



EFIB *news*

European Federation of Soil and Water Bioengineering

Fall 2020

Dear Friends

In the previous EFIB News we announced activities for a full year related to Soil and Water Bioengineering, activities that for the most part have been moved to next year, when we get used to this new coexistence.

The dates may change but what will not change are the challenges we face, which are now even greater if possible. That is why EFIB continues to work this year, as shown by the numerous calls, publications, webinars ... Here we present a brief selection, and we encourage you to follow them on the websites of our members.

We also renew in this issue our intention to continue working with other organizations and projects with which we share objectives, joining forces together for this new green deal for Europe and for the rest the World. We believe strongly in this.

Enjoy this EFIB News and till Wilnter

Paola Sangalli-EFIB President



A new APENA course, to disseminate good practices of Soil and Water Bioengineering, is going to be in November at Oeiras Municipality (near Lisbon)



Course in Portugal-Foto: Aldo Freitas Ecosalix in Portugal

A new APENA course, to disseminate good practices of Soil and Water Bioengineering as a compensation tool for disturbances induced in river ecosystems is going to be in November at Oeiras Municipality (near Lisbon).

The course is theoretical-practical and the target audience is technicians of this municipality.

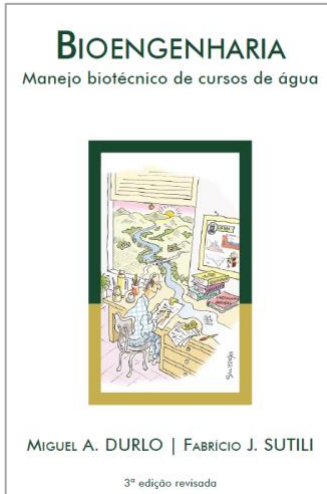
Um novo curso APENA, de divulgação de boas práticas de Engenharia Natural como ferramenta de compensação de distúrbios induzidos em ecossistemas fluviais vai decorrer em novembro no Concelho de Oeiras (perto de Lisboa).

O curso é teórico-prático e tem como público-alvo técnicos deste município.

[MORE INFORMATION](#)

BOOKS in SOIL AND WATER BIOENGINEERING IN PORTUGUEESE

You can find this books in the list of bibliography:



Bioengenharia Manejo biotécnico de cursos de água

Miguel A. Durlo/Fabrício Sutili

COLECCION Universidad EVORA



- **Introdução a Engenharia Natural .**
- **Limpeza e gestão de linhas de água**
- **Manual de boas práticas de gestão dos espaços florestais na bacia drenante da albufeira De castelo do bode**
- **Gestão de serviços dos ecossistemas em bacias hidrográficas**

[MORE INFORMATION](#)



NATIONAL AWARD FOR ECOLOGICAL ENGINEERING 2020



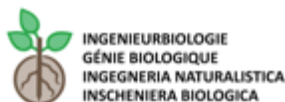
AIGéco, the federation of association in ecological engineering and Soil and Water Bioengineering which AGEBIO belongs, has succeeded in launching the “National Prize for Ecological Endgineering 2020”, the award ceremony for which will take place on October 8 during the 10th National Conference of the Biodiversity, <http://a-igeco.fr/remise-du-prix-national-du-genie-ecologique-2020> The objective of this National Prize is to promote exemplary ecological engineering projects, and Soil and Water Bioengineering by their design, the techniques used or their integration into the local socio-economic context. It is a question of highlighting the know-how of this emerging sector and promoting its development.

REMISE DU PRIX NATIONAL DU GENIE ECOLOGIQUE 2020

L’AIGéco, la fédération des acteurs de l’ingénierie et du génie Ecologiques auquel appartient AGEBIO, a réussi à lancer le « Prix National du Génie Ecologique 2020 » dont la remise de prix aura lieu le 8 octobre lors des 10ème Assises Nationales de la Biodiversité, <http://a-igeco.fr/remise-du-prix-national-du-genie-ecologique-2020/>

L’objectif de ce Prix national est de valoriser des projets de génie écologique exemplaires, par leur conception, par les techniques employées ou par leur intégration au contexte socio-économique local. Il s’agit de mettre en valeur les savoir-faire de cette filière en émergence et de favoriser son développement.

[MORE INFORMATION](#)





Am 1./ 2. Okt. 2020 organisiert der Verein für Ingenieurbiologie zusammen mit der Arbeitsgruppe Seeufer und der HSR Hochschule für Technik Rapperswil eine 2-tägige Veranstaltung.

On October 1st / 2nd, 2020, the Association for Engineering Biology is organizing a two-day event together with the Seeufer working group and the HSR University of Applied Sciences Rapperswil.

