



EFIB News October 2023



This summer has been marked in our hearts by the loss of two of our best friends and bioengineering experts, Florin Florineth and Joao Paulo Almeida Fernandes. In honour of their memory, we are taking up our news with renewed vigour and look forward to intensifying our contacts and activities this autumn.

We want to renew the desire, in these uncertain times, to improve the understanding of man with Nature and man with HIS nature. For peace, always, and for Nature.

SWB whitout borders and EFIB FRIENDS



W Bioengineering Project in Isare (Burundy) carried out by the University of Florence DIAGRI in collaboration with EFIB was presented at the International Federation of Landscape held in Nairobi on 28th and 29th December last.

Alessandro Martinelli chaired the session dedicated to Nature Based Systems with the participation of experts from UN-Habitat (United Nations Human Settlements Programme), Sareh Moosavi from the University of Brussels (BE), landscape architect expert in urban metabolism



P.Sangalli President EFIB during the presentation of the project and image of the work finished

Burundi's landscapes are under threat of erosion and the country made a commitment in Paris in 2015 as part of the African Landscape Resilience Initiative as well as the Bonn Challenge targets.

To mitigate hydrogeological risks such as landslides and to protect infrastructure and fields from these types of erosion, the Department of Science and Technology for Agriculture, the Environment and Forestry (DAGRI) at the University of Florence (ITA) in cooperation has been recruited to implement a Bioengineering worksite at Isare.

EFIB has collaborate in the management and technical aspects of this project with DAGRI.

[Here the presentation of the project](#)

WORKSHOPS, COURSES and CONFERENCES from EFIB MEMBERS



The **Centre for Forestry Research and Experimentation, CIEF**, together with the **Botanical Garden of Valencia** and with the collaboration of the **International Union for Conservation of Nature (IUCN)**, **GENMEDA** and **Mediterranean Agronomic Institute of Chania (CIHEAM-MAICH)** will organise the fourth edition of the **Mediterranean Plant Conservation Week**, from 23 to 27 October 2023 at the Botanical Garden of Valencia.

The **4th Mediterranean Plant Conservation Week (4th MPCW)** is a congress that aims to bring together researchers and managers related with the conservation of wild plants and their habitats around the Mediterranean. For this edition, the 4th MPCW will expand its initial goal—**centred on the conservation of species and the relationships between people and the wild or cultivated plants**— towards the **complementary recovery of habitats**, as a contribution to the **United Nations Decade for Ecosystem Restoration**.

This congress will be a **meeting point where different opinions and experiences from diverse fields of knowledge will converge**. This can be done by connecting experts on plant conservation and ecological restoration, being conscious that the last goal of plant rescue is not possible without the full recovery of the ecological functions on site.

Additionally, the 4th MPCW also **intends to be a forum where experiences from the different sides of the Mediterranean region can meet and establish links for future cooperation projects**. Specialists from Southern Europe, the North of Africa, and the Middle East can find here a forum for the conservation of a common natural heritage, including plants, their habitats, and the knowledge on how to manage and use them in a sustainable way.

The 4th MPCW is a window to show research results and experiences in form of oral presentations and posters, not only from the plant or ecological sciences but also about the relationships between the public and the plant conservation world (citizen science, ethnobotany, local involvement, bottom-up initiatives, landraces, etc.), **opening a new paradigm for the next decades around the Mediterranean: The plants are for the people, but with the people**.

More information on how to participate and how to register can be found at the following link >

<https://bit.ly/4thMPCW>

OTHER CONFERENCES



Biohydrology7

“Biota, water and humans. Management for a sustainable world”

Gandia, Spain, October 18th-22nd 2023

Call for papers extended till 15 OCTOBER 2023

The aim of the BioHydrology conferences is to provide a forum to share knowledge and network about any topic related to the interactions between biotic systems and hydrology. Biohydrology aims to gather scientists and practitioners dealing with issues in the field of hydrology, biohydrology, biology, ecohydrology, ecology, geography, and engineering in natural, agricultural, forestry, and anthropogenic areas.

