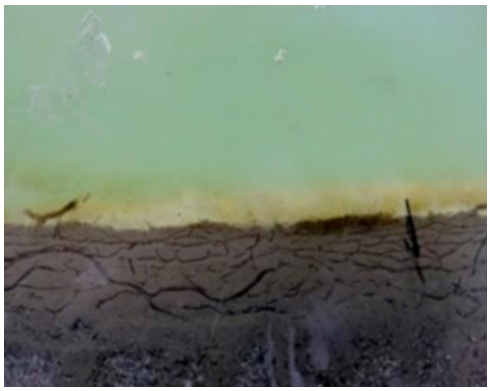
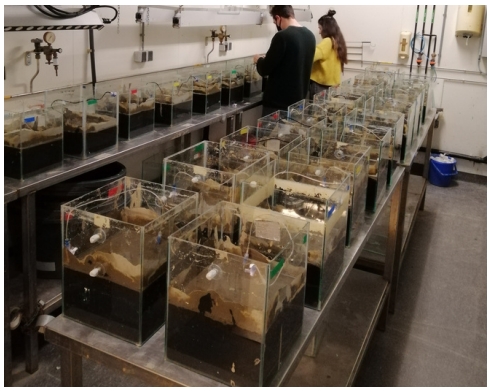
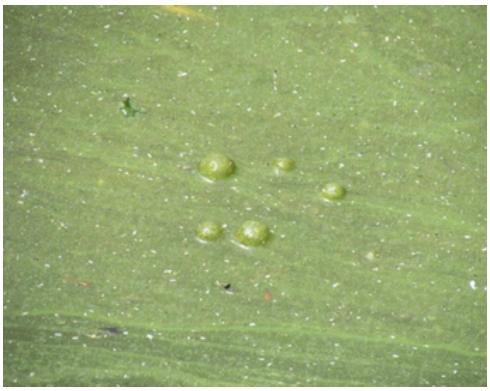
BIOTURBATION AND GHG IN AQUATIC SEDIMENTS

INTERNSHIP







AIM OF THE PROJECT

Methane is the second most important greenhouse gas in the atmosphere and inland waters are its main natural source. This gas is produced in the sediment through microbial communities where it accumulates forming bubbles. These bubbles allow its upward transport to the atmosphere, becoming its main pathway of emission. Therefore, understanding how bubble release is affected by organisms that impact sediment processes (i.e., bioturbators) in inland waters is of great interest. In this project, we aim to test four types of sediment with one bioturbating organism (e.g., Tubifex sp.) to link its activity on methane production, bubble formation, and release under different physico-chemical conditions. The outcome of this experimental set-up will give first insights into the key role of bioturbating organisms (macrofauna group) in aquatic systems that act as major methane hotspots

WHAT YOU ARE GOING TO LEARN

As our intern, you will have the opportunity to work in an experimental setup at Radboud University. You will gain practical knowledge on different methodologies such as measuring GHG emissions, imaging techniques to evaluate microorganisms, and visually monitoring the effects of bioturbators on gas bubbles in the sediment. We are looking for enthusiastic and proactive. students who are eager to work in ecology experiments and learn new methodologies. We are also open to discussing any of your interests and ideas to come up with a suitable internship project for either BSc or MSc. Are you interested?

CONTACT

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