

EINLADUNG

Kolloquium
Sommersemester 2024

Dr. Nathan Baker

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hält am Dienstag, den **25.06.2024**, um 16:15 Uhr im Hörsaal 1, Biologikum, Campus Riedberg, Max-von-Laue-Str. 13, einen Vortrag über,
„Understanding European freshwater biodiversity: Spatio-temporal patterns and future directions“

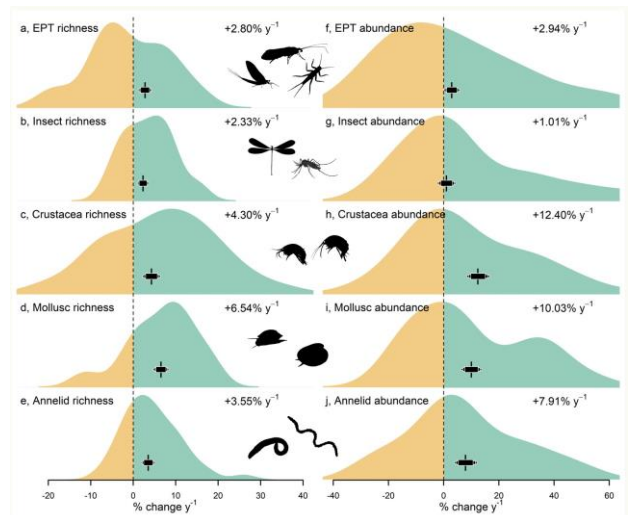
European biodiversity is changing, with natural communities constantly shifting over time and space. This is particularly true in freshwater environments that are disproportionately impacted by anthropogenic activities. To combat this, riverine communities are monitored, reporting results at national and international levels. Yet, each sampled community represents a



mere snapshot of an ever-changing ecological landscape. By analyzing numerous snapshots alongside environmental data, we can better discern broader ecological patterns and investigate their underlying drivers, the essence of contemporary ecological inquiry. As a community ecologist, my research delves into two fundamental questions: how and why freshwater



biodiversity is changing. Through a combination of ecological and statistical methodologies, I (together with many talented colleagues) examine changes in freshwater biodiversity at multiple scales: localized, regional, and pan-European. Findings reveal that freshwater biodiversity is highly context-dependent, influenced by a myriad of local and regional factors that shape its broader spatio-temporal patterns. Kurzgesagt (in a nutshell), European freshwater biodiversity is changing, with some parts showing improvements and others showing deterioration. This variability challenges the effectiveness of current one-size-fits-all monitoring and mitigation strategies, as ~60% of European rivers fail to reach good ecological status. So, where to from here? The short answer: it's complicated. The long answer: to address these emerging challenges, we must develop better predictive tools, engage in thoughtful planning, and enhance our monitoring efforts. European freshwater biodiversity is at a critical juncture, and our actions today will determine its future trajectory.



Einladender: Dr. Jonas Jourdan