

WANTED Motivated MSc. Student

The effects of restoration efforts in a modified stream basin. Do all fish benefit equally?

Dive into the heart of aquatic ecology studying the movement of fishes throughout a stream basin (Westerwoldse Aa, The Netherlands) focusing on river connectivity and habitat availability.

Over the last 31 years, multiple projects have been completed to restore river connectivity and re-establish lost habitats for fish in Dutch waters. However, due to some irreversible modifications made to the streampath, some aspects may not come back at all. Consequently, some traits may be lost forever changing the overall ecosystem functioning with obvious consequences to the fish community. Hence, we are interested in studying the potential of what can be brought back to a, so-called, novel ecosystem.

We have access to a 9-year dataset featuring recordings of PIT tagged fish, including threespined stickleback, eel, ide, common roach, gudgeon, bream and tench, to give you some examples. Collaborate with another MSc student, each of you will dive into a specialized focus, one on river connectivity, the other on habitat dynamics.

You will make use of multiple analyses in R and QGIS, which will help you in identifying which relationships are essential to re-establish sea-to-source connectivity. In addition to the computer based work, you will be asked to join occasionally on a fieldwork trip to the study area. Expect the ratio between analyses and fieldwork to be 70/30, with the majority being the analyses.

Are you interested in this research? Please send your resume and motivation to donne.mathijssen@wur.nl and leo.nagelkerke@wur.nl.

