Steve J Miller steve.j.miller@colorado.edu www.steveimiller.com Assistant Professor Environmental Studies Program University of Colorado Boulder

## **Academic Employment**

University of Colorado Boulder, Environmental Studies Program

August 2019-Present

Assistant Professor

University of Minnesota, Department of Applied Economics

Assistant Professor September 2015-August 2019

Education

## Ph.D. Environmental Science & Management, UCSB

June 2015

B.S. Computer Science, Stanford University
Ford Award recipient – top graduate in School of Engineering

June 2004

#### Research

\* indicates authorship alphabetical; all others in order of contribution

PEER-REVIEWED PUBLICATIONS

paternity leave: fall 2022

- S. Miller, L.E. Dee, M.T. Hayden, U. Jarrett, A.R. Carrico, K.A. Brauman, E. Aceves-Bueno. 2024. "Telecoupled systems are rewired by risks." *Nature Sustainability*. *In press*.
- S. Miller, E. Clarke, and S.L. Mathews. 2023. "Little evidence of avoided yield loss in US corn when short-term forecasts correctly predict extreme heat." *Environmental Research Letters* 18(12), 124041.
- \*U. Jarrett, S. Miller, and H. Mohtadi. 2023. "Dry spells and global crop production: a multistressor and multi-timescale analysis." *Ecological Economics* 203: 107627. (12pp)
- \*I. Luby, S. Miller, and S. Polasky. 2022. "When and where to protect forests." Nature 609: 89-93.
- S. Miller, K. Chua, J. Coggins, and H. Mohtadi. 2021. "Heat waves, climate change, and economic output." *Journal of the European Economic Association* 19(5): 2658–2694.
- M. Loreau, M. Barbier, E. Filotas, D. Gravel, F. Isbell, S.J. Miller, J. M. Montoya et al. 2021. "Biodiversity as insurance: from concept to measurement and application." *Biological Reviews* 96(5): 2333-2354.
- L. Dee, D. Okamoto, A. Gårdmark, J. Montoya, and S. Miller. 2020. "Temperature variability alters stability and collapse of interacting species populations. *Phil. Trans. R. Soc. B.* **375**: 20190457.
- Miller, S. 2020. "Causal forest estimation of heterogeneous and time-varying environmental policy effects." *Journal of Environmental Economics and Management*. 103:102337. (20pp)
- Aceves-Bueno, E., S. Miller, J. Cornejo-Donoso, and S.D. Gaines. 2020. "Cooperation as a solution to shared resources in territorial use rights in fisheries." *Ecological Applications* 30(1): e02022. (10pp)
- Miller. S., A. Rassweiler, L. Dee, K. Kleisner, T. Mangin, R. Oliveros-Ramos, J. Tam, F. Chavez, M. Niquen, S.E. Lester, M. Burden, S. Gaines, and C. Costello. 2019. "Optimal harvest responses to environmental forecasts depend on resource knowledge and how it can be used." *Canadian Journal of Fisheries and Aquatic Sciences* 76(9): 1495-1502.
- \*Miller, S. and R. Startz. 2019. "Feasible Generalized Least Squares Using Support Vector Regression." Economics Letters 175: 28-31.
- I. De Pellegrin Llorente, H. M. Hoganson, M. Windmuller-Campione, and S. Miller. 2018. "Using a Marginal Value Approach to Integrate Ecological and Economic Objectives across the Minnesota Landscape." Forests 9, 434. (24pp)
- Aceves-Bueno, E., J. Cornejo-Donoso, S. Miller, S.D. Gaines. 2017. "Are Territorial Use Rights in Fisheries (TURFs) Sufficiently Large?" *Marine Policy* 78: 189-195.
- Miller, S. and R.T. Deacon. 2017. "Protecting Marine Ecosystems: Regulation versus Market Incentives." *Marine Resource Economics* 32(1): 83-107.
- \*Miller, S. and B. Nkuiya. 2016. "Coalition formation in fisheries with potential regime shift." *Journal of Environmental Economics and Management* 79:189-207.
- Dee, L.E, S. Miller, L.E. Peavey, D. Startz, D.E. Bradley, S.E. Lester, C. Costello, A.D. Ridlon, R. Gentry, S.D. Gaines. 2016. "Functional diversity of catch mitigates negative effects of temperature variability on fisheries yields." *Proceedings of the Royal Society B* 283 20161435. (9pp)

- Boersma, K.S., L.E. Dee, S. Miller, M.T. Bogan, D.A. Lytle, and A.I. Gitelman. 2016. "Linking multidimensional functional diversity to ecological theory: A graphical hypothesis-driven framework." *Ecology* 97(3):583-593.
- Caron, B, D. Toole, P. Wicks, and S. Miller, 2011. "DigitalOcean: building a platform for scientific collaboration and social media sharing on the Drupal content management system." *Earth Science Informatics* (4):191-196.

#### OTHER PUBLICATIONS

Miller, S. and R.T. Deacon. 2017. "Mobilizing Markets to Reduce Bycatch in Marine Fisheries?" *PERC Policy Series* 57: 1-23.

Deacon, R.T. and S. Miller. 2012. "Aligning Incentives for Fisheries Governance: Can Industry Lead the Reform Process?" *PERC Research Paper* No. 13-3

#### Teaching

## University of Colorado, Boulder

Undergraduate

- Intro. to Developing Environmental Solutions (ENVS 1001)
- Topical Cornerstone: Adapting to a warming world (ENVS 3525)

#### Graduate

Applied Environmental Statistics (ENVS 5100-006)

**University of Minnesota:** Methods of Economic Data Analysis (MS), Programming for Econometrics (MS/PhD), Big Data Methods in Economics (MS/PhD), Natural Resource Economics (PhD)

## Mentoring

University of Colorado

- PhD Advising: Nisha Koppa, Chris Quinn, Naia Ormaza Zulueta (co-advised with Zia Mehrabi)
- Undergraduate Honors: Allison Riley, Ben Woods, Ziad Lien, Allison Riley
- Committee membership
  - PhD: Nicole Bundt (ECON), Wenbo Meng (ECON), Margaret Hegwood (ENVS), Ashley Dancer (ENVS), Claire Powers (ENVS)
  - PhD prelim committee:, Henry Li (EBIO)
  - Undergrad Honors: Ty McCaffrey (EBIO)
- Undergrads engaged in research: S. Logan Mathews, Evelyn Clarke, Ebenezer Solomon

### **Grants Received**

Redistributing the risk and repercussions of climate shocks through trade. PI, NSF \$399,142 (2023) Emergent Risks in Telecoupled Fisheries. PI, RIO Seed Grant \$47,000 (2021)

# Service

Departmental committees (Graduate, Merit Review, Peer Teaching Evaluation, Awards, Chair of ongoing Critical Needs TTT search)

University (RIO Seed Grant, CARTTS grants, Graduate School Dissertation Completion Awards, A&S Natural Sciences Council)

Profession (reviews at various journals, including JEEA, JEEM, JAERE, AJAE, REE, MRE, ERE, JPAM, Food Policy, Ecological Economics, Energy Economics, Land Economics, Nature Climate Change. Served on external review panel for NSF HEGS)