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website: https://ebeaury.wixsite.com/evelynbeaury; twitter: @evecologist

**Education**

2022 PhD, University of Massachusetts Amherst

Organismic and Evolutionary Biology, advised by Dr. Bethany Bradley

*The spatial distribution of invasive plant presence, abundance, and impact*

2017 B.A., University of Colorado Boulder

Ecology and Evolutionary Biology with a minor in French

Included courses abroad in Paris, France and the Galápagos Islands

GPA: 3.91 (*summa cum laude*)

**Research Experience**

2022- Postdoctoral Research Associate, High Meadows Environmental Institute,

Department of Ecology and Evolutionary Biology, Princeton University

Spatially co-optimizing land-based climate mitigation strategies to maximize carbon storage, biodiversity conservation, and societal benefits. Advised by Dr.

Jonathan Levine.

2021 NSF Graduate Research Intern, United States Geological Survey

Modeling the distribution of invasive plant abundance to inform stakeholder needs. Advised by Dr. Catherine Jarnevich and Dr. Ian Pearse.

1. -2021 Research Assistant, University of Massachusetts Amherst

‘*The spatial distribution of invasive plant presence, abundance, and impact’.* PhD dissertation advised by Dr. Bethany Bradley.

1. -2017 Undergraduate Honors Thesis, University of Colorado Boulder

*‘Vegetative response to resource manipulations in the alpine tundra’*. Honors thesis advised by Dr. Timothy Seastedt and the Niwot Ridge LTER Program.

2014-2017 Research Assistant and Field Technician, University of Colorado Boulder

Assisted lab and field research on biocrust response to climate manipulations, microbial ecology of tropical invertebrates (acknowledged in Hammer et al. 2016, *Proc B),* and restoration of grasslandimpacted by invasive tall oatgrass.

**Peer-Reviewed Publications**

In press Ibáñez, I., Petri, L., Barnett, D.T., **Beaury, E.M.**, Blumenthal, D.M., Dukes,

J.S., Corbin, J.D., Early, R., Pearse, I.S., Sorte, C.J.B, Vilà, M., Bradley, B.A. Combining local, landscape, and regional geographies to assess plant community vulnerability to invasion impact. *Ecological Applications.*

2023 Petri, L., **Beaury, E.M.**, Corbin, J., Peach, K., Sofaer, H., Pearse, I.S., Early,

R., Barnett, D.T., Ibáñez, I., Peet, R.K., Schafale, M., Wentworth, T.R., Vanderhorst, J.P., Zata, D.N., Spyreas, D., Bradley, B.A. SPCIS: Standardized Plant Community with Introduced Status Database. *Ecology* e3947.

2022 Bradley, B.A., **Beaury, E.M.**, Fusco, E.J., Lopez, B.E. Invasive species

policy must embrace a changing climate. *BioScience,* https://doi.org/10.1093/biosci/biac097

2022 Hodžić, J., Pearse, I., **Beaury, E.M.**, Corbin, J.D. & Bakker, J.D. Root

hemiparasitic plants are associated with more even communities across North America. *Ecology.* https://doi.org/10.1002/ecy.3837.

2022 Lopez, B.E., Allen, J.M., Dukes, J.S., Lenoir, J., Vila, M., Blumenthal, D.M.,

**Beaury, E.M.**, Fusco, E.J., Laginhas, B.B., Morelli, T.L., O’Neil, M.W.,

Sorte, C.J.B, Maceda-Veiga, A., Whitlock, R., Bradley, B.A. Biological

invasions interact with global environmental change to create ecological surprises. *PNAS*. 119.22: e2117389119.

2022 Bradley, B.A., **Beaury, E.M.**, Fusco, E.J., Munro, L., Coville, W., Kesler, B.,

Parker, J., Brown-Lima, C., & Olmstead, N. Breaking down barriers to consistent, climate-smart regulation of invasive plants - a case study in the Northeast U.S. *Ecosphere.* https://doi.org/10.1002/ecs2.4014

2021 **Beaury, E.M.**, Patrick, M., & Bradley, B.A. (2021). Invaders for sale: the

ongoing spread of invasive species by the plant trade industry. *Frontiers in*

*Ecology and the Environment.* doi:10.1002/fee.2392

*\*Press coverage in the* [*Smithsonian Magazine*](https://www.smithsonianmag.com/smart-news/worlds-worst-invasive-weed-sold-us-garden-centers-180978481/)*,* [*Miami Herald*](https://www.miamiherald.com/news/nation-world/national/article253802483.html)*, and others*

