# **Christopher M. Anderson**

Associate Professor of Fisheries Economics School of Aquatic and Fishery Sciences University of Washington Box 355020 Seattle, WA 98195 cmand@uw.edu

### Education

California Institute of Technology, Ph.D., Social Science, 2001

Brown University, Sc.B. Applied Math-Economics (Honors), 1996

## **Appointment**

2012-: Associate Professor of Fisheries Economics, School of Aquatic and Fishery Sciences, University of Washington

2006-2011: Associate Professor of Experimental Economics, Department of Environmental and Natural Resource Economics, University of Rhode Island; duties include Director of the Policy Simulation Laboratory, research, teaching and service.

2000-2006: Assistant Professor of Environmental & Natural Resource Economics, University of Rhode Island

#### Awards

Research Scientist of the Year, URI College of the Environment and Life Sciences, 2005

Teacher of the Year, URI College of the Environment and Life Sciences, 2005

Honorable Mention, Best Paper in Marine Resource Economics 2012. (Scheld, Anderson and Uchida)

### Research and Educational Interests

My research uses the tools of experimental economics, game theory and applied econometrics to understand the decisions underlying natural resource use, and to design methods and institutions for managing them. Market-based applications include using laboratory experiments to evaluate different sealed bid auctions for fishing quota in New Zealand; simultaneous multi-round auctions for oil tract leases in the Gulf of Mexico; and a transition period of leasing in new transferable fishing quota systems, prior to trading permanent allowances, to facilitate price discovery and hampers speculation in the market for the newly created asset. Current projects involve building a new dynamic common pool resource environment for evaluating catch share fishery management, which allows different groups of harvesters can pursue the same fish stock under management rules that present different harvesting incentives; designing theoretically, and testing in the lab and in the field, incentive compatible and second-best mechanisms for attracting public payments in support of ecosystem service goods; and developing a new, rapid assessment indicators metric for wealth generation in developed and developing country fisheries. I teach courses in introductory resource economics at the undergraduate and graduate levels, and a PhD seminar in fishery economics.

### **Publications**

- Anderson, C. M., C. R. Plott, K.-I. Shimomura and S. Granat. 2004. Global Instability in Experimental General Equilibrium: The Scarf Example. *Journal of Economic Theory* 115(2):209-249. (*Lead article*)
- Anderson, C.M. and J. G. Sutinen. 2005. A Laboratory Assessment of Tradable Fishing Allowances. *Marine Resource Economics* 20(1):1-24. (*Lead article*)
- Anderson, C.M. and L. Putterman. 2006. Do Non-strategic Sanctions Obey the Law of Demand? The Demand for Punishment in the Voluntary Contribution Mechanism. *Games and Economic Behavior* 54(1):1-24. (*Lead article*).
- Anderson, C., and D. Holland. 2006. Auctions for Initial Sale of Annual Catch Entitlement. *Land Economics* 82(3):333-52.
- Anderson, C.M. and J.G. Sutinen. 2006. The Effect of Initial Lease Periods on Price Discovery in Laboratory Tradable Fishing Allowance Markets. *Journal of Economic Behavior and Organization* 61(2):164-180.
- Das, C., C. Anderson and S. Swallow. 2009. Estimating Distributions of Willingness to Pay for Heterogeneous Populations. *Southern Economics Journal* 75(3): 593-610. (*Lead article*)
- Anderson, C. 2012. Ambiguity Aversion in Multi-armed Bandit Problems. Theory and Decision 72(1):15-33.
- Scheld, A., C. Anderson and H Uchida. 2012. The Economic Effects of Catch Shares: The Rhode Island Fluke Sector Pilot Program. *Marine Resource Economics* 27(3):203-28. (*Lead article*)
- Minzner, M. and C. Anderson. 2013. Do Warrants Matter? Review of Law and Economics 9(1):169-96.

