

\* = [Hyperlink](#)

## SUMMARY

I am interested in leveraging my experience with natural resource planning, ecology, and environmental education to contribute to sustainable and equitable research in the human dimensions of natural resources. I am passionate about work that fosters collaboration between scientists, managers, and the public.

## EDUCATION

**PhD Student in Natural Resources** **2023-Present**  
*University of Vermont Rubenstein School of Natural Resources* **Burlington, VT**  
- Gund Institute of Environment student fellow

**Master of Science (Natural Resources & Ecology)** **2021-2023**  
*State University of New York at Plattsburgh* **Plattsburgh, NY**  
- **Thesis:** *Forests, Roads, and Streams: Riparian Forest Management in the Lake Champlain Basin*  
- GPA: 4.0

**Bachelor of Science (BS) in Environmental Studies / International Relations** **2016-2020**  
*Tufts University* **Medford, MA**  
- Double major in Environmental Studies (Environmental Science track) and International Relations (Global Health, Nutrition, and the Environment track), minor in Italian  
- GPA: 3.76, *Magna Cum Laude*

## PAST POSITIONS

**Graduate Student Researcher** **2021-2023**  
*Lake Champlain Research Institute* **Plattsburgh, NY**  
**M.S. Thesis:** [Forests, Roads and Streams: Riparian Forest Management in the Lake Champlain Basin\\*](#)

- In progress: using landowner surveys to better understand the attitudes of road crossing owners towards their crossings and how they should be managed; investigating the impact of private forest road crossings on stream communities using field assessments
- Digitizing private road crossing locations using high res. LiDAR Topography data
- Wrote and received LCBP Grant “Technical Proposals to Implement Opportunities for Action” to expand the scope of this research

**Assistant Planner** **2021-2022**  
**Assistant Water Quality Coordinator (AmeriCorps)** **2020-2021**  
*Northwest Regional Planning Commission* **St. Albans, VT**

- Contributed to regional and municipal project development for natural resource restoration and stormwater projects within Franklin and Grand Isle (VT) counties
- Spearheaded efforts to improve aquatic organism passage through road culverts in Franklin County in partnership with regional conservation district and U.S. Fish and Wildlife Service
- Wrote, received, and administered project development grants and contracts of >\$100,000
  - *Lake Champlain Basin Program Large Implementation Grant, Vermont Clean Water Grant, Vermont Better Roads Grants, Vermont Watershed Grant*
- Produced Request’s-for-proposals, managed selected consultants and contractors
- Communicated directly with municipalities and private landowners to facilitate project development
- Completed road erosion and culvert inventories; processed data using GIS expertise
- Conducted GIS analysis (watershed delineations, project impact, project identification) and cartography (creating web and print maps for display by municipalities)
- Responsible for development of public outreach and educational materials ([StoryMaps\\*](#), website content, videos) for the Franklin County Stormwater Collaborative

- Member of American Planning Association Northern New England chapter

#### **Norton Nickerson Environmental Intern**

**2019-2020**

***The Helmuth Lab at Northeastern University Marine Science Center***

**Nahant, MA**

**“Impact of Acclimation on Recovery of Blue Mussels (*Mytilus edulis*) to Heat Wave Scenarios”**

- Assessed the impacts of climate change on *M. edulis* via thermal performance under varying heat wave and acclimation conditions
- Used optical oxygen meters to evaluate differences in recovery respiration rates between transplanted subtidal and intertidal mussels at elevated temperatures

**“The Viability of the Community Thermal Index – A Story Map”\***

- Conducted literature meta-analysis to collect thermal performance data for an array of marine species in order to assess the effectiveness of common biological change indicators
- Designed StoryMap on the pitfalls of using thermal indices to analyze global biological change using data from this meta-analysis

#### **Student Researcher, Tropical Ecology and Conservation (short course)**

**2019**

***Tufts University Biology Department***

**Costa Rica**

**“The Relationship between Edge Effects and Insect Herbivory: Untangling the Consequences of Edge Type”\***

- Comparative study between Atlantic & Pacific slopes of Costa Rica
- Assessed herbivory percentages using LeafByte app on riparian edges and trail edges to evaluate the impact of edge type on herbivorous insect presence
- Found herbivory was suppressed around direct river edges in comparison to trail edges

#### **Research Intern**

**2014-2016**

***Teatown Lake Reservation Department of Conservation Science***

**Ossining, NY**

**“The Effects of the Invasive Crayfish *Procambarus clarkii* on Leaf Litter Decomposition and Macroinvertebrate Presence in an In Lake Exclosure Setting” \***

- Utilized in-lake exclosures to assess the impact of *P. clarkii* on leaf litter decomposition speed and macroinvertebrate community composition in an exurban lake

## **PUBLICATIONS**

**Briccetti, Luke H.,** Coleman, Kimberly J., Taylor, Lakelyn E. “*They’re the Ones that Sent Me Down a Flooded Road*”: Trust, Distrust, and Individuals’ Flood Mitigation Decisions. 2025. Journal of Environmental Planning and Management.