2021 **Beaury, E.M.**, Fusco, E.J., Allen, J.M., & Bradley, B.A. (2021) Plant regulatory

lists in the U.S. are reactive and inconsistent. *Journal of Applied*

*Ecology*, 58, 1957– 1966. <https://doi.org/10.1111/1365-2664.13934>

*\*Press coverage in* [*The Wall Street Journal*](https://www.wsj.com/articles/invasive-insects-and-plants-spread-northward-11628427602)

2021 **Beaury, E.M**., Finn, J.T., Corbin, J.D., & Bradley, B.A. (2021) Habitat

covariates do not artificially cause a negative correlation between native

and non-native species richness. *Ecology Letters,* 24: 1735-1737.

https://doi.org/10.1111/ele.13782

2021 Morelli, T.L., Brown-Lima, C., Allen, J., **Beaury, E.M.**, Fusco, E.J., Barker-

Plotkin, A., Laginhas, B.B., Quirion, B., Griffin, B., McLaughlin, B., Munro, L., Olmstead, N., Richburg, J., Bradley, B.A. (2021). Translational Invasion Ecology: Bridging research and practice to address one of the greatest threats to biodiversity. *Biological Invasions*. https://doi.org/10.1007/s10530-021-02584-7

2021 Vilà, M., **Beaury, E.M.**, Blumenthal, D., Bradley, B.A., Early, R., Laginhas,

B.B., Trillo, A., Dukes, J.S., Sorte, C.J.B., & Ibáñez, I. (2021).

Understanding the combined impacts of weeds and climate change on

crops. *Environmental Research Letters, 16*(3), 034043*.*

https://doi.org/10.1088/1748-9326/abe14b

2020 Seastedt, T., White, C.T., Tucker, C., **Beaury, E**.**M.**, Concilio, A., Gasarch, E.,

Haggans, V., & J. Smith. (2020). Decadal dynamics of dry alpine meadows under nitrogen and phosphorus additions. *Plant Ecology* 221, 647–658. https://doi.org/10.1007/s11258-020-01039-8.

2020 Wallingford, P.D., Morelli, T.L., Allen, J.M., **Beaury, E.M.**, Blumenthal, D.M.,

Bradley, B.A., Dukes, J. S., Early, R., Fusco, E.J., Goldberg, D., E., et al. Adjusting the lens of invasion biology to focus on the impacts of climate-driven range shifts. *Nature Climate Change*. 10, 398–405. <https://doi.org/10.1038/s41558-020-0768-2>.

2020 **Beaury, E.M.**, Finn, J.T., Corbin, J.D., Barr, V. & Bradley, B.A. (2020). Biotic

resistance to invasion is ubiquitous across ecosystems of the United States. *Ecology Letters*, 23: 476-482. doi:10.1111/ele.13446

2019 **Beaury, E.M.,** Fusco, E.J., Jackson, M.R., Laginhas, B.B., Morelli, T.L., Allen,

J.M., Pasquarella, V.J., & Bradley, B.A. (2019). Incorporating climate change into invasive species management: insights from managers. *Biological Invasions*, 22: 233. [doi.org/10.1007/s10530-019-02087-6](https://doi.org/10.1007/s10530-019-02087-6).

**Manuscripts in Progress**

In Review **Beaury, E.M.**, Jarnevich, C., Pearse, I., Evans, A.E., Teich, N., Engelstad, P.,

LaRoe, J., Bradley, B.A. Modeling habitat suitability across different levels invasive plant abundance.

In Review **Beaury, E.M.**, Sofaer, H.R., Early, R., Pearse, I.S., Blumenthal, D.M., Corbin,

J.D., Diez, J., Dukes, J.S., Barnett, D.T., Ibáñez, A., Petri, L., Vilà, M., Bradley, B.A. Invasive plant impacts vary across native plant communities of the continental U.S.

In Review Fusco, E.J., **Beaury, E.M.**, Bradley, B.A., Cox, M., Jarnevichm C.S., Mahood,

A.L., Nagy, R.C., Nietupski, T., Halofsky, J.E. The invasive plant data

landscape: A synthesis of spatial data and applications for research and management.

In Review Fertakos, M.E., **Beaury, E.M.**, Ford, N., Bradley, B.A. Documenting the

spatiotemporal history of native and introduced plant sales in the conterminous U.S.

