



The <u>ECOSPHERE research group</u> aims to study aquatic and valley ecosystems that are continuously challenged by natural and anthropogenic stressors. The research focuses on acquiring fundamental and applied knowledge at different levels of structural and functional organisation in order to underpin environmental management decisions.

MASTER THESIS SUBJECT 2024

Are swimming performance tests a good predictor for spontaneous swimming activity in fish?

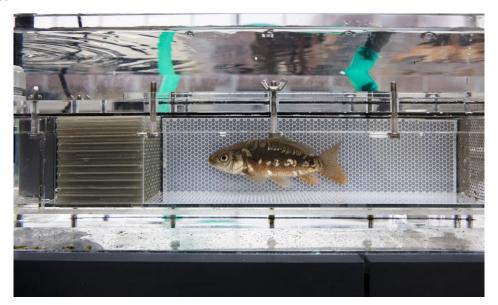
Research group: ECOSPHERE

Hosting laboratory: CGB

Promotor(s): Gudrun De Boeck, April Grace Opinion

Daily supervision: April Grace Opinion

In fish physiology, swimming performance tests are often used as an indicator of the fitness of fish under different environmental conditions. It is assumed that swimming capacity, such as measured in a critical swimming speed test, also reflects natural swimming behaviour and activity and better swimmers are also more active fish. So far, this has only been examined in one (1!) older study on zebrafish. In the current proposal we want to examine different swimming performance tests and link the swimming capacity to spontaneous swimming activity in rainbow trout (a salmonid model) and koi carp (a cyprinid model).



A juvenile common carp swimming in a respirometer raceway at the ECOSPHERE lab.

- ➤ This topic mostly contains ☑ literature study, ☑ lab work, □ field work, ☑ experimental work, □ GIS, □ numerical modelling, □ other: