Michael J. Malick

Ph.D. Candidate, Simon Fraser University Resource and Environmental Management Burnaby, BC, Canada mmalick@sfu.ca

Education

2010–15 Ph.D. Simon Fraser University, Burnaby, BC, GPA: 4.00

Advisors: Randall Peterman, Sean Cox, and Franz Mueter

Dissertation: Ecological drivers of spatial and temporal variability in Pacific salmon productivity

2006–08 M.Sc. University of Alaska Fairbanks, Juneau, AK, GPA: 4.00

Advisor: Milo D. Adkison

Thesis: Variable effects of biological and environmental processes on coho salmon marine survival in Southeast Alaska (PDF)

2002-06 B.Sc. Mansfield University, Mansfield, PA, GPA: 3.95

Senior Thesis: The influence of climatological factors on the migration timing of sockeye salmon into freshwater (Advisor: Dr. Richard W. Soderberg)

Independent Research: Chemical and biological study of the Tioga River (Advisor: Dr. Gregory A. Carson)

Publications

- Accepted Malick, M.J., S.P. Cox, R.M. Peterman, T.C. Wainwright, and W.T. Peterson. Accepted. Accounting for multiple pathways in the connections among climate variability, ocean processes, and coho salmon recruitment in the Northern California Current.
- Malick, M.J., S.P. Cox, F.J. Mueter, R.M. Peterman. 2015. Linking phytoplankton phenology to salmon productivity along a north/south gradient in the Northeast Pacific Ocean. Canadian Journal of Fisheries and Aquatic Sciences 72:697-708. http://doi.org/10.1139/cjfas-2014-0298
- Malick, M.J., L.J. Haldorson, J.J. Piccolo, and J.L. Boldt. 2011. Growth and survival in relation to body size of juvenile pink salmon in the Northern Gulf of Alaska. Marine and Coastal Fisheries 3:261-270. (PDF) http://doi.org/10.1080/19425120.2011.593467

Malick, M.J., M.D. Adkison, and A.C. Wertheimer. 2009. Variable effects of biological and environmental processes on coho salmon marine survival in Southeast Alaska. Transactions of the American Fisheries Society 138:846-860. (PDF) http://doi.org/10.1577/T08-177.1

Awards and Honors

Ph.D. Graduate Fellowship, Simon Fraser University
Ph.D. Graduate Fellowship, Simon Fraser University
President's Ph.D. Scholarship, Simon Fraser University
C.D. Nelson Memorial Graduate Scholarship
Certificate of Recognition for Academic Achievement in Biology
Stanley Henry Nauman Scholarship for Academic Excellence in Fisheries
Certificate of Accomplishment for Grantsmanship

Presentations

- Malick, M.J., R.M. Peterman, S.P. Cox. Stock-recruitment datasets for wild North American pink and chum salmon stocks. International Salmon Data Workshop, Seattle, WA. September 9, 2014.
- Malick, M.J., S.P. Cox, F.J. Mueter, R.M. Peterman. North-south differences in the effects of the initiation date of the spring bloom on pink salmon survival. Salmon Ocean Ecology Annual Meeting, Santa Cruz, CA. March 14, 2014.
- Litzow, M., W.J. Sydeman, D. Schoeman, S. Chiba, M. Garcia-Reyes, M.J. Malick, H. Sugisaki, S.A. Thompson. Nonlinear change in the variability of North Pacific climate: are biological systems responding? PICES 2013 Annual Meeting, Nanaimo BC, Canada. October 18, 2013.
- Malick, M.J., S.P. Cox, R.M. Peterman, W.T. Peterson, and T.C. Wainwright. Using Bayesian networks to link climate variability, ocean processes, and coho salmon marine survival. North Pacific Anadromous Fish Commission Workshop, Honolulu, HI. April 26, 2013.
- Adkison, M., R. Briscoe, J. Robins, **M.J. Malick**, A. Wertheimer, and S.G. Taylor. Marine survival and interspecific interactions of coho salmon in SE Alaska. Poster. North Pacific Anadromous Fish Commission Workshop, Honolulu, HI. April 25, 2013.
- 2013 Malick, M.J. Modeling causal networks to link climate variability, ocean pro-