In Review **Beaury, E.M.**, Allen, J.M, Bradley, B.A., Evans, A., Fertakos, M.E.,

Pfadenhauer, W.G., Nelson, M. Horticulture could facilitate invasive plant range infilling and several cases of range expansion with climate change.

In Review Evans, A.E., Jarnevich, C.S., **Beaury, E.M.**, Engelstad, P.S., Teich, N.B.,

LaRoe, J., Bradley, B.A. Shifting hotspots: Climate change projected to

drive contractions and expansions of invasive plant abundance ranges.

**Grants, Fellowships, and Awards**

2021 Team Climate Adaptation Leadership Award, Fish and Wildlife Service

2021 Ecological Society of America Graduate Student Policy Award

2020 Simberloff Award for Outstanding Presentation, Ecological Society of America

2020-2021 National Science Foundation Graduate Research Internship Program ($5,000)

2019 National Science Foundation Graduate Research Fellow ($34,000/year)

2019 UMass College of Natural Sciences Teaching Fellow ($3,000)

2019 Invited Student Workshop on Socio-Environmental Synthesis at SESYNC

2018 Best Student Presentation Award, Northeast Arc Users Group Conference

2018-2019 Northeast Climate Adaptation Science Center Fellow

2013-2017 Chancellor’s Achievement Scholarship, University of Colorado Boulder

2016-2017 Undergraduate Research Opportunities Program Grant

2016 Marian and Gordon Alexander Fellowship for Montane Research

2013-2017 University of Colorado Dean’s List

**Invited Talks**

2023 **Beaury, E.M.** *Seeding ecosystems of the future*. Northeast Native Plant

Workshop, hosted by HalfMoon Education. Oral presentation.

2022  **Beaury, E.M.** *The spatial ecology of plant invasions in a changing climate*. UC

Davis Department of Plant Sciences. Oral presentation.

2022 **Beaury, E.M.** *Seeding ecosystems of the future*. New Jersey Strike Team

Annual Conference. Oral presentation.

2022 Fusco, E.J., **Beaury, E.M.** *The case for consistent climate-smart regulations*

*across jurisdictions.* Montana Invasive Species Council Webinar Series. Joint oral presentation.

2022 **Beaury, E.M.** *Preventing the spread of invasive plants via regional*

*collaborations.* Central Plant Board Conference. Oral presentation.

2022 **Beaury, E.M.** *Seeding ecosystems of the future.* Master Gardeners of

Massachusetts. Oral presentation.

2022 **Beaury, E.M.** *Big data solving big problems: Getting a large scale perspective*

*on invasive species and climate change.* Life Science Cafe. Oral presentation.

2021 **Beaury, E.M.** *Gardening as an ecological tool in a changing climate.*

Massachusetts Pollinator Network. Oral presentation.

2021 **Beaury, E.M.**, Patrick, M., & Bradley, B.A. *Invaders for sale: the ongoing*

*spread of invasive species by the plant trade industry*. Minnesota Noxious

Weed Advisory Committee. Oral presentation.

2021 **Beaury, E.M.** *Gardening as an ecological tool in a changing climate.* Amherst

Garden Club Monthly Meeting. Oral presentation.

2021 **Beaury, E.M.** *Researcher Perspectives on Open Data & Open Scholarship*.

Association of College and Research Libraries New England Chapter Roundtable. Invited Panelist.

2018 **Beaury, E.M.**,Patrick, M., & Bradley, B.A.*The Role of Invasive Species in the*

*Plant Trade Industry*. Meeting of the National Association of Invasive Plant

Councils. Oral presentation.

**Conference Presentations**

2022 **Beaury, E.M.**, Smith, J., Levine, J. Global spatial potential for implementing

land-based climate solutions. British Ecological Society Annual Conference. Poster.

2022 **Beaury, E.M.**, Allen, J., Evans, A., Fertakos, M., Pfadenhauer, W., Nelson, M.,

Bradley, B.A. Horticulture facilitates invasive plant range infilling and several cases of range expansion with climate change. Ecological Society of American Annual Conference. Oral presentation.

2022 **Beaury, E.M.** Ornamental invaders in a warming climate. Northeast Regional

Invasive Species and Climate Change Management Network Symposium.

Oral presentation.

2021 **Beaury, E.M.** Progress towards regional coordination of invasive species policy

and management. North American Invasive Species Management Association Annual Conference. Oral presentation.

2021 **Beaury, E.M.**, Sofaer, H., Early, R., Barnett, D., Blumenthal, D., Corbin, J.D.,

Diez, J., Dukes, J., Ibáñez, I., Pearse, I., Petri, L., Bradley, B. *Macroscale patterns in the per capita effects of plant invasions.* Ecological Society of America Annual Conference. Oral presentation.

