Curriculum Vitae

Maura C. Muldoon

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(she/her/hers pronouns)

Current position: Graduate Research Assistant, Rubenstein School of Environment and Natural Resources, University of Vermont

EDUCATION

PhD Candidate in Natural Resources **expected Fall 2027**
University of Vermont (UVM), USA, Rubenstein School of the Environment and Natural Resources
Dissertation title: The impact of Earth Observation on cultural and nonmaterial values of nature
Committee: Dr. Rachelle Gould (advisor), Dr. Gillian Galford, Dr. Luis Vivanco, and Dr. Peter Dodds

MSc in Global Prosperity **September 2022**
University College London (UCL), UK, Institute for Global Prosperity (IGP)
Mark: 83.9% – Distinction (above 70%)
Thesis title: 'The Future of the Swanscombe Marshes: A Cost-Benefit Analysis of Land Use Scenarios Including Ecosystem Services'
Thesis Supervisor: Dr. Ida Kubiszewski

BSc in Aerospace Engineering & Mechanics with a Minor in French **May 2021**
The University of Alabama, USA, College of Engineering
GPA: 3.89/4.0 – Magna Cum Laude, High Honors
Capstone Project: Led data collection, analysis and systems integration on a student design team for rocketry

PEER-REVIEWED ARTICLES

Muldoon, M.C., Galford, G.L. & Gould, R.K. Perception of interconnectedness: a new typology and tools across disciplines. Sustain Sci (2026). https://doi.org/10.1007/s11625-026-01849-1

C.C. O'Hara, M. Baez-Schon, R. Chaplin-Kramer, S.H. Cheng, A. Echeverri, G.L. Galford, R.K. Gould, C.L. Mancilla, **M.C. Muldoon**, G.G. Singh, P. Baltezar, Y. Kuwayama, S. Polasky, A.D. Rodewald, R.P. Sharp, E.J. Tennant, J. Zhao, & B.S. Halpern, A systematic map of methods for assessing societal benefits of Earth science information, Proc. Natl. Acad. Sci. U.S.A. 123 (6) e2524370123, https://doi.org/10.1073/pnas.2524370123 (2026).

OTHER PUBLICATIONS

Muldoon, M., Wrigley, K., Chesshire, D., & Derrien, M. 2026. Chapter 9: Recreation and Tourism. In Galford, G.L., Balerna, J.A., Turner H.C., Sardonis, A., Peplinski, H. (Eds), The Vermont Climate Assessment 2025. Burlington, Vermont: Climate Measurements Center of Excellence, Gund Institute for Environment at the University of Vermont. DOI: 10.5281/zenodo.20272849. Accessed online at https://vtclimate.org.

RESEARCH EXPERIENCE

Graduate Student Researcher **August 2025 – May 2026**
Vermont Climate Corps, Climate Measurements Center of Excellence (CMeC), University of Vermont

- Research and co-author the Recreation and Tourism chapter of the 2025 Vermont Climate Assessment
- Mentor an undergraduate researcher as part of a team-based, service-learning experience
- Produce writing and information products intended for a diverse audience
- Designed and produced message driven data visualizations for a statewide climate assessment ensuring accessibility and clarity for a range of audiences

Graduate Student Trainee **January 2025 – May 2025**
Water Resources Institute, University of Vermont

- Contribute to a large grant proposal application on the topic of Sacred Water: Intersections between religion, spirituality, health, and water science
- Conduct literature reviews and engage collaborators to support the grant proposal

Graduate Research Assistant **August 2023 – present**
University of Vermont
- Contribute to research in the Collaborative Network for Valuing Earth Information (CONVEI) led by WWF, NASA, NOAA, and USGS to understand the societal value of Earth Observation including synthesis reviews and case studies
- Lead research on the use of 'interconnectedness' across disciplines

Doctoral Student Training Program Trainee **August 2023 – present**
Biological Data Science (BilDS) Program, University of Vermont
- Undertake training in core concepts of ecology and evolution through advanced quantitative methods and modeling
- Participate in professional development training in computation, communication, and cultural awareness and inclusion

Graduate Fellow in the Gund Institute for Environment **August 2023 – present**
- Participate in interdisciplinary research hub focused on understanding and tackling critical environmental problems

TEACHING AND MENTORSHIP EXPERIENCE

Research Mentor – Focus Group Research **January 2025 – present**
University of Vermont
- Trained, mentored, and supervised seven undergraduate research assistants (M.A., K.F., E.A., S.L., G.K., and F.M.) in developing protocols, recruiting participants, holding focus groups, audio transcription and data processing, and data analysis including thematic coding

Research Mentor – Climate Assessment Research **January 2025 – present**
University of Vermont
- Mentored and supervised one undergraduate research assistant (D.C.) in all research stages for the Vermont Climate Assessment on the Outdoor Recreation and Tourism chapter

Co-instructor **August 2025 - December 2025**
University of Vermont
- Co-instructed the "Environmental Education" course at UVM, an elective course for 50 upperclassmen undergraduate students
- Responsible for 1/3 of all course requirements including lecturing, grading, and mentoring undergraduate teaching assistants

Graduate Teaching Assistant **August 2024 - December 2024**
University of Vermont
- Assisted in the "Social Processes and the Environment" course at UVM, a core curriculum course for 160 sophomore undergraduate students in the Rubenstein School of Environment and Natural Resources
- Primary tasks included grading, overseeing four undergraduate teaching assistants, and mentoring 30 students in a transformative visioning project
- Led a lecture on the theory of Ecological Economics

