Mark D. Scheuerell

U.S. Geological Survey Washington Cooperative Fish and Wildlife Research Unit
School of Aquatic and Fishery Sciences
University of Washington
PO Box 355020
Seattle, WA 98195-5020
scheuerl@uw.edu
206.543.5997

Education

Ph.D., Zoology, University of Washington (2002)

M.S., Fishery and Aquatic Science, Cornell University (1995)

B.S., Zoology, University of Wisconsin (1991)

Professional experience

Assistant Unit Leader
USGS Washington Cooperative Fish and Wildlife Research Unit — 2019 - present

Associate Professor
School of Aquatic and Fishery Sciences, University of Washington — 2019 - present

Research Fisheries Biologist
Northwest Fisheries Science Center, NOAA Fisheries — 2003 - 2019

Affiliate Associate Professor
School of Aquatic and Fishery Sciences, University of Washington — 2016 - 2019

Affiliate Assistant Professor
School of Aquatic and Fishery Sciences, University of Washington — 2007 - 2016

Other professional activities

Member, Chinook Salmon Expert Panel, Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative (2011-2012)

Member, Expert Advisory Panel, Pacific Salmon Commission Bilateral Scientific Workshop to Examine the Decline in Fraser River Sockeye (2010)

Member, Biological Review Team, National Marine Fisheries Service Risk Assessment of Oregon Coast Coho Salmon (2009-2010)

Relevant publications

Holmes EE, Ward EJ, **Scheuerell MD**. 2020. Analysis of multivariate time-series using the MARSS package, Version 3.10.12. http://cran.r-project.org/web/packages/MARSS/vignettes/UserGuide.pdf.

Scheuerell MD, Ruff CP, Anderson JH, Beamer EM. *In press.* An integrated population model for estimating the relative effects of natural and anthropogenic factors on a threatened population of steelhead trout. Journal of Applied Ecology

Buhle ER, **Scheuerell MD**, Cooney TD, Ford MJ, Zabel RW, Thorson JT. 2018. Using Integrated Population Models to Evaluate Fishery and Environmental Impacts on Pacific Salmon Viability. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-NWFSC-140.

Bal G, **Scheuerell MD**, Ward EJ. 2018. Characterizing the strength of density dependence in at-risk species through Bayesian model averaging. Ecological Modelling 381:1-9

Honea JM, McClure MM, Jorgensen JC, **Scheuerell MD**. 2016. Assessing the vulnerability of freshwater life stages of Chinook salmon to climate change. Climate Research 71:127-137

Goertler PAL, **Scheuerell MD**, Simenstad CA, Bottom DL. 2016. Estimating common growth patterns in juvenile Chinook salmon (Oncorhynchus tshawytscha) from diverse genetic stocks and a large spatial extent. PLoS ONE 11:e0162121

Ohlberger J, **Scheuerell MD**, Schindler DE. 2016. Population coherence and environmental impacts across spatial scales: a case study of Chinook salmon. Ecosphere 7:e01333

Jorgensen JC, Ward EJ, **Scheuerell MD**, Zabel RW. 2016. Assessing spatial covariance among time series of abundance. Ecology and Evolution 6:2472–2485

Scheuerell MD, Buhle ER, Semmens BX, Ford MJ, Cooney T, Carmichael RW. 2015. Analyzing large-scale conservation interventions with Bayesian hierarchical models: A case study of supplementing threatened Pacific salmon. Ecology and Evolution 5:2115–2125

Griffiths JR, Schindler DE, Armstrong JB, **Scheuerell MD**, Whited DC, Clarke RA, Hilborn R, Holt CA, Lindley ST, Stanford JA, Volk EC. 2014. Performance of salmon fishery portfolios across western North America. Journal of Applied Ecology 51:1554–1563

Stachura MM, Mantua NJ, **Scheuerell MD**. 2014. Oceanographic influences on spatio-temporal patterns in North Pacific salmon abundance. Canadian Journal of Fisheries and Aquatic Sciences 71:226-235

Thorson JT, **Scheuerell MD**, Buhle ER, Copeland T. 2014. Spatial diversity buffers temporal variability in early juvenile survival for an endangered Pacific salmon. Journal of Animal Ecology 83:157–167

Schindler D, Krueger C, Bisson P, Bradford M, Clark B, Conitz J, Howard K, Jones M, Murphy J, Myers K, **Scheuerell M**, Volk E, Winton J. 2013. Arctic-Yukon-Kuskokwim Chinook Salmon Research Action Plan: Evidence of Decline of Chinook Salmon Populations and Recommendations for Future Research. Prepared for the AYK Sustainable Salmon Initiative, Anchorage, Alaska. v + 70 p.

Holsman KK, **Scheuerell MD**, Buhle ER, Emmett R. 2012. Interacting effects of translocation, artificial propagation, and environmental conditions on the marine survival of Chinook salmon from the Columbia River, Washington, U.S.A. Conservation Biology 26:912-922

Crozier LG, **Scheuerell MD**, Zabel RW. 2011. Using time series analysis to characterize evolutionary and plastic responses to environmental change: a case study of a shift toward earlier migration date in sockeye salmon. The American Naturalist 178:755-773

Scheuerell MD, Zabel RW, Sandford BP. 2009. Relating juvenile migration timing and survival to adulthood in two species of threatened Pacific salmon (Oncorhynchus spp.). Journal of Applied Ecology 46:983–990

Buhle ER, Holsman KK, **Scheuerell MD**, Albaugh A. 2009. Using an unplanned experiment to evaluate the effects of hatcheries and environmental variation on threatened populations of wild salmon. Biological Conservation 142:2449–2455

Waples RS, Zabel RW, **Scheuerell MD**, Sanderson BL. 2008. Evolutionary responses by native species to major anthropogenic changes to their ecosystems: Pacific salmon in the Columbia River hydropower system. Molecular Ecology 17:84-96