
Woods Hole Oceanographic Institution
Biology Department Seminar



Thursday, February 8, 2024 – 12:00 noon

Interdisciplinary Applications of Animal-Borne Tag Data: Ocean Observation, Dynamic Management and Beyond

Laura McDonnell
Postdoctoral Scholar, WHOI

Effective management and conservation of highly migratory and/or commercially important species requires interdisciplinary approaches that translate ecological knowledge into action. Animal-borne telemetry tags provide important movement and environmental data that can add value to several research fields beyond spatial ecology. My work explores how shark tagging data can contribute to ocean observation and dynamic, flexible management. I outline findings and considerations for incorporating tag-derived surface and sub-surface temperature data in ocean observational efforts, highlighting current and future applications. I also examine the current use of tagging data streams in dynamic ocean management, which offers a flexible, climate-responsive approach towards addressing critical issues in fisheries. Future directions and next steps in using marine predator tagging data to answer questions beyond the immediate ecological realm will be discussed. Overall, tag data can act as a significant addition to the ocean observing toolbox, permitting an enhanced understanding of physical ocean changes occurring throughout the Northwest Atlantic, climate variability, and, in turn, their impacts on both fish and fisheries.

HYBRID! **In Person:** Redfield Auditorium **Zoom:** <https://whoi-edu.zoom.us/j/95659711989> Meeting ID: 956 5971 1989 **By phone:** Find your local number: <https://whoi-edu.zoom.us/u/adKtjpWqPI>