See here the program <https://7biohydrology.webador.es>

RESEARCH and NEW PUBLICATIONS



Ecological Engineering

Volume 186, January 2023, 106840



Performance assessment of a Soil and Water Bioengineering work on the basis of the flora development and its associated ecosystem processes



The Atlantic Forest of Brazil is one of the world's 25 biodiversity hotspots, but floodplains in this region are continuously converted into agricultural or urban areas, and riverine ecosystems are affected by anthropogenic interventions. Soil and water bioengineering techniques are a component of ecological engineering that can provide nature-based solutions as an alternative or as complementary measures to conventional hydraulic or civil engineering approaches. However, there is a lack of post-evaluation of interventions and there are still great difficulties in identifying valid evaluation criteria and measurement variables, especially in countries like Brazil where soil and water bioengineering measures have only been implemented in the last decade. [MORE INFORMATION](#)



CALL FOR PAPERS for works with SWB

Special Issue in Ecological Engineering (Elsevier) on:

“Nature- and bio-based solutions for ecosystem restoration, landslide hazard mitigation, and ground improvement: research and application novelties”.

Open call for papers

This special issue will focus on developing practical solutions that can be applied in real-world scenarios. Additionally, there will be a significant emphasis on exploring the interactions between industry and research, with the aim of bridging the gap between scientific knowledge and implementation.

The topics of this special issue include, but are not limited to, the following:

- Novel NBbS applications, also including laboratory or in-situ tests used for the design/monitoring/upscaling/proof of concept.
- Numerical studies investigating and supporting the application at different scales.
- Development of tools, investigation of case studies, and practical approaches to implement nature- and bio-based solutions at full-scale, with special emphasis to novel applications and ecosystem restoration.
- Monitoring the performance and effectiveness of nature- and bio-based solutions over time.
- Theoretical or data-driven approaches to design nature- or bio-based solutions in geotechnical engineering.
- Producing reviews and databases on nature- and bio-based solutions for hydro-geological risk mitigation.
- Sharing ground-breaking and promising results from preliminary testing of nature- and bio-based solutions.

MORE INFORMATION: <https://www.sciencedirect.com/journal/ecological-engineering/about/call-for-papers#nature-and-bio-based-solutions-for-ecosystem-restoration-landslide-hazard-mitigation-and-ground-improvement-research-and-application-novelties>

Guest editors:

- Dr. Vittoria Capobianco (Norwegian Geotechnical Institute) vittoria.capobianco@ngi.no
- Dr. Alessandro Fraccica (Italian Institute for Environmental Protection and Research) alessandro.fraccica@isprambiente.it
- Dr. Floriana Anselmucci (University of Twente) f.a.r.anselmucci@utwente.nl;
- Dr. Vito Tagarelli (Politecnico di Bari) vito.tagarelli@poliba.it

Deadline : 30th of December, 2023.

Special Issue in Ecological Restoration of River and Wetland by Soil Bio- and Eco-Engineering

As a nature-friendly technology, soil Bio- and Eco-Engineering has been being utilized for restoration of degraded rivers and wetlands, and many researches have contributed to its theory development. To further promote and expand the practices of Soil Bio- and Eco-Engineering in ecological restoration of river and wetland worldwide, this special issue will highlight focuses on its recent advances and research on theory, mechanism, practice and case studies.

Keywords:

(Soil Bio- and Eco-Engineering) OR (river) OR (wetland) OR (ecological restoration) OR (erosion) OR (riparian) OR (rock) OR (wood pile)

Guest editors:

- Prof. Zhenxing Zhang. Northeast Normal University, zhangzx725@nenu.edu.cn
- Prof. Ying Liu. Hubei University of Technology, liuy@hbut.edu.cn
- Prof. Hans Peter Rauch. University of Natural Resources and Life Sciences (BOKU), hp.rauch@boku.ac.at
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Deadline: Jan 31, 2024

MORE INFORMATION: <https://www.sciencedirect.com/journal/ecological-engineering/about/call-for-papers>



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