

**THESIS TITLE**  
**RESEARCH QUESTION**  
**SUPERVISOR**  
**LOCATION**  
**PERIOD**

**Taxonomic and functional diversity of fish communities**

Does the diversity of species of fish in a community reflect the functional diversity, or are they not directly linked?

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Any time

**SHORT DESCRIPTION**

This is an ongoing project, which, in principle, can be started at any time (after some preparation)

Biodiversity is mostly described from a taxonomic point of view: the number of species, evenness of species distributions, phylogenetic relationships etc. I am interested under which circumstances functional diversity increases with taxonomic diversity. My hypothesis is that there is no clear link between both and that even a narrow taxonomic diversity can support a wide variety of functionalities.

In order to investigate this a number of freshwater systems (e.g. lakes) with a different taxonomic signature will be compared in terms of the functional traits in the community. Functional traits will be derived from the morphology of fishes, either directly, by measuring specimens, or by measuring from photographs. By performing known statistical techniques taxonomic and functional diversities will be compared. We strive to get the final results published in a scientific journal.

**RESEARCH AIM/ SCOPE**

The overall research aim of this project is to find out what the relationships between taxonomic and functional biodiversity in fish communities are. This might be instrumental in identifying key species in the community, which is useful for the management of aquatic ecosystems

**REQUIREMENTS**

- Interest in functional morphology, fish biology and/or biological invasions.
- Steady hand and precise working attitude
- Affinity with quantitative methods (R, or similar)

**OTHER INFORMATION**

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