**Briccetti, Luke H.,** Doran, Elizabeth M.B., Coleman, Kimberly J. [Using the Transtheoretical Model of Behavior Change to Explore Forest Landowner Perspectives on Water Quality](#). \* 2024. Journal of Small-Scale Forestry.

Kuklinski, Katelyn P., Coleman, Kimberly J., Leahy, Jessica E., Perry, Elizabeth E., Reinhardt, Emily, **Briccetti, Luke H.** [Scoping the Lines: Assessing the Mountain Biking Research Terrain and Calling for a Holistic Scholarship Agenda](#). \* 2024. Journal of Outdoor Recreation and Tourism.

**Briccetti, Luke H.** (accepted) *Using the Theory of Planned Behavior to Assess Private Road Crossing Management in the Lake Champlain Basin: a Case Study in Vermont and New York Watersheds*. Book Chapter in “The Clean Water Act and the Lake Champlain Basin: 50 Years of Environmental Stewardship”. SUNY Press.

## **OUTREACH & EDUCATION**

#### **Boston Harbor Educator**

**2020**

***Save the Harbor / Save the Bay***

**Boston, MA**

- Trained a group of junior educators on the natural history and wildlife of Boston Harbor
- Produced deliverable environmental educational content for Boston Public Schools (BPS)

**Environmental Education and Estuary Research Intern** **2018**  
**Hudson River Park** **New York, NY**  

- Conducted urban Eastern Oyster (*Crassostrea virginica*) reintroduction as part of Billion Oyster Project (BOP) in Lower Manhattan
- Facilitated community science participation groups in the BOP by coordinating cleaning and measurements of oysters prior to reintroduction
- Led educational programs for private groups and public park visitors on ecology and history of the Hudson River estuary

**Staff Writer** **2016-2017**  
**The Tufts Daily** **Medford, MA**  

- Trained in journalistic writing for student newspaper, personal interest in outdoor writing

**Natural Education Counselor** **2014-2017**  
**Teatown Lake Reservation** **Ossining, NY**  

- Responsible for groups of children aged 4-12 at outdoors-oriented nature camp
- Led wildlife/conservation education and natural history discussions for camp groups

## SERVICE

### PROFESSIONAL SERVICE

**Board Fellow** **2024-Present**  
**Vermont Land Trust** **Vermont**

**Committee Member** **2023-Present**  
**International Association for Society and Natural Resources (IASNR) Student Advisory Committee**

**Board Member** **2021-Present**  
**Native Fish Coalition, Vermont Chapter** **Vermont**  

- Guide decision-making and organizational planning for Vermont projects of the Native Fish Coalition, a non-profit focused on the conservation of vulnerable native fish species in the United States
- Led informational sign project effort that raised awareness of native fish conservation needs in Vermont's Winooski River

### CAMPUS SERVICE

**Co-President** **2024-Present**  
**University of Vermont Rubenstein School Graduate Student Association** **Burlington, VT**

**Committee Member** **2024-Present**  
**Gund Institute for Environment Internal Steering Committee** **Burlington, VT**

**Student Representative** **2018-2019**  
**Tufts University Environmental Studies Program Executive Council** **Medford, MA**

**Hiring Committees:** RSENR Parks, Recreation, and Tourism Assistant Professor (Tenure Track) (2024-2025), Gund Institute Policy & Partnerships Specialist (2024)

## TEACHING EXPERIENCE

**Graduate Teaching Assistant, Global Environmental Assessment** **2024-Present**  
**University of Vermont Rubenstein School of Natural Resources** **Burlington, VT**  

- Lead lab instruction, logistics, and technical assistance for a large (100+ students) spatial reasoning course

**Undergraduate Teaching Assistant, Introduction to GIS** **2020**  
**Tufts University Environmental Studies Department** **Medford, MA**  

- Assisted students with general GIS principles, ArcMap functionality, and final project design
- Supported instructor with class organization and graded student assignments

## GIS & DATA EXPERIENCE

**Environmental Studies Majors Virtual Yearbook** **2020**  
**Tufts University** **Medford, MA**

- Fun use of a GIS platform: [“ENVS Majors Virtual Yearbook 2020”](#)\*
- Shared by StoryMaps Creative Director on [Twitter!](#)\*

#### Relevant Coursework

- Advanced GIS: [“Communities in Crisis: Assessing the Vulnerability of Freshwater Fish Populations in Florida”](#)\*
- Env. Data Visualization: [“The Viability of the Community Thermal Index – A Story Map”](#)\*
- Remote Sensing: [“Glacier Loss in Glacier National Park, Montana”](#)\*

#### Relevant Software/Languages

- High proficiency: ArcMap, ESRI StoryMaps, ArcGIS Pro, QGIS
- Proficient: R, ENVI, Tableau
- Basic proficiency: SQL, Python
- Languages: English (Native Speaker), Italian (B2)

