

## Owen Cortner

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[owencortner@gmail.com](mailto:owencortner@gmail.com)

[ocortner.github.io/](https://ocortner.github.io/)

**SUMMARY:** Program manager, educator, and scientist with over ten years of experience in sustainable food systems including a M.S. in agricultural development

### CURRENT ROLE

- 2023-2024 **Postdoctoral Associate**, Yale School of the Environment, New Haven, CT  
Study of Politics and Institutions with Remote Environmental Sensing Lab
- Combine social, economic, and environmental data to analyze the carbon and livelihood implications of different land uses in Bahia, Brazil
  - Catalogue Jurisdictional REDD+ policies to show how different governments reduce deforestation and distribute carbon credit benefits
  - Mentor four doctoral students in remote sensing & policy analysis

### EDUCATION

- 2018-2023 **Ph.D., Environmental Systems Science**, Environmental Policy Lab  
ETH Zürich, Switzerland  
Dissertation: "Collectives to capital: Institutional, forest, and farm transitions in Georgia"
- 2013-2016 **M.S., International Agricultural Development**, Specialization in Sustainable Livestock Production  
University of California, Davis, CA
- 2006-2011 **B.S., Environmental Science**, Emphasis Water Resources, Minor in Mathematics, *Distinction in University Honors*  
New Mexico State University, Las Cruces, NM

### RESEARCH & PROGRAM MANAGEMENT

- 2018 **Pre-doctoral Fellow**, Boston University, Boston, MA  
Global Development Policy Center
- Researched the potential impact of blockchain technology on agricultural supply chains traceability and sustainability
  - Organized the Center's first land use and livelihoods workshop, including invitations to participants from 10 institutions including Harvard, the World Bank, and the Environmental Defense Fund
- 2017 **Research Analyst, Food & Agriculture**, Datu Research, Durham, NC
- Pinpointed gaps in cover crop economics research for a large foundation

- Co-authored report, "Sustainable agriculture in Cuba: Status, challenges, and opportunities" to inform a client's land-based conservation strategy
- Established a \$1,000 scholarship for graduate students in environmental data science to attend Soil and Water Conservation Society meeting
- Analyzed the proposal capture process and expedited the deployment of a novel network visualization tool to prepare the firm to gain new clients
- Helped win a successful \$150K grant from a global NGO to scale up their successful projects in health, education, conflict, and development

2014-2017 **Program Analyst, Graduate Student Assistant** USAID Horticulture Innovation Lab, Davis, CA

- Oversaw a \$45K yearly grant program partnering graduate students with NGOs in food-insecure communities
- Led students in conducting trainings and co-developing technologies and practices for better horticultural production in developing countries
- Spearheaded a \$750K call for proposals for socioeconomic analysis of animal-horticulture systems
- Reviewed over 50 global horticultural research proposals

2013-2015 **Co-investigator**, University of California, Davis

- Completed a rapid survey of dairy production problems in a rural northern municipality in Nicaragua
- Co-facilitated a workshop in Spanish focused on silage and cattle nutrition to the municipality's top dairy farmers and agricultural extension specialist

2010 **Attached Researcher**, World Agroforestry Center, Kigali, Rwanda

- Collaborated with a team of Kenyan and Rwandan scientists to analyze biophysical and socio-economic characteristics of runoff water harvesting ponds for small-scale irrigation of horticultural crops
- Surveyed 15 farms across three provinces
- Produced rapid assessment report to inform Rwanda Irrigation Master Plan

2007-2009 **Research Assistant**, New Mexico State University, Las Cruces, NM

- Supported a multi-year chile pepper yield and soil nutrient project
- Designed field sampling approach, collected and processed soil and plant samples, conducted pH and electrical conductivity analyses
- Maintained laboratory operations and standards

## LEADERSHIP & SERVICE

2024 **Yale University**

- Co-drafted report "Artificial Intelligence at the School of the Environment"
- Presented findings to provost's Yale Task Force on Artificial Intelligence

