

LISA A. KERR
Fisheries Ecologist
Gulf of Maine Research Institute
350 Commercial St., Portland, ME 04101
Email: lkerr@gmri.org

Education

Tufts University	B.S., Biology, 1997
Moss Landing Marine Laboratories, California State University	M.S., Marine Science, 2003
University of Maryland Center for Environmental Science	Ph.D., Marine, Estuarine, & Environ. Sciences, 2008
University of Massachusetts, Dartmouth	Post-doc/Research Associate, Population Modeling, 2008-2012

Professional Background

Research Scientist, Gulf of Maine Research Institute, 2012-present
Graduate Faculty, School of Marine Sciences, Univ. of Maine, 2013-present
Adjunct Associate Research Professor, School of Marine Sciences, Univ. of Maine, 2012-present
Post-doctoral Researcher/Research Associate, University of Massachusetts Dartmouth, 2008-2012
Graduate Researcher, University of Maryland Center for Environmental Science, 2004-2008
Research Associate, Moss Landing Marine Laboratories, 2003-2004
Graduate Student Trainee, California Sea Grant College Program, 2001-2003
Research Assistant and Writer, California Sea Grant College Program, 2001-2002
Research Assistant, Pacific States Marine Fishery Commission, 2000-2002
Environmental Scientist/Consultant, All Environmental, Inc., 1999

Recent Publications

- Cadrin, S.X., **Kerr, L.A.**, Mariani, S. 2014. Interdisciplinary evaluation of spatial population structure for definition of fishery management units. Cadrin, S.X., Kerr, L.A., Mariani, S.E. (Eds.) *Stock Identification Methods*, Academic Press. 566 pp.
- Kerr, L.A.**, Goethel, D.R. 2014. Simulation modeling as a tool for synthesis of stock identification information. Cadrin, S.X., Kerr, L.A., Mariani, S.E. (Eds.) *Stock Identification Methods*, Academic Press. pp. 501-533.
- Kerr, L.A.**, Campana, S.E. 2014. Chemical composition of fish hard parts as a natural marker of fish stocks. In: *Stock Identification Methods* (Eds. S. Cadrin, L. Kerr, S. Mariani). 2nd Edition. Elsevier. 566 pp.
- Zemeckis, D. R., Martins, D., Kerr, L.A., Cadrin, S. X. 2014. Stock identification of Atlantic cod (*Gadus morhua*) in US waters: an interdisciplinary approach. *ICES J. Mar. Sci.* doi:10.1093/icesjms/fsu032
- Kerr, L.A.**, Cadrin, S.X., Secor, D.H., Taylor, N. 2012. A simulation tool to evaluate effects of mixing between Atlantic bluefin tuna stocks. ICCAT SCRS/2012/138, Madrid.
- Kerr, L.A.**, Secor, D.H. 2012. Partial migration across populations of white perch (*Morone americana*): a flexible life history strategy in a variable estuarine environment. *Estuaries and Coasts*. 35(1) 227–236.
- Andrews A.H., Natanson L.J., **Kerr L.A.**, Burgess G.H., and Cailliet G.M. 2011. Bomb radiocarbon and tag-recapture dating of sandbar shark (*Carcharhinus plumbeus*). *Fishery Bulletin*. 109: 454–465.
- ICES. 2011 (**L. Kerr**, co-chair, lead author). Report of the workshop on the implications of stock structure (WKISS), 5-7 April 2011, ICES Headquarters, Copenhagen. ICES CM 2011/SSGSUE:03. 53 pp.

- Cadrin SX, M Bernreuther, AK Daniélsdóttir, E Hjörleifsson, T Johansen, **L Kerr**, and others. 2010 Population Structure of beaked redbfish, *Sebastes mentella*: evidence of divergence associated with different habitats. ICES Journal of Marine Science 67: 1617-1630.
- Kerr, L.A.**, Cadrin, S.X., Secor, D.H. 2010. Simulation modeling as a tool for examining the consequences of spatial structure and connectivity to local and regional population dynamics. ICES J. Mar. Sci. 67(8): 1631–1639.
- Kerr, L.A.**, Cadrin, S.X., Secor, D.H. 2010. The role of spatial dynamics in the stability, resilience, and productivity of an estuarine fish population. Ecol. Appl. 20(2): 497–507.
- Kerr, L.A.**, Secor, D.H. 2010. Latent effects of early life history on partial migration for an estuarine-dependent fish. Environmental Biology of Fishes. 89: 479–492
- Runge, J.A., Kovach, A.I., Churchill, J.H., **Kerr, L.A.**, et al. 2010. Understanding climate impacts on recruitment and spatial dynamics of Atlantic cod in the Gulf of Maine: integration of observations and modeling. Progr. Ocean. 87: 251-263.

SYNERGISTIC ACTIVITIES

1. *Research impacts on fishery management and conservation*: Understanding stock structure and spatial aspects of fish is directly relevant to sustainable fisheries management. My research has informed regional (New England Fisheries Management Council) and international (International Commission for the Conservation of Atlantic Tunas and International Council for Exploration of the Seas) fisheries management and scientific advisement organizations.
2. *Development and/or refinement of research tools*: I have contributed to the development and refinement of an operating model to represent bluefin tuna stock structure and stock mixing. This model has been presented to ICCAT as part of their development toward a management strategy evaluation of bluefin tuna.
3. *Communication of science*: As an early career scientist, I have published more than 22 peer-reviewed journal publications, 12 reports, and edited, as well as co-authored 4 chapters, in a book on *Stock Identification Methods*. My use of simulation modeling to explore the impacts of spatial structure on population stability and resilience was award the AIFRB W.F. Thompson Best Student Paper Award (2012). I am currently a reviewer for several scientific journals and research programs including: NOAA’s Fisheries and the Environment Sea Grant Programs, Canadian Journal of Fisheries and Aquatic Sciences, Ecological Applications, Marine Ecology Progress Series, Marine Biology, Fisheries Oceanography, Environmental Biology of Fishes, and ICES Journal of Marine Science.
4. *Contributions to education and outreach*: I currently serve as a committee member for two Ph.D. and 1 M.S. candidate enrolled at the UMass and UMaine. I have served as a mentor to undergraduates through the NSF Research Experiences for Undergraduates Program (2005 & 2007) and the GMRI Summer intern Program (2013). I am also actively involved in outreach and education at the Gulf of Maine Research Institute and regularly give lectures to interested public.

A. COLLABORATORS AND OTHER AFFILIATIONS

Graduate and Postdoctoral Advisors

M.S. Advisor: G.M. Cailliet (Moss Landing Marine Laboratories, California State University)

Ph.D. Advisor: D. H. Secor (University of Maryland Center for Environmental Science)

Postdoctoral Advisor: S.X. Cadrin (University of Massachusetts Dartmouth)

Thesis Advisor and Postgraduate-scholar Sponsor

Greg Decelles (Ph.D., UMass Dartmouth)

Doug Zemeckis (Ph.D. candidate UMass Dartmouth)

David Martins (M.S. candidate, UMass Dartmouth)

Lisha Guan (Ph.D. candidate, UMaine)