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Education & experience

I graduated at Eötvös Loránd University (Hungary), receiving an MSc in Biology in 2009 and a PhD in 2013. I was a postdoctoral researcher at WasserCluster Lunz (Lunz am See, Austria), the German Centre for Integrative Biodiversity Research (iDiv; Leipzig, Germany) and at KU Leuven (Belgium). I started my own lab in 2019 at the Centre for Ecological Research in Hungary. Besides ISSLR, I am a member of European Pond Conservation Network (EPCN), Association for the Sciences of Limnology and Oceanography (ASLO), International Society of Limnology (SIL), serving also as a steering committee member of EPCN.

I am an aquatic ecologist particularly interested in metacommunity ecology and the importance of connectivity among habitats in a landscape. Most of my work comes from saline temporary ponds (soda pans), where we study plankton and large branchiopods. I equally enjoy investigating empirical patterns via spatial statistics and addressing specific ecological questions with micro- and mesocosm experiments. Combining both approaches can be crucial for understanding the interplay of local stressors (like salinity) and the safeguarding role of spatial connectivity in a landscape. Using a landscape-level view for the investigation of saline lakes provides a good basis and effective management tools also for the conservation of these valuable and highly sensitive habitats. Working with these invisible connections between ponds and lakes is an important topic in most of my research projects.

Five representative publications on saline lakes

Horváth, Zs., Ptacnik, R., Vad, Cs. F., & Chase, J. M. (2019). Habitat loss over six decades accelerates regional and local biodiversity loss via changing landscape connectance. *Ecology Letters* 22: 1019–1027.

Horváth, Zs., Lejeusne, C., Amat, F., Sánchez-Fontenla, J., Vad, Cs. F., & Green, A. J. (2018). Eastern spread of the invasive *Artemia franciscana* in the Mediterranean Basin, with the first record from the Balkan Peninsula. *Hydrobiologia* 822: 229–235.

Horváth, Zs., Vad, Cs. F., & Ptacnik, R. (2016). Wind dispersal results in a gradient of dispersal limitation and environmental match among discrete aquatic habitats. *Ecography* 39: 726–732.

Horváth, Zs., Vad, Cs. F., Tóth, A., Zsuga, K., Boros, E., Vörös, L., & Ptacnik, R. (2014). Opposing patterns of zooplankton diversity and functioning along a natural stress gradient: When the going gets tough, the tough get going. *Oikos* 123: 461–471.

Horváth, Zs., Vad, Cs. F., Vörös, L., & Boros, E. (2013). The keystone role of anostracans and copepods in European soda pans during the spring migration of waterbirds. *Freshwater Biology* 58: 430–440.

Candidate's statement

Soda pans (temporary saline ponds and lakes) have been my study systems since the start of my PhD in 2009, but I have joined the International Society for Salt Lake Research only recently. It was a great honour to receive the Young Scientist Award of the society in 2017, which significantly helped my participation at my first meeting in Ulan-Ude. At the same time, I feel that European researchers are somewhat underrepresented at the society, and through my involvement in the board, I would try to increase the number of members (and particularly the young scientists) from this region. I would also like to inspire the society to put more emphasis on biodiversity research in saline lakes and to sustain and, if possible, even increase the support of young scientists. I would also foster the role of the society as a channel for promoting communication and cooperation of salt lake researchers, by bringing possible funding sources and calls to more focus. This could also facilitate more cooperation with freshwater scientists.