SCHOOL OF AQUATIC AND FISHERY SCIENCES
UNIVERSITY OF WASHINGTON

2026 Autumn Seminar Series

October 29, 4:00PM

Thursday (Th) (FSH 102)

When rivers thrive: cross-ecosystem biodiversity linkages and freshwater conservation

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Freshwater ecosystems are closely connected to surrounding terrestrial landscapes, exchanging organisms, energy, and nutrients. Aquatic insects play an important role in these connections, providing essential food resources for birds and other terrestrial consumers. Yet, we still know relatively little about how these ecological linkages operate across large geographic scales and how they are influenced by human activities. In this seminar, I will discuss recent research, exploring the relationships between freshwater insect biodiversity and riparian bird communities across the United States, including how these connections differ among bird species and environmental conditions. I will then turn to freshwater conservation and examine whether protected areas effectively safeguard river biodiversity. In particular, I will highlight how considering ecological processes and connections across river networks can change our understanding of conservation effectiveness and help inform better protection strategies.

Christian works with Professor Julian Olden and is supported by a Walter Benjamin Fellowship from the German Research Foundation (DFG). His research focuses on understanding how human activities affect freshwater biodiversity, how ecological changes extend across ecosystem boundaries, and how conservation strategies can better protect freshwater ecosystems. Christian received his PhD in Biology from the University of Duisburg-Essen, Germany, in 2024, where he studied the impacts of agricultural land use and environmental pressures on river ecosystems across Europe. His current work combines large-scale biodiversity data and ecological modelling to investigate connections between freshwater and terrestrial ecosystems and evaluate the effectiveness of river conservation.

Accommodation requests related to a disability or health condition should be made before the event by contacting Jon Wittouck, Assistant Director, Facilities for SAFS: 206-616-8552/ wittouck@uw.edu.

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