



James Garner, PhD

James Garner, PhD, is an aquatic ecologist and the founder of Bishir Monitoring Solutions, PBC, a Massachusetts public benefit corporation that develops and applies environmental DNA (eDNA) methods for aquatic biomonitoring. He earned his PhD from the University of Massachusetts (UMASS) Amherst in 2025, where his research advanced the use of eDNA to assess diadromous fish populations, biodiversity, and ecosystem health. He designs his work in partnership with the people who use it, including state and federal agencies, Tribal nations, NGOs, and community organizations, with a focus on establishing biodiversity baselines, detecting rare and endangered species, and calibrating eDNA against traditional survey methods to strengthen management decisions. His collaborators include the United States Geological Survey, National Oceanic and Atmospheric Administration, and UMASS Amherst.

Dr. Garner will present on environmental DNA at the Western Mass Membership Meeting on October 7, 2026, at O'Reilly Talbot & Okun Associates in Springfield, MA.