of international collaboration.

To help us as we move forward with developing projects, we invite all members to complete our membership survey (https://forms.gle/rnzRRCGFaaf1XzFv6). If you haven’t already, please fill out the survey to let us know a bit more about your expertise and your interest in collaborating on future endeavours. We also have a ResearchGate project page where you can follow our activities, view updates, find FWBON-related publications, and share your own relevant work and publications (https://www.researchgate.net/project/Freshwater-Biodiversity-Observation-Network-FW-BON).

Upcoming FWBON webinar series

We are planning to start a regular FWBON webinar series in 2023, with a webinar held every second month and recordings made available. Expect an announcement in early 2023 about the first webinar, which will provide an overview of the goals, objectives, and activities of FWBON and a discussion of how members can get involved.
Network activities

GBIF freshwater landscape study, led by Eren Turak

The Global Biodiversity Information Facility (GBIF) provided FWBON with a small amount of funding in 2022 to explore the current freshwater biodiversity data landscape. The GBIF freshwater landscape project aims to assess the type and frequency of freshwater data that is mobilised to GBIF, as well as the reasons for regional data repositories not submitting to global repositories. To meet the first objective, the existing collection of freshwater data within GBIF will be analysed to determine the number and types of organisations that contribute freshwater data, and how these vary geographically and temporally for each taxon group. For the second objective, data repository holders and FWBON members were invited to participate in a survey that explores existing data and reasons for not mobilising data to GBIF.

The project is hosted by the Council of Scientific and Industrial Research (CSIR) in South Africa. The first major output of this project will be a manuscript describing the attributes or freshwater biodiversity datasets from across the world, using results of the existing data inventory survey. Currently there are 160 contributors to this project from 52 countries. The results of the project will aim to identify possible geographic, temporal and taxonomic gaps of representation, and propose opportunities to engage with stakeholder groups and support mobilisation of freshwater data to global repositories. The publication is envisaged to be submitted for review at the end of February 2023, and budget has been kept aside for it to be an open access publication. A presentation was also held on 4 November 2022 by Dr Marc Pienaar, from the South African Environmental Observation...
Network (SAEON), showing progress on the extraction and analysis of the freshwater species data from GBIF. This talk is titled “A global assessment of the mobilisation of freshwater biodiversity data (SAEON Seminar, Nov 2022)”, and it is available to view at the following link: https://www.youtube.com/watch?v=UsDHQU35BOU.

FWBON attended and in some instances also presented at the following seminars, webinars and conferences:

- World Biodiversity Conference, 26 June to 1 July 2022 with a special session
- GeoWetlands, 10 May 2022
- EUCOMARE conference, 13 May 2022
- Global Wetland Watch workshop, 19 August 2022
- Cooperation Bavaria Lounge, 23 October to 4 November 2022

News relevant to FWBON members

- Africa
  - An interesting Freshwater Bioinformatics in Africa seminar series was funded by JRS and hosted by the Freshwater Research Centre (FRC), Dr Helen Dalles and team, and is available here: https://www.youtube.com/playlist?list=PLSbcS_P56gw37cj1cEhhNV2TP24mgv3w5
  - In addition, a training series was also held by the FRC on their Freshwater Biodiversity Information System (FBIS) that can be accessed from this session 1: https://www.youtube.com/watch?v=fYfi0y8oOnU&list=PLSbcS_P56gw3Kl9s1OU_alv27zCL1wfdU onwards.

- Asia
  - December 11 is celebrated as International Mountains Day. Nearly all the freshwaters have their origin in the mountains. FWBON member Dr. Ahmad Mahdavi, Emeritus Professor at the University of Tehran, presented a talk at the 6th Global Meeting of the Mountain Partnership event in Aspen, Colorado, and spoke about the importance of biodiversity in mountains and the associated wetlands. Here’s the link to his presentation: https://www.cbd.int/api/v2013/documents/FED4C78D-44A8-7109-A700-34F63193622E/attachments/212789/Uot(2).pdf Have any queries? Prof Mahdavi can be contacted at: bugmahda@gmail.com

- Latin America & Caribbean
  - Open call for FWBON LatAm members to participate in the development of a data paper related to Neotropical Monitoring Networks (for more information about the datapaper project, please refer to tinyurl.com/neotrop)
Outlook and feedback request

We hope you found this Newsletter informative. We aim to distribute this Newsletter in regular intervals, with the purpose to improve communication within FWBON. Effective communication will be increasingly critical to work towards our goals.

We appreciate any comments or suggestions you may have and will try to implement them in the upcoming issues of the FWBON Newsletter. We encourage you to suggest topics to be featured, provide contributions, and indicate which news you consider relevant to our FWBON network. Please feel free to contact your regional coordinator to share information, feedback, and to hear about ongoing initiatives.

Find us on ResearchGate: https://www.researchgate.net/project/Freshwater-Biodiversity-Observation-Network-FW-BON

Follow us on Twitter: https://mobile.twitter.com/fwbon1

Newsletter Imprint

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