## GRANTS WRITTEN & RECEIVED

<b>UVM:</b> “Investigating Drivers of Flood Mitigation Actions Among Property Owners in Waterbury, VT”, Natural Hazards Center	<b>(\$9,550)</b>	<b>2024</b>
<b>SUNY Plattsburgh:</b> “Assessing the Impact of Private Roads on Aquatic Habitat Connectivity in The Missisquoi and Chazy Basins”, Lake Champlain Basin Program	<b>(\$116,950)</b>	<b>2022</b>
<b>SUNY Plattsburgh:</b> “CEES Friday Seminars”, SUNY Plattsburgh Green Grant	<b>(\$8,000)</b>	<b>2022</b>
<b>NRPC:</b> “Removal and Replacement of Road Crossing Structure – Black Falls Road, Montgomery, VT”, Lake Champlain Basin Program	<b>(\$135,000)</b>	<b>2021</b>
<b>NRPC:</b> “Removal and Replacement of Road Crossing Structure – Black Falls Road, Montgomery, VT”, VT DEC Clean Water Design and Implementation Block Grant	<b>(\$35,000)</b>	<b>2021</b>
<b>NRPC:</b> “Evaluating Aquatic Organism Passage Barriers in the Trout River and Tyler Branch Watersheds”, VT DEC Watershed Grant	<b>(\$2,800)</b>	<b>2021</b>
<b>Ind. Research:</b> Norton Nickerson Endowed Internship Grant	<b>(\$4,500)</b>	<b>2019</b>

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**Total funds received (across professional experiences): \$311,800**

## CONFERENCES & TALKS

“ <i>We Never Used to Worry About That</i> : Climate Change, Community Change, and Road-Stream Crossing Management, Conference of the International Association for Society and Natural Resources (Vancouver, BC)	<b>2025</b>
“Proposal: Understanding Beaver Management Decisions in a Rapidly Changing Socioecological System” [Poster], <i>Conference of the International Association for Society and Natural Resources</i> (Vancouver, BC)	<b>2025</b>
“Changing Climate, Changing Communities, and Resilience to Extreme Weather: The Case of Culverts in the Northeast USA”, <i>FLARE Conference: Forest Livelihoods, Assessments, Research, and Engagement</i> (Rome, Italy)	<b>2024</b>
“Using the Transtheoretical Model of Behavior Change to Explore Forest Landowner Perspectives on Water Quality”, <i>Conference of the International Association for Society and Natural Resources</i> (Portland, ME)	<b>2023</b>
“The Management of Private Road Crossings in the Lake Champlain Basin” [Poster], <i>International Conference on Ecology and Transportation</i> (Burlington, VT)	<b>2023</b>
“Proposal: Challenges in Private Road Crossing Management”, <i>Conference of the International Association for Society and Natural Resources</i> (San Jose, Costa Rica)	<b>2022</b>
“Proposal: The Management of Private Road Crossings in the Lake Champlain Basin”, <i>Lake Champlain Research Conference</i> (Burlington, VT)	<b>2022</b>
“Forest Landowner Understanding of Water Quality Protection Practices: Case Study in the Lake Champlain Basin”, <i>Lake Champlain Research Conference</i> (Burlington, VT)	<b>2022</b>
“Assessing Plethodon cinereus (Red-backed Salamander) Skin Microbiome Differences Across Northern NY” [Poster], <i>Northeast Natural History Conference</i> (Albany, NY)	<b>2022</b>
Invited Talk: “Human Dimensions of Natural Resources”, <i>Adirondack Research Consortium</i> (virtual presentation)	<b>2022</b>

## OUTREACH TALKS

“Assessing the Management and Impact of Private Road Crossings in the Lake Champlain Basin”, <i>North Atlantic Aquatic Connectivity Collaborative (NAACC) New York Meeting</i> (virtual presentation)	2025
“Assessing the Management and Impact of Private Road Crossings in the Lake Champlain Basin”, <i>Lake Champlain Basin Program Technical Advisory Committee Meeting</i> (virtual presentation)	2025
“Investigating Drivers of Household Flood Mitigation Decisions After Successive Flood Events: Waterbury-Based Research”, <i>Waterbury Flood Preparedness Committee</i> (Waterbury, VT)	2025
“Flood Communication & Mitigation: Results from the Research”, Waterbury Rotary Club (Waterbury, VT)	2025
“Stream Stewardship Symposium”, <i>Ausable Freshwater Center</i> (Jay, NY)	2024
“The impact of road/stream crossings on wildlife movement and water quality”, <i>Cold Hollow to Canada Woodlots Groups</i> (4 Meetings)	2024

## HONORS

<b>Award:</b> Best Student Poster Award, International Conference on Ecology and Transportation	2023
<b>Award:</b> Segal AmeriCorps Education Award	2021
<b>Nominee:</b> 2021 Esri Map Book	2020