- Freeman, M. and C. Anderson. 2013. Modeling Effort and Lobbying in a Heterogeneous Common Pool Resource Setting. *Environmental and Resource Economics* 56(3):399-414.
- Anderson, C. and H. Uchida. 2014. An Experimental Examination of Fisheries with Concurrent Common Pool and Individual Quota Management. *Economic Inquiry* 52(2):900-913.
- Uchida, H., H. Wakamatsu, C. Roheim and C. Anderson. 2014. Do Japanese Consumers Care about Sustainable Fisheries: Evidence from an Auction of Ecolabeled Seafood. *Australian Journal of Agricultural and Resource Economics* 58(2):263-80.
- Scheld, A. and C. Anderson. 2014. Market Effects of Catch Share Management: The Case of New England Multispecies Groundfish. *ICES Journal of Marine Science* 71(7):1835-45.
- Anderson, J., C. Anderson, J. Chu, J. Meredith, F. Asche et al. 2015. The Fishery Performance Indicators: A Management Tool for Triple Bottom Line Outcomes. *PLoS ONE* 10(5): e0122809. doi:10.1371/journal.pone.0122809
- Liu, P., C. Anderson and S. Swallow. Threshold Level Public Goods Provision with Multiple Units: Experimental Effects of Disaggregated Groups with Rebates. *Land Economics* 92(3): 515-533.
- Li, Z., C. Anderson and S. Swallow. 2016. Uniform Price Mechanisms for Threshold Public Goods Provision with Complete Information: An Experimental Investigation. *Journal of Public Economics* 144: 14-26.
- Scheld, A. and C. Anderson. 2017. Selective Fishing and Shifting Production in Multispecies Fisheries. *Canadian Journal of Fisheries and Aquatic Sciences* 74(3):388-95. 10.1139/cjfas-2015-0494.
- Freeman, M. and C. Anderson. 2017. Competitive Lobbying over Common Pool Resource Regulations. *Ecological Economics* 134:123-29.
- Wakamatsu, H., C. Anderson, H. Uchida and C. Roheim. 2017. Pricing Ecolabeled Seafood Products with Heterogeneous Preferences: An Auction Experiment in Japan. *Marine Resource Economics* 32(3):277-94.
- Swallow, S., C. Anderson and E. Uchida. 2018. The Bobolink Project: Selling Public Goods from Ecosystem Services Using Provision Point Mechanisms. *Ecological Economics* 143:236-52.
- Guldin, M. and C. Anderson. 2018. Catch Shares and Shoreside Processors: A Costs and Earnings Exploration into the Downstream Sector. *Marine Resource Economics* 33(3):289-307.
- Wakamatsu, M., and C. Anderson. 2018. The Endogenous Evolution of Common Property Management Systems. *Ecological Economics* 154: 211-17.
- Wang, J., C. Anderson, C. Cunningham, R. Hilborn and M. Link. 2019. Does More Fish Mean More Money? Evaluating Alternative Escapement Goals in the Bristol Bay Salmon Fishery. *Canadian Journal of Fishery and Aquatic Sciences*. 76(1): 53-67.
- Anderson, C., J. Meredith, R. Flethoven and M. Fey. 2018. The Regional and Community Size Distribution of Fishing Revenues in the North Pacific. *Marine Fisheries Review* 80(2). doi.org/10.7755/MFR.80.2.1
- Asche, F., T. Garlock, J. Anderson, S. Bush, M. Smith, C. Anderson, J. Chu, K. Garrett, A. Lem, K. Lorenzen, A. Oglend, A. Tveteras, and S. Vanniccini. 2018. Three Pillars of Sustainability in Fisheries. *Proceedings of the National Academy of Sciences*. 10.1073/pnas.1807677115.
- Cunningham, C., C. Anderson, Y.-L. Wang, M. Link and R. Hilborn. A Management Strategy Evaluation of the Commercial Sockeye Salmon Fishery in Bristol Bay, Alaska. *Canadian Journal of Fishery and Aquatic Sciences*. doi.org/10.1139/cjfas-2018-0133
- Anderson, C., M. Krigbaum, M. Arostegui, M. Feddern, J.Z. Koehn, P. Kuriyama, C. Morrisett, C. Allen Akselrud, M. Davis, C. Fiamengo, A. Fuller, Q. Lee, K. McElroy, M. Pons, and J. Sanders. 2018. How Commercial Fishing Effort is Managed. *Fish and Fisheries*. DOI: 10.1111/faf.12339.
- McCluney, J., C. Anderson and J. Anderson. The Fishery Performance Indicators for Global Tuna Fisheries. *Nature Communications*. Forthcoming.