2020 **Beaury, E.M.**, Patrick, M., & Bradley, B.A. *Invaders for sale: the ongoing*

*spread of invasive species by the plant trade industry*. North American Invasive Species Management Association Conference. Oral presentation.

2020 **Beaury, E.M.**, Patrick, M., & Bradley, B.A. *Invaders for sale: the ongoing*

*spread of invasive species by the plant trade industry*. Ecological Society

of America Annual Conference. Oral presentation.

***Simberloff Award for Outstanding Presentation.***

2020 **Beaury, E.M.**, Finn, J.T., Corbin, J.D., Barr, V., & Bradley, B.A. *Biotic*

*resistance to invasion across ecosystems of the United States.* International Association of Landscape Ecology Annual Conference. Oral presentation.

2019 **Beaury, E.,** B. Bradley, B. Laginhas, E. Fusco, T. Morelli. *Incorporating*

*climate change into invasive species management – insights from*

*managers.* North American Invasive Species Management Association

Annual Conference. Oral presentation.

2019 **Beaury, E.,** B. Bradley, B. Laginhas, E. Fusco, T. Morelli. *Incorporating*

*climate change into invasive species management – insights from managers.* 75th Northeast Association of Fish and Wildlife Agencies Conference. Oral presentation.

2019 **Beaury, E.** *The Role of Invasive Species in the Plant Trade Industry*. UMass

School of Earth and Sustainability Student Showcase. Poster.

2018 **Beaury, E.** *The Role of Invasive Species in the Plant Trade Industry.*

Northeast Arc Users Group Conference. Poster.

***Best Student Presentation****.*

2016 **Beaury, E.**, K. Bennett, J. Klimpl, W. Gabbert, K. Pang, and C. White.

*Grassland Invertebrate Communities in relation to Tall Oatgrass Invasion*. Restoration Management Plan Presented to Boulder County Open Space and Mountain Parks. Oral presentation.

2015 **Beaury, E**., Ho, C., Marlow, H., and A. Potsch, *Impacts and Management of*

*the Invasive Species Cirsium arvense in the Plains of Colorado.* University of Colorado Boulder Ecology and Evolutionary Biology Student Presentations. Poster.

**Professional Service and Outreach**

2022- Postdoc Representative, ‘Climate for All’ committee to increase inclusion in

Ecology and Evolutionary Biology, Princeton University

2022- Officer, University Postdoctoral Council to serve Postdoctoral Fellows,

Princeton University

2020 Co-author of the ‘Action Plan to Institute Structural Changes to Support the

UMass Black and Brown Community’, University of Massachusetts Amherst

2020 President of the Organismic and Evolutionary Biology Graduate Program,

University of Massachusetts Amherst

2020 Co-facilitator of the Organismic and Evolutionary Biology Graduate Program

forum on anti-racism

2019- Associate Editor*, Management of Biological Invasions*. Reviewer *Nature,*

*Ecology Letters, Bioscience, Biological Invasions, NeoBiota, Rethinking*

*Ecology, Restoration Ecology*

2017- Leadership Team, Northeast Regional Invasive Species and Climate Change

Management Network (https://www.risccnetwork.org/)

Conduct and facilitate multi-stakeholder translational science, outreach, and communication related to invasive species and climate change; co-organized multiple webinars, workshops, and two symposia.

Consult northeast Invasive Plant Councils on updating plant regulations to adapt to a changing climate.

**2021 Association of Fish and Wildlife Climate Adaptation Leadership Award**

2019 Invited Researcher, Student Workshop on Socio-Environmental Synthesis

Training in interdisciplinary research, science policy, and science communication at the National Socio-Environmental Synthesis Center (SESYNC).

2015 Research Volunteer, Denver Botanic Gardens

Shadowed research staff, digitized herbarium data, and presented exhibits.

2015 Environmental Education Intern, Shaver’s Creek Environmental Center

Planned, marketed, and delivered educational and recreational programming.

**Science Communication**

2022 Author, Pennsylvania iMapInvasives newsletter: ‘Limiting the Spread of

Invasive Ornamental Plants’. https://tinyurl.com/srahp9ek.

2021 Nominated for the Northeast Outdoor Writers Association Award

2017- Outreach through the Northeast Regional Invasive Species and Climate

Change Management Network (https://www.risccnetwork.org/).