2019-2023 **ETH Zurich**

- Co-organized IDANE+ Swiss Science-Policy Dialogue on "Forests, trees, and partnerships – from knowledge to policy." 27 October 2022
- Co-led seminar series on Food Systems Geography, Economics, and Policy

2015-2016 **University of California, Davis**

- Acknowledged with the Judy Irwin community award for providing outstanding service to the graduate program in 2015

**PROFESSIONAL DEVELOPMENT**

- Environmental Leadership and Mentoring course, Yale School of the Environment, September 2023-April 2024
- 8th Annual Duck Family Graduate Workshop on Environmental Politics and Governance, University of Washington, May 2022
- Geospatial Data Analysis Short Course, National Socio-Environmental Synthesis Center at University of Maryland, 2019
- UC Cooperative Extension Multi-Species Grazing Academy, Auburn, CA, 2016
- Practicum at UC Davis Meat Lab; kill floor and retail butchering, Davis, CA, January-March 2015

**FOOD SYSTEMS**

- UC Cooperative Extension Multi-Species Grazing Academy, Auburn, CA, 2016
- Practicum at UC Davis Meat Lab; kill floor and retail butchering, Davis, CA, January-March 2015
- Dairy goat cooperative; Davis, CA; August 2014-December 2016

**LANGUAGES:** Portuguese (Conversational), Spanish (Basic)

**FORTHCOMING PUBLICATION**

**Cortner, O.**, Wuepper, D., Gollnow, F., Stigler, M., Torchinava, P., Garrett, R. D. "Effects of varied political institutions and armed conflict on forest degradation in the Caucasus." In review at Forest Policy and Economics.

**PEER-REVIEWED PUBLICATIONS**

- 1) Gollnow, F., **Cortner, O.**, Chen, S., Olofsson, P., Garrett, R. D. 2024. "Georgia's potentials for sustainable intensification, increasing food security and rural incomes." Environmental Research: Food Systems. 2(1): 015005. <https://doi.org/10.1088/2976-601X/ad8bc8>

- 2) Stritih, A., Senf, C., Kuemmerle, T., Munteanu, C., Dzadzamia, L., Stritih, J., Matijašić, D., **Cortner, O.**, Seidl, R. 2024. "Same, but different: similar states of forest structure in temperate mountain regions of Europe despite different social-ecological forest disturbance regimes." *Landscape Ecology*, 39, 114. <https://doi.org/10.1007/s10980-024-01908-x>
- 3) **Cortner, O.**, Chen, S., Olofsson, P., Gollnow, F., Torchinava, P., Garrett, R.D. 2024. "Exploring natural and social drivers of forest degradation in post-Soviet Georgia." *Global Environmental Change*, 84: 102775. <https://doi.org/10.1016/j.gloenvcha.2023.102775>
- 4) Garrett, R.D., Ryschawy, J., Bell, L.W., **Cortner, O.**, Ferreira, J., Garik, A.V.N., Gil, J.D.B., Klerkx, L., Moraine, M., Peterson, C.A., dos Reis, J.C., and Valentim, J.F. 2020. "Drivers of decoupling and recoupling of crop and livestock systems at farm and territorial scales." *Ecology and Society* 25(1): 24. <https://doi.org/10.5751/ES-11412-250124>
- 5) **Cortner, O.**, Garrett, R.D., Valentim, J.F., Ferreira, J., Niles, M.T, Reis, J., and Gil, J. 2019. "Perceptions of integrated crop-livestock systems for sustainable intensification in the Brazilian Amazon." *Land Use Policy*, 82: 841-853. <https://doi.org/10.1016/j.landusepol.2019.01.006>
- 6) Garrett, R.D., Niles, M.T., Gil, J.D.B., Gaudin, A., Chaplin-Kramer, R., Assmann, A., Assmann, T., Brewer, K., de Faccio Carvalho, P. C., **Cortner, O.**, Dynes, R., Garbach, K., Kebreab, E., Mueller, N., Peterson, C., Reis, J. C., Snow, V., and Valentim, J. 2017. "Social and ecological analysis of integrated crop livestock systems: Current knowledge and remaining uncertainty." *Agricultural Systems*, 155: 136–146. <https://doi.org/10.1016/j.agsy.2017.05.003>