ISSUE NO. 1/2020

WORK MANUAL LAKE SHORE REVITALIZATION

The working manual for lakeshore revitalization provides an application-oriented to planning the bank protection projects based on the latest scientific findings. The booklet includes information and guidelines on responsibilities and legal bases, right through to the maintenance and success.

Die Arbeitshilfe Seeuferrevitalisierung liefert eine anwendungsorientierte Planungshilfe für Uferschutzprojekte basierend auf den neusten wissenschaftlichen Erkenntnissen

Das Heft umfasst Informationen und Richtlinien über Zuständigkeiten und Rechtsgrundlagen, bis hin zum Unterhalt und der Erfolgskontrolle von Projekten.

https://issuu.com/ingenieurbiologie/docs/ingenieurbiologie_2020_1

[MORE INFORMATION](#)





PREMIO INTERNAZIONALE GIULIANO SAULI INTERNATIONAL AWARD GIULIANO SAULI

PREMIO INTERNAZIONALE DI INGEGNERIA NATURALISTICA

"GIULIANO SAULI"

Il Premio con cadenza annuale è rivolto a personalità o Enti che si sono particolarmente distinti per lo sviluppo e la promozione dell'Ingegneria Naturalistica.

With honor and pleasure we communicate that the 1st International Prize for Soil and Water Bioengineering "Giuliano Sauli" has been announced, promoted by the Nebrodi Park Authority. The award is aimed at personalities or organizations that have particularly distinguished themselves in the scientific and cultural fields.

[The presentation of the Award](#) at the Press Conference at the Botanical Garden of Palermo on 27 August 2020,

Con onore e piacere comunichiamo che è stato indetto il I° Premio Internazionale di Ingegneria Naturalistica "Giuliano Sauli", promosso dall'Ente Parco dei Nebrodi che è stato [presentato in una a in Conferenza stampa](#) presso l'Orto Botanico di Palermo lo scorso 27 agosto 2020 (link alla Conferenza e al Premio).

[MORE INFORMATION](#)

NEW BOARD OF MEMBERS AIPIN

The AIPIN Has removed the board of directors. See Composition [in this link](#)

- Federico Preti is the new National President
- Vice-Presidents Eng. Gianluigi Pirrera from Palermo, the Geologist Pino Doronzo of Naples and the Architect Flora Vallone from Milan were elected ad Vice-Presidents.

The AIPIN-EFIB relations will be even more intense, so much so that the Association now bears the name AIPIN - E.F.I.B.

NUOVA GIUNTA DIRETTIVA AIPIN

- Presidente nazionale : Federico Preti, Ingegnere e docente di Sistemazioni Idraulico-Forestali e di Difesa del Territorio e Ingegneria Naturalistica all'Università di Firenze,
- Vice Presidenti l'Ing. Gianluigi Pirrera di Palermo, il Geol. Pino Doronzo di Napoli e la Arch. Paesaggista Flora Vallone di Milano.

I rapporti AIPIN-EFIB saranno ancora più intensi, tanto che l'Associazione riporta ora la denominazione AIPIN – E.F.I.B..



DWA-M 620-1 - BAUWEISEN (6/2020)

the aim of the leaflet is to improve the application principles and to specify standards for the selection, planning and application of Soil and Water Bioengineering methods in hydraulic engineering., planning or the like.

The leaflet focuses on bioengineering construction methods on inland rivers such as streams, rivers, brooks and ditches, primarily in the hills and mountains. These can carry water permanently or temporarily, near-natural or remote or strongly anthropogenically influenced rivers.

<https://webshop.dwa.de/de/dwa-m-620-1-bauweise-6-2020.html>



DWA-M 620-1 - BAUWEISEN (6/2020)

Merkblatt DWA-M 620-1 - Ingenieurblogische Bauweisen an Fließgewässern - Teil 1: Grundlagen und Bauweisenauswahl - Juni 2020

Das Merkblatt hat zum Ziel, die Anwendungsgrundlagen zu verbessern und Standards für die Auswahl, Planung und Anwendung ingenieurblogischer Bauweisen im Wasserbau zu benennen.

Das Merkblatt behandelt schwerpunktmäßig ingenieurblogische Bauweisen an Fließgewässern des Binnenlandes wie Ströme, Flüsse, Bäche bis hin zu Gräben, vorrangig im Hügel- und Bergland. Diese können permanent oder temporär Wasser führen, naturnahe oder naturferne bzw. stark anthropogen beeinflusste Fließgewässer sein.