Research Mentor – Literature Review Research **August 2023 - December 2024**
University of Vermont
- Trained, mentored, and supervised three undergraduate research assistants (E.M., O.H., and E.B.) in data collection, analysis, and presentation of results for literature review research

Vice President of Recruitment **August 2018 – August 2019**

Ambassadors of the College of Engineering, University of Alabama

- Led the selection, training, and mentoring of new ambassadors to represent the College of Engineering on campus

Scholarship Chair **December 2016 - January 2018**

Alpha Delta Pi sorority, University of Alabama

- Monitored academic progress of 400 members
- Provided mentoring in the form of academic strategies and study plans as needed

SERVICE EXPERIENCE

Board of Advisors Member **September 2025 - present**

Audubon Vermont

- Participate in board meetings and select committees as a full member of the board for a state conservation organization as part of a Non-Profit Board Fellows Program at UVM

Member **August 2024 - present**

Equity and Justice Community of Practice, University of Vermont

- Engage with issues relating to departmental and university-wide equity and justice
- Led a session evaluating diversity, equity, and inclusion training practices on campus

Service-Learning Project Member **January 2024 - May 2024**

Monkton Town Forest, Monkton, Vermont

- Collected data and engaged with local stakeholders to support the creation of the Monkton Town Forest
- Delivered a landscape inventory and analysis report including management recommendations for vegetation, wildlife, recreation, and sustainable harvesting

Member and Pin Badge Volunteer **May 2022 - August 2023**

Royal Society for the Protection of Birds (RSPB)

- Liaised between local businesses and the RSPB in a fundraising program

Event Coordinator **October 2021 - December 2021**

"Gender and Prosperity in Asia" Lecture Series, University College of London (UCL)

- Facilitated communications with guest speakers to coordinate live events with over 500 guests

Student Ambassador **March 2018 - May 2021**

Ambassadors of the College of Engineering, University of Alabama

- Delivered guided tours of the College of Engineering to alumni and prospective students
- Acted as a representative for the university at networking and community outreach events

Conversation Club Leader **September 2019 - July 2020**

ESOL Community Learning Bristol, England

- Facilitated group conversation with adult immigrants learning English to enable pursuit of work, education, or participation in the community

PROFESSIONAL EXPERIENCE

Editorial Assistant **October 2022 – present**

The Anthropocene Review

- Support the editorial team of a trans-disciplinary academic journal in the peer-review process
- Primary tasks include screening manuscripts, selecting reviewers, managing communication with authors, and producing social media content

Assistant Transport Planning Consultant **September 2022 - July 2023**

Momentum Transport Consultancy, London, England

- Assisted clients on planning applications and strategy related to sustainable and accessible transport provision across London and the UK

- Analyzed data and present results to developers, local councils, and transport authorities in written report and presentation format

Flight Physics Engineering Intern **July 2019 - July 2020**
AIRBUS Commercial UK, Bristol, England
- Managed large and complex data sets pertaining to physical properties and configurations of the wing and produced analyses for customers
- Developed and validated a modelling and mass prediction tool deploying Python/CAD for use during design iteration process

PUBLIC TALKS

Piloting an Experiment to Measure the Perceptual Effects of Earth Observation. **October 2026**
RSENR Research Seminar, Rubenstein School of Environment and Natural Resources, UVM

Engaging with the 2025 Vermont Climate Assessment for Vermont-based Research. **April 2026**
Gund Slam 2026, Gund Institute for Environment, UVM

Interconnectedness in Earth Observation. **April 2025**
Gund Slam 2025, Gund Institute for Environment, UVM

How Earth Observation Shapes Human Relationships in/with Nature. **March 2025**
Proposal Defense Seminar, Rubenstein School of Environment and Natural Resources, UVM

CONFERENCES

Attendee and Poster Session Leader **August 2025**
Ecological Society of America (ESA) 2025 Annual Meeting
- Led a poster session titled: *Interconnectedness: An interdisciplinary systematic literature review*

Creative Format Presentation Leader **April 2025**
Student Research Conference, University of Vermont
- Led a creative format session titled: *Seeing the big picture: A stop motion film exploring Earth Observation* presenting a stop-motion short film I created about my research

Attendee and Poster Session Co-leader **December 2023**
American Geophysical Union (AGU) Fall Meeting 2023
- Attended the Fall Meeting
- Co-led a poster session engaging the Earth Science Information (ESI) community in a thought experiment and interactive activity about the value of ESI

Conference Volunteer **July 2022**
Development Studies Association DSA2022
- Supported conference convenors in delivering panels, workshops, and discussions pertaining to sustainable urban futures in a virtual conference format

HONORS AND AWARDS

IGP Dissertation Award of Excellence
September 2022
IGP Blog Award of Excellence **December 2021**
University of Alabama Engineering Scholarship **August 2016**
University of Alabama Scholar Award **August 2016**
State of Maryland Merit Scholastic Award **May 2016**
Cecil County College Fair Scholarship **May 2016**
United States Army Scholar Athlete Award **May 2016**
Advanced Placement Scholar Award **May 2016**
Excellence in Zoology Award **May 2016**

Excellence in French Award **May 2016**

PROFESSIONAL MEMBERSHIP

American Geophysical Union
Ecological Society of America
Earth Science Women's Network
Union of Concerned Scientists

TECHNICAL SKILLS

Programming languages and analysis packages

- Excel, MATLAB, Python, NVivo, MAXQDA, SPSS, AutoCAD, ArcGIS, C, C++, and R