

Peer Reviewed Research Papers

1. Manhard CV, Adkison MD, Hard JJ, Smoker WW, Gharrett AJ. 2018. Local adaptation of phenology revealed in outcrosses between spawning segments of a salmonid population. *Mol Ecol.* 27: 4698-4710. <https://doi.org/10.1111/mec.14908>
2. Echave, Jesse D, Christopher V. Manhard, William W. Smoker, Milo D. Adkison, Anthony J. Gharrett. 2017. Out crosses between seasonally different segments of a Pacific salmon population reveal local adaptation. *Environ Biol Fish* 100:1469-1481. <https://doi.org/10.1007/s10641-017-0657-3>
3. Manhard, C. V., J. E. Joyce, W. W. Smoker, and A. J. Gharrett. 2017. Ecological factors influencing lifetime productivity of pink salmon (*Oncorhynchus gorbuscha*) in an Alaskan stream. *Can. J. Fish. Aquat. Sci.* 74:1325-1336. <https://dx.doi.org/10.1139/cjfas-2016-0335>
4. Anthony J Gharrett, John E Joyce and William W Smoker. 2013. Fine-scale temporal adaptation within a salmonid population: mechanism and consequences. *Molecular Ecology* 22: 4457–4469.
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12. Ivan A. Wang, Sara E. Gilk, William W. Smoker & Anthony J. Gharrett. Outbreeding effect on embryo development in hybrids of allopatric salmon populations, a potential consequence of stock translocation. 2007. *Aquaculture* 272S1:S152-S160.
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Peer Reviewed Comments, Book Chapters, Review and Perspective Articles

1. Peter S. Rand, Barry A. Berejikian, Allison Bidlack, Dan Bottom, Julie Gardner, Masahide Kaeriyama, Rich Lincoln, Mitsuhiro Nagata, Todd N. Pearsons, Michael Schmidt, William W. Smoker, Laurie A. Weitkamp, Lev A. Zhivotovsky. 2012. Ecological interactions between wild and hatchery salmonids and key recommendations for research and management actions in selected regions of the North Pacific. *Environmental Biology of Fishes* Vol 94. Published On Line Feb 12, 2012. DOI 10.1007/s10641-012-9988-2
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