

Claire C. Karban

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Education

- 2022 **University of Colorado, Boulder**, Department of Ecology & Evolutionary Biology
Ph.D., Ecology and Evolutionary Biology, *Advisor*: Dr. Nichole Barger
- *Doctoral dissertation*: Biotic and abiotic barriers to dryland restoration
- 2013 **Carleton College**, Department of Environmental Studies, *cum laude, dept. distinction*
B.A. Environmental Studies, *concentration*: conservation & development
- *Undergrad thesis*: Nuclear Power and Environmental Justice: A Mixed-Methods Study of Risk, Vulnerability, and the Victim Experience

Grants & Fellowships

- 2022 – 2024 USGS Mendenhall Postdoctoral Fellowship (\$158,726)
2022 CU Boulder EBIO Dept. Summer Fellowship (\$8,622)
2020 Fellowship in Ecological Restoration, Garden Club of America (\$8,000)
2018 – 2020 CU Boulder EBIO Dept. Graduate Student Research Grant (\$7,000)
2020 Beverly Sears Student Research Grant, CU Boulder (\$1,000)
2019 Graduate School Domestic Travel Grant (\$300)
2018 Canyonlands Research Center Graduate Scholars Grant (\$3,000)
2018 UGGS Group Grant for Non-academic Careers Panel, CU Boulder (\$800)
2012 Environmental Studies Summer Internship Grant, Carleton College (\$3,000)

Publications

- 2022 **Karban, C. C.**, Miller, M. E., Herrick, J. E., & Barger, N. N. Consequences of Piñon-Juniper Woodland Fuel Reduction: Prescribed Fire Increases Soil Erosion While Mastication Does Not. *Ecosystems*, 25(1), 122-135. doi: [10.1007/s10021-021-00644-6](https://doi.org/10.1007/s10021-021-00644-6)
- 2020 Balch, J. K., Iglesias, V., Braswell, A. E., Rossi, M. W., Joseph, M. B., Mahood, A. L., ... , **Karban, C.**, ... & Travis, W. R. Social-environmental extremes: Rethinking extraordinary events as outcomes of interacting biophysical and social systems. *Earth's Future*, 8(7), e2019EF001319. doi: [10.1029/2019EF001319](https://doi.org/10.1029/2019EF001319)
- 2019 Schroeter, I. M., Forrester, C. C., Brigham, L. M., Fried, E. R., Grabenstein, K. C., **Karban, C. C.**, & McDermott, M. T. Diverging from the Dogma: A Call to Train Creative Thinkers in Science. *Bulletin of the Ecological Society of America*, 100(1), 1-7. doi: [10.1002/bes2.1463](https://doi.org/10.1002/bes2.1463)
- 2010 Karban, R., **Karban, C.**, Huntzinger, M., Pearse, I., Crutsinger, G. Diet mixing enhances the performance of a generalist caterpillar, *Platyrepia virginialis*. *Ecological Entomology*, 35(1), 92-99. doi: [10.1111/j.1365-2311.2009.01162.x](https://doi.org/10.1111/j.1365-2311.2009.01162.x)

Selected Academic & Extension Presentations

- 2022 **Karban, C.**, Mann, R.K., Duniway, M., Faist, A., Hoover, D., Barger, N. "Ecosystem service trade-offs in a highly degraded semi-arid grassland restoration. Ecological society of America Annual Meeting. Oral Presentation, Montreal, Quebec, CA.

- 2021 **Karban, C.**, Barger, N. N. "Suitable microsite identification for scalable precision restoration." *Ecological Society of America Annual Meeting*. Oral Presentation, Virtual.
- 2021 **Karban, C.**, Lauria, M., Such, K., Correll, N., Heckman, C., Barger, N. "In situ sensing to overcome microsite limitation in dryland restoration." *World Conference on Ecological Restoration*. Oral Presentation, Virtual.
- 2019 **Karban, C.**, Mann, R.K., Faist, A., Hoover, D., Duniway, M., Barger, N. "Vegetation response in reclamation studies on highly disturbed lands across the Colorado Plateau," *Biennial Conference of Science & Management on the Colorado Plateau*, Oral Presentation, Flagstaff, AZ.
- 2019 **Karban, C.**, Duniway, M., Faist, A., Hoover, D., Mann, R.K., Barger, N.N. "Overcoming barriers to restoration in highly degraded semiarid rangelands on the Colorado Plateau," *Biennial Conference of Science & Management on the Colorado Plateau*, Poster, Flagstaff, AZ.

Professional Experience

- 2022 – current **USGS Southwest Biological Science Center**, Postdoctoral Fellow. Advisors: Dr. Seth Munson and Dr. Jeff Lovich. Assessing the environmental impacts of solar energy development in the southwestern U.S.
- 2015 – 2017 **Crested Butte Land Trust**, Outreach and Communications Coordinator. Managed print and electronic communication and messaging for diverse stakeholders.
- 2014 – 2015 **Rocky Mountain Biological Laboratory**, Research Assistant. Advisor: Dr. Carol Boggs. Studied an evolutionary trap and metapop. dynamics in native butterflies.

Teaching Experience

- Spring 2022 **Conservation Biology Recitation**, EBIO 3040, CU Boulder. Graduate Teaching Assistant. Developed and taught case studies and discussions on engage upper-division students in current issues and concepts in conservation biology.
- Fall 2018 – Spring 2019 **Principles of Ecology Lab**, EBIO 2040, CU Boulder. Graduate Teaching Assistant. Mentored undergraduates in developing independent original research projects to test hypotheses, collect data, analyze data, while learning basic ecological concepts. Developed R exercises for approachable coding practice to complement labs.
- Fall 2017 – Spring 2018 **General Biology Lab**, EBIO 1230, 1240, CU Boulder. Graduate Teaching Assistant. Developed lesson plans and quizzes based on existing curriculum covering systematics, physiology and anatomy, genetics, plant biology, and ecology.

Professional Service

- 2020 – 2021 **Graduate Representative**, EBIO undergraduate club, EBIO Dept., CU Boulder, Acted as liaison between undergraduates and the graduate/extended department.
- 2020 – present **IT Coordinator**, Colloquium Committee, EBIO Dept., CU Boulder, Managed the zoom call for virtual weekly speakers and trouble shot any IT issues.
- 2017 **Organizer**, Non-Academic Careers Panel, EBIO Dept., CU Boulder, Organized a panel for non-academic career paths, invited speakers, organized logistics, funded event.

Undergraduate Mentees

2021 - 2022	Emma Ciafone, ENVS major, CU Boulder
2020 - 2021	Andrea Clement, EBIO and Geography majors, CU Boulder
2020	Erin Katie Jaynes, EBIO and ENVS majors, CU Boulder
2020	David Shenfeld, EBIO major, CU Boulder
2020	Nathan Murray, Biochemistry major, CU Boulder
2019 - 2020	Sallie Tucker, EBIO major, CU Boulder
2019	Rachael Merkt, EBIO major, CU Boulder
2019	Melinda Steuber, EBIO major, CU Boulder
2019	Fox Freeman, EBIO major, CU Boulder
2018	Alex Sandberg-Bernard, EBIO major, CU Boulder
2018 - 2019	Cloe Dickson, EBIO major, CU Boulder