### Select Competitive Grant Support (over \$4.4 million total)

- USDA National Research Initiative, \$615,000 (1/05-12/08), Validating Best Forest Management Practices around Vernal Pools: Amphibian Metapopulations, Harvester Adoption Costs and Public Values (co-PI, with S. Swallow, PI, and co-PIs K. Schnier and P. Paton)
- Rhode Island Sea Grant, \$190,500 (3/06-2/08), Laboratory Testbedding of Transferable Allowance Policies and Institutions: Tradable Output and Input Allowances (PI, with J. Sutinen, co-PI)
- USDA Conservation Innovation Grant, \$595,400 (11/05-10/08), Developing a Market for Nesting Bird Habitat on Active Farm Hayfields (co-PI, with S. Swallow, PI, and Eco-Asset Markets, co-PI)
- Rhode Island Sea Grant, \$190,000 (3/08-2/10), Developing Community-based Fishery Management in New England (co-PI, with H. Uchida, PI)
- USDA/AFRI Rural Development, \$500,000 (11/08-10/11), Developing Ecosystem Services Business as New Revenues for Farms in Communities facing Exurban Development (co-PI, with S. Swallow, PI)

- NOAA/Fisheries, \$227,000 (6/10-12/11), An Economic Analysis of the Rhode Island Fluke Sector Pilot Program and Implications for Upcoming Regional Implementation (PI, with H. Uchida, PI and R. Pollnac, PI)
- USDA/AFRI Small and Medium-Sized Farms, \$500,000 (3/11-2/14), Making Markets for Ecosystem Services for Farms on the Rural Fringe: Vermont Grasslands for Hay and Nesting Songbirds (co-PI, with S. Swallow, PI)
- Pollock Conservation Cooperative Research Center, \$400,000, Modeling Biological and Economic Implications of Layered Management Measures for Bering Sea Groundfish Fisheries, (6/13-5/15) (co-PI with Gunnar Knapp, PI, Matthew Reimer, Ray Hilborn)
- The World Bank, \$100,000, (4/13-3/14) A Global Study of Performance in Tuna Fisheries.
- Bristol Bay Science and Research Institute, \$98,000 (6/13-12/14), Economic Analysis of Bristol Bay Salmon Escapement Goals.
- The Nature Conservancy of Washington, \$90,100 (6/14-12/15) Evaluating the Potential for Economic and Ecological Benefits from a Selective Lingcod Trap Fishery (co-PI, with Timothy Essington).
- NMFS Office of International Programs, \$88,300 (1/15-12/15) Tropical Trawl Fishery Impacts in Asia: Investigating Management Decision Processes in 3 Countries that led to Successful/Unsuccessful Outcomes (co-PI, with Ray Hilborn, PI)
- The Nature Conservancy of Washington, \$90,100 (6/14-12/15) Evaluating the Potential for Economic and Ecological Benefits from a Selective Lingcod Trap Fishery (co-PI, with Timothy Essington).
- FAO. \$30,000 (11/15-7/16) Fisheries Performance Assessment.
- UW Population Health Initiative. \$46,500 (10/17-9/18) Connecting Fishery and Health Policies for Diet-Specific Solutions for Vulnerable Populations (Co-PI, with Eddie Allison, PI, and Ray Hilborn and Jennifer Otten Co-PIs)
- NOAA Alaska Fishery Science Center. \$270,000 (7/18-6/20) Evaluating TAC-Dependent Allocation Rules Using Economically Sophisticated Management Strategy Evaluation. (PI)
- Mac McQuown (Private donor). \$600,000 (7/18-6/21) McQuown Fisheries Status Fund. (PI, with Ray Hilborn, Co-PI)
- NOAA National Sea Grant Aquaculture Initiative. \$465,748 (10/18-9/20) Consumer-focused Strategies for Improving Market Acceptance of Domestic Finfish Aquaculture. (PI, with E. Allison, co-PI)
- FAO/GEF Coastal Fisheries Initiative. \$380,000 (11/18-11/21) Development, Training and Post-Implementation Analysis of a Fisheries Performance Assessment Toolkit. (PI, with R. Hilborn, Co-PI)

### **Major Professional and University Service**

Scientific and Statistical Committee, North Pacific Fishery Management Council Advise Council on economic and social science issues

2013-present

North American Journal of Fisheries Management Associate Editor for Economics, Business and Social Science 2005-2016