



# **RIPA-1 : First International Conference on Riparian Ecosystems Science and Management**

**BOOK OF ABSTRACTS**

**LIST OF PARTICIPANTS**

**6<sup>th</sup> to 7<sup>th</sup> April 2022 in Bratislava (Slovakia)**

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- Tomasz Okruszko (Poland)
- Emilio Politti (Italy)
- Tenna Riis (Denmark)
- Priit Tammeorg (Finland)
- Gorazd Urbanic (Slovenia)

Conference organized by the COST Action CONVERGES (<https://converges.eu/>) and the Plant Science & Biodiversity Center, Slovak Academy of Sciences.

## KEYNOTES

- TRAJECTORIES AND STAKES OF RIPARIAN REAFFORESTATION ALONG ANTHROPOCENE RIVERS  
H. Piégay
- FUNCTIONAL FLOWS: A PRACTICAL STRATEGY FOR RIPARIAN RESTORATION  
Stewart Rood

## ORAL PRESENTATIONS

### SESSION 1 : RIPARIAN VEGETATION UNDER PRESSURES

Evidence-based review of the causal effects of human-induced pressures on changes and status of riparian vegetation

González del Tánago M., P. Lucía Núñez, D. García de Jalón

Bayesian Networks and expert knowledge in riparian ecosystem management

Vieites-Blanco, C., Gomes Marques, I., Segurado, P., Jung, T., Almeida, H., Biurrun, I., Corcobado, T., Costa e Silva, F., Diez, J.J., Dufour, S., Faria, C., Ferreira, M.T., Ferreira, V., Jansson, R., Machado, H., Marçais, B., Moreira, C., Oliva, J., Pielech, R., Rodrigues, A., Soares David, T., Solla, A., Marques, M., Barrento, M.J., Fernandes, M.R., Cupertino, A., Rodríguez-González, P. M.

Riparian vegetation communities under fluvial disturbance decline

Núñez Paula L., M. González del Tánago, M. García Torija, D. García de Jalón

Temporal analysis of free-ranging cows' movement on wet grasslands of Axios Delta in Greece

Papaporfyriou P.K., D. Chouvardas, Ch. Evangelou, D.E. Bakaloudis and E.M. Abraham

### SESSION 2 : MONITORING AND INDICATING

Forest connectivity and water stress: characterization and mapping of the impact of channel incision on riparian forest status through remote sensing.

Godfroy J., J. Lejot, L. Demarchi, K. Miche, H. Piégay

Ecosystem Services of riparian forests in uncertain hydrological and land-use futures

Aguiar F.C., R. Rivaes, P. Segurado, M.T. Ferreira, L. Schmidt, M. J. Feio, S.F.P. Almeida, M. R. Fernandes, A. Correia, A. Calapez, A. Delicado, A. Mortágua, C. Vieira, D. Gebler, I. Lozanovska, J. Sá Couto, M. Sales, M. J. Martins, P.C. Silva

Habitat quality of Riparian Ecological Infrastructures and their potential for the provision of biodiversity-related Ecosystem Services in human-dominated landscapes

Fonseca A., V. Zina, G. Duarte, F.C. Aguiar, P.M. Rodríguez-González, M.T. Ferreira, M.R. Fernandes

RipaSoft – an online tool for assessing the ecological status of the riparian zones

Jakubínský J., Cudlín, P., Pechanec, V., Machová, K., Cudlín, O., Štěrbová, L., Purkyt, J., Prokopová, M.

### SESSION 3 : MAPPING AND MODELING

Multi-temporal land cover mapping and comparison of riparian vegetation belts of protected sites: the case of Trentino, Italy

Gobbi S., P. Zatelli, C. Tattoni, M.G. Cantiani, M. Ciolli, N. La Porta

Automatic detection of vegetation dynamics by remote sensing in riparian zone of braided-wandering river system

Rusnák M., A. Kidová, L. Michaleje, T. Goga

#### Riparian vegetation density mapping of an extremely densely vegetated confined floodplain

Fehérvári I., T. Kiss

#### Numerical application of the threshold conditions for vegetation removal during record flood in the Meuse River

Calvani G., K. Berends, J. de Jong, C. Carbonari, L. Solari

#### Floodplain inundation in Germany – an empirical modelling approach with current discharge data

Natho S.

#### Calibrating ecomorphodynamic modelling with field data for short-term riparian simulations

Latella M., S. Cicorello, C. Camporeale

#### Hydrology-based spatial planning of riparian revegetation

Rivaes R., Francisca C. Aguiar

#### Using Bayesian Belief Networks for ecosystem services assessment at the river basin scale in semi-arid environments

Manolaki P., Knez, N., Vogiatzakis, I.N.

### SESSION 4 : ECOLOGY AND HABITATS

#### Too dark to be species rich: vegetation changes in riparian forests after 60 years

Douda J., A. Holešťová, J. Doudová, K. Boublík, A. Havrdová, M. Černá

#### Applying the CSR framework to plant communities of disconnecting side channels: a case study along the lower Loire River (France)

Gaudichet C., S. Grellier, S. Greulich, P. Janssen, S. Rodrigues

#### Phytocoenological characteristics of riparian forests in the Western part of Ilyrian floral province (Bosnia and Herzegovina, Croatia and Slovenia).

