ENCONTROS SCIENTIA

Studying the spatial diversity of European food webs, drivers and implications for conservation

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Co-occurring species share more than just physical space, they share also biotic interactions. Food webs depict predatory interactions of an assemblage of species and their structure can be informative about the underlying processes responsible community assembly, the organization of biodiversity and the functioning of ecosystems. While much has been said on the spatial distribution of taxonomic and phylogenetic diversity of vertebrates, how this diversity impacts food web structure and how this effect changes across space is largely unknown. Here, I explored three different aspects of the spatial distribution of tetrapod food webs: 1) the spatial variation in food web structure and how it is driven by random processes and by natural and anthropogenic factors, 2) how species traits and phylogenetic history correlate with species trophic position and 3) what is the level of threat and protection of European keystone species. For this comprehensive work I combined an expert-based food web (1140 species and 70,601 links) of all European tetrapods with their respective spatial distributions to map the diversity of European food webs.

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FCUL (Building C2), 12h00-13h00, room 2.2.14

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