## PRESENTATIONS AND POSTERS

- 1) "Effects of shifting political institutions and armed conflict on forest degradation in the Caucasus." Full oral presentation at Global Land Programme's 5<sup>th</sup> Open Science Meeting, Oaxaca, Mexico. November 4-8, 2024
- 2) "Institutions and their effects on land cover and land use change in Georgia." Political Economy of Climate & Environment conference. Los Angeles, CA. August 30, 2023
- 3) "Forest degradation drivers in post-Soviet Georgian mountain landscapes." International Mountain Conference. Focus Session: Science-based pathways to sustainability in mountains. Innsbruck, Austria. September 13, 2022
- 4) "Forest degradation in Georgia: Social and biophysical drivers." Bratislava Conference on Earth System Governance. Panel on conservation governance and institutions. Virtual. September 7, 2021

- 5) "Collectives to capital: Forest, farm, and finance transitions in Georgia." ETH for Development Ph.D. Seminar: Research for Development. Virtual. November 27, 2020
- 6) "What role can blockchain play in improving environmental governance in agricultural supply chains?" Global Land Programme 4th Open Science Meeting. Bern, Switzerland. April 25, 2019
- 7) "Perceptions of integrated crop-livestock systems for sustainable intensification in the Brazilian Amazon". Land Use and Livelihoods Initiative workshop at the Global Development Policy Center at Boston University. December 7, 2018
- 8) "Producer perceptions of farm-level crop-livestock integration". Embrapa workshop: "Understanding barriers to the wide-scale adoption of integrated agricultural systems and potential impacts". Belém, PA, Brazil. August 17, 2017
- 9) "Thinking small: Adaptive local management of diverse dairy cattle systems". Poster with Richardson, B. and Short, J. Society for Range Management Annual Meeting. Sacramento, CA. February 2, 2015

## TEACHING

- 2019      **Guest lecturer**, IR 500: Rural Development in the Global South  
"Scale and supporting institutions in rural development" – upper division international relations course. Invited by Instructor Barry Shelley, Frederick S. Pardee School of Global Studies at Boston University. March 25, 2019
- 2014      **Student Docent**, Garden and Farm-Based Experiential Education Methods, University of California, Davis, Davis, CA  
- Organized weekly tours for 20-100 K-12 students focused on experiential outdoor education. Wrote "The 5 Senses Song"
- 2014      **Graduate Student Instructor**, International Programs, UC Davis  
- Led 16 students from Iwate Agricultural Junior College in Japan through a rigorous one-week program to better understand the livestock value chain in Northern California
- 2014      **Teaching Assistant**, Dept. of Sociology, UC Davis  
"Sexual Stratification & Politics" – upper division course
- 2014      **Teaching Assistant**, Dept. of Environmental Science & Policy, UC Davis  
"Environmental Impact Assessment" – upper division course
- 2013      **Teaching Assistant**, Student Academic Success Center, UC Davis  
"American Culture and the University Experience" – introductory course for international students beginning their studies

2012-2013 **Assistant Coordinator, English Teaching Assistant**, U.S. Fulbright Program, Malaysia

- Managed and coached 75 Fulbright grantees in coordination with the U.S. State Department and Malaysian Ministry of Education
- Mediated disputes, planned professional development workshops, and conducted site visits to support grantees
- Implemented English language co-curricular and enrichment activities for 150 rural primary school students

**SOFTWARE:** R, Python, GitHub, Google Earth Engine, QGIS, NVivo