



Provincia di Lecco



# XXVII Congresso AIO L

## Lecco 24 – 28 Giugno 2024

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### Abstract Book



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## **The BIODIVERSA + RIPARIANET project: Prioritising riparian ecotones to sustain and connect multiple biodiversity and functional components in river networks**

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### **ABSTRACT**

The development of approaches optimizing the spatial conservation of natural stream-riparian networks represent a flagship example of biodiversity protection in the EU. The Biodiversa+ RIPARIANET project will leverage the increasing resolution of remote sensing information to provide practitioners with evidence-based guidance and approaches to biodiversity conservation. The key question is how to remotely assess riparian integrity and identify areas which provide effective connectivity allowing species biodiversity and ecosystem functions to persist through meta-ecological processes. We are investigating riparian networks within six river basins in Europe, along a longitudinal/climatic gradient. In 2023, we have gathered local needs and interests from key stakeholders and satellite imagery and GIS environmental data for all basins, and we will use these data to model riparian and river ecosystems functions and to identify ecological hotspots through a GIS-based multi-criteria approach. Starting in May 2024, we will collect field data to assess multiple biodiversity and stressors at the local scale, and scale-up this information to the network scale using geostatistical tools and advanced modelling. This knowledge will result in a decision-support tools allowing decision-makers at local and EU levels to identify protection gaps and ecological hotspots along riparian networks, based on multiple biodiversity, functional and connectivity criteria.