Courtney Richmond

Professor
Biological Sciences

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http://www.rowan.edu/colleges/csm/departments/biologicalSci/facultyStaff/CourtneyRichmondWelcomePage.htm

Education:
BA (Biology), Swarthmore College
PhD (Marine Science), University of South Carolina
Postdoctoral (Ecological Modelling),
National Research Council & Environmental Protection Agency
Postdoctoral (Ecological Modelling), Academy of Natural Sciences Estuarine Research Center

Research Expertise:
Ecological modeling | Individual to community responses to environmental stressors |
Life history strategies of marine invertebrates | Biocontrol of crop pests

My research interests focus on how stressful environmental conditions affect individual organisms, and how those individual-level effects scale up to population- and community-level effects in space and through time. I study both natural and anthropogenic (human-induced) stressors as the drivers of these ecological changes. The techniques I use include empirical, manipulative studies as well as the construction of ecological models to project short-term and/or individual-level effects to larger scales.

I've studied many marine invertebrate taxa, including copepods, ctenophores, and the larvae of snails and marine polychaetes. Despite my background in invertebrates, I've also collaborated with others who work on Florida seagrasses and wasps that infect and damage wheat crops in the Northern Plains of the United States and Canada.

Member of:
American Association for the Advancement of Science (www.aaas.org)
Ecological Society of America (www.esa.org)
Society for Integrative and Comparative Biology (www.sicb.org)
Union of Concerned Scientists (www.ucusa.org)

Recent Academic Projects:
Ecological modelling of biocontrol of the wheat stem sawfly, Cephus cinctus
Zooplankton population studies in South Jersey reservoirs (includes undergraduates in field and laboratory studies)

Recent Publications:
Rand, TA, Richmond, CE, Dougherty, ET (2017) Using matrix population models to inform biological control management of the wheat stem sawfly, Cephus cinctus. Biol Control. 109:27-36.

Richmond, CE, Rose, KA, Breitburg DL (2013) Individual variability and environmental conditions: effects on zooplankton cohort dynamics. Mar Ecol Prog Ser. 486:59-78.

Richmond CE, Kolesar SE (2012) Consensus building for environmental issues: marine protected areas as a case study. In Proceedings of the 33rd Conference of the Association for Biology Laboratory Education (ABLE) (Tested Studies for Laboratory Teaching Vol. 33) McMahon K, ed. pp.302-310.