Universitat de Girona
Institut d'Ecologia Aquàtica

IEA

Postdoctoral Position in Freshwater Ecology

Research Group on Ecology of Inland Waters (GRECO)
Institute of Aquatic Ecology, University of Girona, Girona, Spain

A postdoc position is available as part of the project TRANSIT ("Towards the protection and conservation of Iberian rivers: fish as ecological indicators"), provisionally funded by the State Research Agency of Spain, supervised by Prof. Emili García-Berthou and in collaboration with Prof. Julian D. Olden and Dr. Johannes Radinger, among others. The candidate will be employed at the University of Girona and be part of the GRECO research group (http://www.udg.edu/GRECO). Girona is a city close to Barcelona, known for its life quality, beautiful landscape, cycling opportunities and excellent food (and freshwater research ;-).

Summary of the project. Freshwater fishes are globally one of the most diverse groups of vertebrates, but also amongst the most threatened. As many countries, Spain has enormous problems with freshwater resources (mostly due to overexploitation for agriculture and damming) and invasive alien species and its rivers face many ecological problems, which will be only aggravated by climate change. Many Iberian freshwater ecosystems, such as the lower and middle reaches of the Ebro River, are dominated by invasive alien species. The relationship between hydrologic alteration and invasions in rivers is still not well understood but offers many opportunities to environmental management thorough "designer flows". The general objective of this project is to improve the knowledge of the relationship between hydrological alteration and Iberian freshwater fish in order to support a more sustainable management and biodiversity conservation of Iberian rivers. We will follow our previous work in the Ebro River (e.g. Radinger et al. (2019) *Diversity and Distributions* 25: 701–714; Radinger & García-Berthou (2020) *Global Change Biology* 26: 6383–6398) and recent, established methodology in order to: i) update our available database, with new indicators of hydrologic alteration, water quality variables, species traits and further data; ii) analyze the relationship between fish assemblages and hydrologic alteration with advanced multivariate techniques; and iii) analyze the temporal changes of fish assemblages and environmental factors, with cutting-edge recent techniques such as Multivariate Autoregressive State-Space (MARSS) models.

Required and preferred qualifications. We are looking for a highly motivated and independent scientist interested in freshwater ecology. Applicants should have a strong background in ecology and statistical analyses using R. Experience in one or more of the following areas/techniques is advantageous but not essential: GIS, hydrological modelling, species distribution models, freshwater ecology, landscape ecology, fish ecology, or life-history traits. Proficiency in spoken and written English and a good publication record are mandatory.

Duration: 22 months, possibility of extension

Job start: 1 February 2023 (flexible)

Salary: full time employment as postdoctoral researcher (with standard Spanish conditions: healthcare, unemployment benefits, etc.); salary depending on qualifications

Mode of application. To apply, please **send an email** to Emili García-Berthou (emiligb2@gmail.com) with:

- a short letter of motivation
- a detailed CV (including previous employments and publication list)
- reprints of your two most important published articles
- contact details of at least two references (letters of recommendation are optional).

Application deadline: 18 November 2022.

Project TED2021-129889B-I00, funded by MCIN/AEI/10.13039/501100011033
and the European Union "NextGenerationEU"/PRTR