<https://webshop.dwa.de/de/dwa-m-620-1-bauweisen-6-2020.html>



EINLADUNG FÜR AUTOREN: SPECIAL ISSUE SUSTAINABILITY

sustainability
an Open Access Journal by MDPI

IMPACT FACTOR 2.576

Urban Green Infrastructure for Climate - Proof and Healthy Cities

Guest Editors
Prof. Dr. Rosemarie Stangl, Dr. Ulrike Pitha, Ass. Prof. Dr. Daniela Haluza, Dr. Ingrid Kaltenegger

Deadline
31 May 2021

mdpi.com/si/60985

Special Issue
Invitation to submit

Urban Green Infrastructure for Climate-Proof and Healthy Cities

In the light of climate change adaptation, urban green (and blue) infrastructures are becoming increasingly recognized, referring to urban and settlement planning and the design of climate-adapted housings and buildings. Green and plant-based solutions (such as green roofing, green façading, street and open space greenery, etc.) have become an issue in combatting urban heat and associated health stresses. The purpose of this issue is to provide up-to-date knowledge in technologies, planning and implementation of urban green infrastructure in order to advance urban sustainability and secure healthy and climate-proof urban environments

TERMIN : 31 .05.2021

Deadline 31/05/2021

[MORE INFORMATION](#)

[https://www.mdpi.com/journal/sustainability/special issues/Urban Green Infrastructure for Climate Proof and Healthy Cities](https://www.mdpi.com/journal/sustainability/special%20issues/Urban%20Green%20Infrastructure%20for%20Climate%20Proof%20and%20Healthy%20Cities)

URBAN FOREST EDGE MANAGEMENT – A COMPARISON STUDY OF THE APPLICATION OF COPPICING IN ALNARP (SE), SALZBURG AND VIENNA (AT)



Master's thesis for being awarded the academic title Diplom-Ingenieur (Dipl.-Ing.) at the University of Natural Resources and Life Sciences, Vienna

**Magdalena Kofron (B. Sc.)
Bregenz, June 2020**

Abstract

This thesis is devoted to coppicing as a method to preserve and enhance biodiversity, structure and subsequently the edges' resilience within an urban and urbanised context. Three different forest edges, in Alnarp (SE), Salzburg and

Vienna (AT), were mapped according to biometric parameters, including; plant height, crown area, stem diameter, circumference, height of the coppiced stool and the number of stems.

This work concludes that there is great potential to apply coppicing in urban forest edges, in order to foster structural components and enhance biodiversity that can cope with the environmental and climatic challenges in urban and urbanised landscapes

MORE INFORMATION

Zusammenfassung

Um eine bestmögliche Funktionalität der Waldränder im Sinne der Ökosystemleistungen und der Resilienz zu erhalten, ist die Pflege ein integraler Bestandteil zur Erreichung der Ziele. Im Rahmen dieser Arbeit wird untersucht, welche Auswirkungen der Stockschnitt als Pflegemaßnahme auf den Waldrand hat. Hierzu wurden drei unterschiedliche Waldrandabschnitte in Alnarp (Schweden), Salzburg und Wien (Österreich), in denen der Stockschnitt praktiziert wurde, kartiert und untersucht. Erhoben wurden biometrische Daten wie Höhe der Bäume und Sträucher, Kronendurchmesser, Stammdurchmesser, Stockumfang, Stockhöhe und die Anzahl der Stämme nach Stockausschlag.

Aus dieser Arbeit geht hervor, dass Stockschnitt in städtischen Waldrändern einen positiven Effekt hat auf die Vegetationsstruktur sowie die Biodiversität. Ferner wird davon ausgegangen, dass der Stockschnitt eine kontinuierliche Verjüngung garantiert trotz sich klimatisch verändernder Bedingungen und des anthropogen verursachten Nutzungsdrucks.

New Article in Ecological Engineering

[Volume 158](#), 1 December 2020, 106048

Assessment of safety-relevant woody vegetation structures along railway corridors

[Stephan Hoerbinger^a](#), [Michael Obriejetan^a](#), [Hans Peter Rauch^a](#), [Markus Immitzer^b](#)
<https://doi.org/10.1016/j.ecoleng.2020.106048>

Abstract

Railway networks are linear landscape elements that are mostly accompanied by adjacent lineside vegetation. In order to maintain safe railway operation, lineside vegetation must be continuously monitored and maintained. A large-scale assessment approach to identify safety-relevant woody vegetation structures along a railway corridor is presented in this paper. The presented approach can support tree care management and contribute to maintaining safe and functional lineside vegetation.