- cesses, and Pacific salmon population dynamics. IDEAS Symposium, Simon Fraser University, Burnaby, BC. January 19, 2013.
- Malick, M.J. Timing of the spring bloom in the Northeast Pacific. IDEAS Symposium, Simon Fraser University, Burnaby, BC. January 7, 2012.
- 2009 Malick, M.J., L. Haldorson, and J.J. Piccolo. Feeding intensity, diet, and survival in relation to body size of juvenile pink salmon. Alaska Chapter American Fisheries Society Annual Meeting, Fairbanks, AK. November 4, 2009.
- Malick, M.J. What comes after a fisheries undergraduate degree? Mansfield University Special Seminar, Mansfield, PA. October 14, 2009.
- Malick, M.J., L. Haldorson, and J.J. Piccolo. Characterizing habitat specific size, condition, and growth of juvenile pink salmon in the Northern Gulf of Alaska. Salmon Ocean Ecology Annual Meeting, Juneau, AK. April 7, 2009.
- 2009 Malick, M.J., M.D. Adkison, and A.C. Wertheimer. Variable effects of biological and environmental processes on coho salmon marine survival in Southeast Alaska. Salmon Ocean Ecology Annual Meeting, Juneau, AK. April 7, 2009.
- Malick, M.J. Variable effects of hatchery pink and chum salmon on coho salmon marine survival in Southeast Alaska. University of Alaska Chapter, Juneau Subunit, American Fisheries Society Annual Meeting, Juneau, AK. April 14, 2008.
- Malick, M.J., M.D. Adkison, and A.C. Wertheimer. The influence of physical and biological factors on coho salmon marine survival in Southeast Alaska. Alaska Chapter American Fisheries Society Annual Meeting, Ketchikan, AK. November 15, 2007.
- Malick, M.J., C. Oppel, R. Sweater, and G. Carson. Chemical and biological study of the Tioga River. Poster. Pennsylvania Academy of Science Annual Meeting, Pittsburg, PA. March 26, 2004.

Teaching Experience

- 2014 Teaching Assistant: Risk Assessment and Decision Analysis for Management of Natural Resources, Simon Fraser University (REM-625). Lead and developed computer labs, graded assignments, lead reading discussions.
- 2013 Instructor: Introduction to R for Data Analysis, Simon Fraser University A two day short course that covered the basics of the R programming language.
- 2013 Instructor: Introduction to R, NOAA Northwest Fisheries Science Center A two day short course that covered the basics of the R programming language.

2012 Instructor: Introduction to R, Simon Fraser University – An 11 week voluntary course that covered the basics of the R programming language.

Certifications & Services

- 2007–14 American Fisheries Society Associate Professional
- 2007–08 Secretary: AFS Student Subunit, University of Alaska Fairbanks
- Reviewer Transactions of the American Fisheries Society, North Pacific Anadromous Fish Commission, North American Journal of Fisheries Management

Work Experience

- 2008–10 Research Associate: University of Alaska Fairbanks, Juneau, AK. Duties included dataset assembly and maintenance, statistical analyses using R, Excel, and PRIMER, and manuscript preparation.
- 2007–08 Fisheries Contractor: National Atmospheric and Oceanic Administration, Little Port Walter, AK. Duties included salmon collection, recovery of coded wire tags, and salmon weir maintenance.
- 2006 Fisheries Technician: Wyoming Game & Fish Department, Laramie, WY. Duties included fish sampling using backpack electro-fishing, raft electro-fishing, seins, gillnets, trap nets, and trammel nets, habitat mapping, and rotenone treatments.
- Volunteer Fisheries Technician: United States Fish and Wildlife Service, King Salmon, AK. Duties included remote field camp and salmon weir construction and maintenance, daily salmon counts both manually and using underwater motion detection cameras.