

Owen Cortner

owen.cortner@yale.edu

ocortner.github.io/

RESEARCH FOCI: land use, forest degradation, sustainable agricultural systems, environmental governance and policy, social-ecological systems

CURRENT ROLE

- 2023- **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 understand how different governments reduce deforestation and distribute benefits from carbon credits
 - 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

FORTHCOMING

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. Accepted manuscript.

<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." In press. 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) Forthcoming: Accepted abstract. "Effects of shifting political institutions and armed conflict on forest degradation in the Caucasus" for full oral presentation at Global Land Programme's 5th 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

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

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 conservation strategy an environmental NGO

- 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

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

LANGUAGES: Portuguese (Conversational), Spanish (Basic)

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