

MARINE FISHERIES ECOLOGY — JESSICA MILLER

Jessica Miller, Marine Fisheries Ecologist, joined COMES and OSU in January 2006.

Prior to this, she lived in Coos Bay, where she worked at the University of Oregon's Institute of Marine Biology, starting in 1998.

After completing her Ph.D. at UO in 2004, she received an OSG co-PI position to build upon components of her dissertation work examining local and regional patterns of dispersal and exchange in Pacific rockfish.

Prior to her doctoral studies, Jessica received a MS from the University of Washington's School of Fisheries and Aquatic Sciences where she examined juvenile salmon use of natural and created estuarine sloughs.

She then moved on to work with the Tillamook Bay National Estuary Project, a cooperative local, state, and federal effort, and The Willapa Alliance, a private, non-profit organization located on the coast of Washington. In both of those positions, she worked on estuarine and freshwater restoration design, implementation and assessment, with an emphasis on Pacific salmon.

Jessica started off in Boston, where she developed an interest in fish at an early age. After spending time in Chicago, she migrated west to Seattle in 1990 and has remained in the Pacific Northwest ever since, except for a brief time in Florida, working on a project assessing mosquito control practices.

Her general research interests involve the ecology and evolution of life history diversity in fishes and development and maintenance of that diversity. Her research has focused on larval dispersal and transport, population connectivity and structure, and the use of estuaries by larval and juvenile marine and anadromous fishes.

She has combined techniques, including otolith microchemistry, genetic, and time-series analyses, to address these topics. She is interested in continuing to use diverse methods to address basic questions in fish ecology while also providing information critical for management and conservation efforts.



Currently, she is finishing up a research project examining the structure and chemistry of fish otoliths to provide information on mixing and migration in Pacific rockfish and is beginning a project with ODF&W and Washington Dept. of Fish & Wildlife to examine movements and connectivity among Pacific herring using similar techniques.

She is also collaborating with researchers at the University of Washington to quantify patterns of estuarine rearing and feeding habitats in Chinook salmon from the Columbia River using elemental, isotopic, and microstructural analyses of otoliths.

When not working, she loves walking the beach and hiking with her husband, Ed Backus, Vice-President for Fisheries at Ecotrust, and her German Shepherd, Kiger. They have acquired a drift boat and are hoping to learn the waters of the Alsea River.

She's excited to be part of COMES and believes that her research interests are well-suited to the mission of the experiment station. Jessica would be happy to talk about her current and future research plans, fisheries ecology, or fishing with anyone who is interested. Her telephone number is 541-867-0381; e-mail is Jessica.Miller@oregonstate.edu.