<https://www.sciencedirect.com/science/article/pii/S0925857420303360>



L'ingegneria naturalistica per la riquilificazione dei corsi d'acqua

Venerdì 9 ottobre 2020 - 10:00-13:00

WEBINAR - [CLICCA QUI PER ACCEDERE](#)



FOTO: P. SANGALLI

Scopo del seminario è promuovere un confronto tra approcci e tecniche della riquilificazione fluviale e dell'ingegneria naturalistica, identificando obiettivi gestionali e contesti in cui RF e IN possono essere sinergiche, ovvero in cui l'IN può essere uno strumento per il miglioramento dello stato ecologico dei corsi d'acqua.

Una particolare attenzione verrà dedicata a tecniche applicabili anche ai canali di bonifica, in virtù del ruolo sempre più importante che il reticolo idrografico artificiale sta assumendo per la riquilificazione del paesaggio agrario e la fornitura di Servizi Ecosistemici.

Si tratteranno brevemente i principi di base dei due approcci, facendo il punto su cosa si possa definire RF e IN, anche alla luce della normativa di settore, e si discuterà, sulla base di casi studio, delle situazioni più favorevoli e delle tecniche più adatte a realizzare interventi di RF tramite l'IN.

Il seminario è realizzato nell'ambito del progetto LIFE GREENCHANGE Green Infrastructures for increasing biodiversity in Agro Pontino and Maltese rural areas (LIFE17 NAT/IT/000619 <http://lifegreenchange.eu/it/>) di cui il CIRF è uno dei partner.

Il progetto ha tra i suoi obiettivi l'incremento del valore naturalistico e della connettività delle aree agricole, anche attraverso la realizzazione di infrastrutture verdi e altri interventi di miglioramento ambientale, alcuni dei quali prevedono l'applicazione di tecniche di ingegneria naturalistica per migliorare lo stato ecologico del reticolo idrografico.

COME PARTECIPARE

Per partecipare inviate mail all'indirizzo comunicazione@cirf.org entro il giorno 8 ottobre 2020.

Il collegamento alla riunione verrà aperto anticipatamente alle ore 9.30, così da permettere ai partecipanti di verificare le funzionalità audio e video.



Projecte cofinançat pel Fons Europeu de Desenvolupament Regional (FEDER)

Proyecto cofinanciado por el Fondo Europeo de Desarrollo Regional (FEDER)



LA BIOINGENIERÍA DEL PAISAJE es una disciplina técnico-científica en la cual las plantas se utilizan como elementos de construcción, conjuntamente o no con elementos inertes (piedra, madera, metal...) en actuaciones de recuperación del entorno tanto en el control de la erosión superficial como en la estabilización de taludes.

Actualmente la crisis climática y el impacto a la biodiversidad está provocando efectos secundarios como la oruga (*Cydalima perspectalis*) que está matando al boj *Buxus sempervirens*; la quitridiomycosis, causada por un hongo, que está afectando a los anfibios; la *Cryphonectria parasitica*, conocido como chancro, un hongo que está afectando a los castaños...y el COVID 19 que está afectando a la humanidad.

Una de las muchas pequeñas grandes soluciones es la de trabajar con recursos locales y sostenibles, es también trabajar aprovechando los servicios ecosistémicos... y la Bioingeniería del Paisaje es una disciplina que sirve como una herramienta muy valiosa. Con estas charlas pretendemos actualizar la información sobre todo lo que ya se ha llevado a cabo y plantear los retos de futuro de nuestra disciplina.

Webinar 1:

¿Por qué proyectar con Bioingeniería del Paisaje? Retos y oportunidades en escenarios de cambio global

Paola Sangalli / Paolo Cornellini • 14 OCTUBRE 2020

www.aeip.org.es

SOIL AND WATER BIOENGINEERING is a technical-scientific discipline in which plants serve as construction elements in environmental recovery actions. Here, the living materials can be used alone or accompanied by other inert elements (stones, wood, metals ...) in controlling surface erosion and in slope stabilization.

Currently the climate crisis and the impact on biodiversity is causing secondary effects such as the caterpillar (*Cydalima perspectalis*) that is killing the boxwood *Buxus sempervirens*; *chytridiomycosis*, caused by a fungus, which is affecting amphibians worldwide; *Cryphonectria parasitica*, known as canker, a fungus that is affecting chestnut trees ... and also COVID 19 that is affecting humanity.

One of the many great little solutions is to work with local and sustainable resources, as it also is to benefit from ecosystem services ... and, again, Soil and Water Bioengineering is a discipline that serves as a very valuable tool.

With these talks we intend to provide the state of the art of landscape bioengineering, analysing its past, present and the future challenges of our discipline.