Translate research to create outreach materials for invasive species managers

and homeowners. Published outreach materials:

Allen, J.A., **Beaury, E.M.**, Mazzuchi, J., Nelson, M., O’Uhuru, A., Bradley, B.A. (2022). “Do Not Sell! Ornamental invasive plants to avoid with climate change”.

Bradley, B.A., Bayer, A., Griffin, B., Joubran, S., Laginhas, B.B., Munro, L., Talbot, S., Allen, J.M., Baker-Plotkin, A., **Beaury, E.M.**, et al. (2020). “Gardening with climate-smart native plants in the Northeast”.

**Beaury, E.M.**, Barker-Plotkin, A., Brown-Lima, C., Fusco, E.J., Griffin, B., Joubran, S., Laginhas, B.B., Graham MacLean, M., Morelli, T.L., et al. (2020). “Taking Action: Managing invasive species in the context of climate change.”

Bradley, B.A., **Beaury, E.M.**, Fusco, E.J., Girffin, B.J., Laginhas, B.B., McLaughlin, B.C., Morelli, T.L., & L. Munro. (2019). “Double Trouble: Understanding risks from invasive species + climate change”.

Fusco, E.J., Allen, J.M., **Beaury, E.M.**, Jackson, M.R., Laginhas, B.B., Morelli, T.L., & B.A. Bradley. (2018). “Why Native? Benefits of planting native species in a changing climate”.

Bradley, B.A., **Beaury, E.M.**, Fusco, E.J., Laginhas, B.B., Pasquarella, V. (2018). “Preparing for sleeper species”.

2017-2021 Student Member, Life Science Café (https://oebsciencecafe.org/)

We work with academics to create and organize community conversations about

local research in the life sciences. I have co-organized more than 20 events.

2017-2021 Leader, That’s Life [Science] Blog and Outreach (thatslifesci.com)

Former Vice President, treasurer, writer, editor, and outreach committee member. That’s Life [Science] is a life science themed blog and outreach organization aiming to communicate science in a creative and accessible format. Selected articles:

[**“**The Big Data Revolution”. 2020.](http://thatslifesci.com/2020-11-09-Big-Data-Revolution-ebeaury/)

[“A Guide to Graduate School Interviews”. 2020.](http://thatslifesci.com/2020-07-27-grad-school-interviews-ebeaury/)

[“Changing the climate change conversation”. 2019.](http://thatslifesci.com/2019-08-28-Changing-the-climate-change-conversation-BEAURY/)

[“3 Reasons Why What You Grow in Your Garden Matters”. 2018.](http://thatslifesci.com/2018-11-27-3-Reasons-Why-What-You-Grow-In-Your-Garden-Matters-EBeaury/)

**Teaching and Mentoring**

2022 Princeton Plant Ecology Field Workshop, Sedge Island Natural Resource Education Center

Organizer and instructor for a field course to provide undergraduate students from underrepresented backgrounds with skills in ecological research

2019 College of Natural Sciences Teaching Fellow, University of Massachusetts

Amherst

Instructor of Record for Freshman Seminar on Invasive Species (*enrollment: 32*).

Developed and delivered all course content; goals were to facilitate student learning about invasive species, the scientific process, and transitioning to college.

2018-2019 Teaching Assistant, University of Massachusetts Amherst

Introductory Geographic Information Science with Lab (*enrollment: ~90 students*

*per semester)*

Facilitated lab sections in which students learned how to visualize, analyze and

interpret spatial data and geographic processes.

2017-2021 Mentoring Undergraduate Research Assistants

Mentor students on invasion biogeography research and outreach. Students have learned to work with and visualize data in excel, R, and ArcGIS, as well as gained skills in time and data management, writing, and presenting.

**Students**: Julia Mazzuchi (*2021*), Neil Ford (*2020*), Maddie Patrick\* (*2017-2020*), Megan Breviglia (*2018-2019*), Emily Lao (*2018*), Bailey Buckley (*2018*), Liam Cleary (*2018*), Madison Benoit (*2018*), Muchen Liu (*2017*)

*\*denotes honors thesis*

**Technical Skills and Professional Memberships**

|  |  |
| --- | --- |
| * R program | * Microsoft Office and Google Suite |
| * ArcGIS and QGIS softwares * Frequentist statistics, spatial analyses, mixed effects modeling, distribution modeling * Member of the American Association for the Advancement of Science | * Adobe Illustrator * Management and manipulation of large spatial and temporal datasets * Member of the Ecological Society of America * Member of Princeton Women in Science Partnership |