Koljanin D., A. Čarni, Ž. Škvorc, J. Brujić, Đ. Milanović, V. Stupar

#### Syntaxonomy, ecology and status of alliance Tamaricion parviflorae I. Kárpáti et V. Kárpáti 1961 on the territory of Bulgaria

Vassilev K., B. Genova, M. Nazarov, B. Grigorov, S. Stoyanov, N. Velev

#### Riparian forest vegetation in Turkey

Kavgaci A.

#### Structure and dynamics of the riparian vegetation on the braided-wandering Belá River

Kidová A., M. Rusnák, J. Babej, P. Barančok, Z. Máčka

#### Modelling and classifying alluvial forests and swamp woods

Karttunen K., P. Härmä, M. Sane, H. Mykrä

### SESSION 5 : MANAGEMENT AND RESTORATION

#### Enhancing ecosystem services in agricultural watersheds through riparian restoration

Castellano C., D. Bruno, F.A. Comin, J. M. Rey Benayas, A. Masip, J.J. Jiménez

#### Long-term development of riparian forest vegetation after bringing back more water dynamics to the floodplain - success and limits of a restoration project along the Danube in Germany

Stammel B., F. Betz, B. Cyffka

#### Riparian Vegetation conservation and enhancement in the Tagus and West River Basin District, in Portugal

Alves M.H., Susana Fernandes

#### LIFE WILDIsland Danube Wild Island Habitat Corridor

Georg F.

## SESSION 6 : LARGE SCALE PERSPECTIVES

Interpretative manual of european riparian forests and shrublands

Mandžukovski D. et al.

Ecological restoration of riparian vegetation – a success story

Jansson R. et al.

Genetic Considerations in European Riparian Ecosystems Management: Experts View on Status and Needs

Pielech R., J. Milovanović, P. M Rodríguez González, G. Hinkov, R. Jansson, F. Alimpić

Ecotypic variation research to achieve functional targets in the conservation management of riparian forests

Marques I. et al.

Impact of riparian forest on EPTs dispersion across European biogeographical regions

Peredo Arce A., Palt, M., Kail, J., Schletterer, M

Linking wood flux video monitoring and semi-controlled experiment of downstream wood diffusion to better understand wood transport

Hortobágyi B., S. Petit, G. Melun, G. Le Roux, F. Thauvin, H. Piégay

## SESSION 7 : WORKING WITH AND FOR CITIZENS

Monitoring riparian vegetation: toward a citizen science approach

Gumiero B., Francesco Maria De Matteis, Patricia María Rodríguez-González, Simon Dufour, González del Tánago, Marta

Dighomi meadow civic initiative to save the unique riparian forest in Tbilisi from ecological catastrophe

Trapaidze A., M. Khvedelidze, M. Shaklandze

Lousada Guarda RIOS: Active Citizenship in the Protection of Natural Resources

Barbosa D., M. Matos, M. Nunes

## SESSION 8 : CONCLUSIONS AND PERSPECTIVES

Establishing misalignments in riparian knowledge and priorities for knowledge conversion for enhanced management

Urbanic G. et al.

Bringing the margin to the focus: 10 challenges for riparian vegetation science and management

Rodríguez-González P.M. et al.

COST Action CONVERGES : 4 years of networking, and now ?

Dufour S. et al.

## **SURVIVAL OF BLACK POPLAR (POPULUS NIGRA L.) SEEDLINGS AFTER THE FLOODING AT THE WETLAND IN SERBIA**

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Black poplar (*Populus nigra* L.) is one of the endangered native forest species in Europe, which is also endangered in Serbia, with rare natural forests. One of the native black poplar populations in Serbia is conserved in the natural protected area of „Veliko ratno ostrvo” Island, where this research was conducted. The wetland „Veliko ratno ostrvo” Island is located in Belgrade (Serbia), at the confluence of the Sava and Danube rivers. One of the important endangering factors for vegetation in this area is an irregular change in water levels. This research aimed to determine the survival rate of two-year old black poplar seedlings after the period of flooding on the „Veliko ratno ostrvo” Island. The seedlings were produced in March 2017, from cuttings that originated from 9 trees, previously selected in this area. The seedlings were planted on the field in autumn 2018. This research was conducted in 2019, when the period of flooding and water stagnation on the „Veliko ratno ostrvo” Island lasted 45 days (from middle May to the end of June), with the highest water level at the beginning of June (the Danube water level was 603 cm, while the first flood alert is at 500 cm). The survival rate of seedlings was obtained based on the number of planted and the number of survived seedlings after flooding. Seedlings originating from tree number 9 (clone number 9) had the highest survival rate after the flooding period (85.70%), while the lowest value was recorded in clone number 8 (55.00%). More than 50% of seedlings of all nine clones survived after the flooding. It can be stated that the seedlings of all nine clones have the potential to be planted on the wetlands in Serbia, but this research should be continued with the aim of selecting superior clones.

Keywords: black polar, wetland, flooding, seedlings, survival rate