Webinar 1:

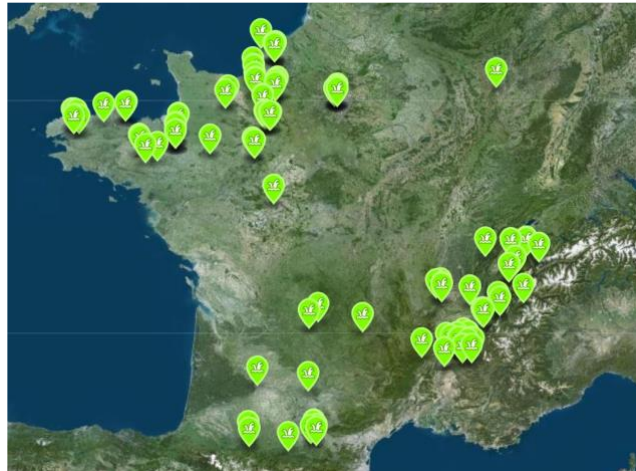
Why projecting with Soil and Water Bioengineering? Challenges and opportunities in a global change scenario Paola Sangalli / Paolo Cornellini • 14 OCTOBER 2020

www.aeip.org.es

[MORE INFORMATION](#)

OTHER NEWS

DATABASE ABOUT SOIL AND WATER BIOENGINEERING FOR RIVERBANK PROTECTION



INRAE Grenoble is building a database about bioengineering for riverbank protection, financed by the OFB (French biodiversity office, project BD GeniVeg). This database collects information about French riverbank operations using bioengineering techniques.

The [map](#) presents constructions with soil bioengineering techniques currently in our database.

Inrae is developing the database and data will be added throughout the project (2017-2021).

BASE DE DONNEES SUR LE SUR LE GENIE VEGETAL

Irstea Grenoble mène actuellement un projet de création d'une base de données financé par l'OFB (Projet BD GeniVeg). Cette base de données recense les ouvrages français comportant des techniques de génie végétal réalisés en berge de cours d'eau. Ce projet a deux sous-objectifs :

La [carte](#) présente les ouvrages actuellement recensés dans notre base de données.

[MORE INFORMATION](#)



LaRiMiT - Landslide Risk Mitigation Toolbox - now includes also Nature-Based Solutions and soil-bioengineering techniques

The Norwegian Geotechnical Institute, within the centre for research-based innovation Klima2050, has developed a free access web-based tool that helps practitioners during the selection process of landslide risk mitigation measures. The tool contains a total of 11 categories of structural mitigation measures, both including measures to prevent landslide triggering and measures to reduce the consequence of a landslides after taking place.

Of special interest are the mitigation measures grouped into two new categories related to Nature-Based Solutions (NBS). NBS are solutions that not only contribute to landslide and erosion protection, but can simultaneously provide added value through environmental, social and local benefits.

The LaRiMiT toolbox

LaRiMiT (Landslide Risk Mitigation Toobox – <http://www.larimit.com/>) is a dynamic web-portal developed by the Norwegian Geotechnical Institute within the Norwegian research project Klima2050 (<http://www.klima2050.no/>).



**Young Talent
Architecture Award
2020**



Oasi, the project in the river Llobregat is one of the four winners of the **Young Talent Architecture Award**.

The Young Talent Architecture Award is organized by the Fundació Mies van der Rohe with the support of Creative Europe as an extension of the European Union Prize for Contemporary Architecture – Mies van der Rohe Award, and World - Architects as founding partner.

to reward the best projects of recent graduated architects.

In this case, one of the four winner prize has gone to the Oasi a project in which the philosophy and techniques of Soil and Water Bioengineering have been very present.

The team is composed by : Roser Garcia Álvaro Alcázar Del Águila , Eduard Llargués and Sergio Sangalli

The school **Vallès School of Architecture** Universitat Politècnica de Catalunya - Barcelona Tech-Sant Cugat del Vallés, Spain.

More information about The project OASI: <http://ytaa.miesbcn.com/work/1106>

The Team <https://miesbcn.box.com/s/y49wa3q77zet4malgnoxjz78av9nbiav>

Our congratulations to all the winners and specially to the team of Oasi



OASI

Renaturalization of Llobregat river in its passage through Sallent

Oasi is the renaturalization of a strongly transformed area caused by the patrimonial past, which allows us to approach the river through the strategy of topographic forms that concern floods and the plantation of autochthonous species. A real landscape transformation with natural logics that enables fluvial resilience of the territory along time.

[YTAA Young Talent Architecture Award](#)

