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## EDUCATION

2020*	MSc GIS and Web Map Programming	University of Wisconsin-Madison	Madison, WI
2018	Advanced GIS Certificate, GPA: 4.0	University of Maine, Machias	Machias, ME
2014	BA Geography, GPA: 3.54	University of Vermont	Burlington, VT
2012	Non-degree	Sea Education Association (S-239)	Woods Hole, MA

\*Anticipated graduation

## EXPERIENCE

**Invasive Plant Technician, Copper River Watershed Project**      Cordova, AK      5/2019 – Present

- Treating and managing invasive plants
- Collecting and tracking field data
- On site plant surveys and monitoring

**Independent GIS Analyst, ART Geospatial**      Cordova, AK      2/2019 – Present

- Provide spatial data analysis and visualization with GIS products for clients
- Develop map products and interactive online maps for clients
- Conduct environmental research and supplemental field work

**Data Specialist, MDI Biological Laboratory**      Salisbury Cove, ME      9/2017- 1/2019

- Plan and execute data collection activities in Community Environmental Health Lab (CEHL) to monitor water quality, phytoplankton, cruise ships, eelgrass, and green crabs
- Manage and build upon historic databases and disseminate data to partners
- Manage CEHL GIS database
- Improve and implement new eelgrass mapping protocols and technology
- Analyze data for grant reporting and publications
- Research scientific literature
- Promote Anecdota.org, a free online citizen science platform: recruit new users, assist with project set up, develop usability studies

**Bay Steward, MDI Biological Laboratory**      Salisbury Cove, ME      6/2017-9/2017

- Map and collect water samples to track pollution sources in the Jordan River in collaboration with Department of Marine Resources
- Collect field data: temperature, salinity, and samples for bacteria analysis
- Manage CEHL GIS layers; develop map and spatial products
- Participate in outreach and education regarding water quality issues in Frenchman Bay
- Manage collected data from Jordan River project, Maine Healthy Beaches Project, and phytoplankton monitoring
- Participate in eelgrass research and restoration

**Volunteer Research Assistant, Reef Doctor**      Ifaty, Madagascar      3/2017-4/2017

- Trained in coral, aquatic invertebrates, and tropical fish identification
- Participated in long term coral reef, artificial reef, and seagrass surveys via scuba diving and snorkeling
- Assisted in local sustainable livelihood initiatives such as seaweed farming, sea cucumber farming, turtle tagging program, and sustainable tree nursery
- Performed aquatic and fisheries data collection and entry

**Monarch Butterfly Conservation Specialist, The Xerces Society** Portland, OR 4/2015-12/2016

- Maintained and updated western milkweed and monarch breeding Access and Excel databases
- Assisted with identification and acquisition of data relevant to an 11 state monarch breeding habitat suitability model
- Liaison between Pacific Region U.S. Fish and Wildlife Service biologists and biotechnicians, GIS analysts, and Xerces Society biologists
- Created monarch/pollinator habitat restoration guidelines, including developing and field testing a monarch/pollinator habitat assessment tool for large scale natural landscapes
- Trained U.S. Fish and Wildlife Service biologists and technicians on protocols and provided technical support for ArcPad Trimble GPS usage and GIS
- Conducted independent fieldwork in remote areas and on wildlife refuges in OR, WA, ID, UT, CO, WY, and MT
- Coordinated and facilitated data collection with various citizen science, public, and governmental organizations (i.e. National Park Service, Washington State University, Monarch Larval Monitoring Project, The Nature Conservancy)
- Provided input and testing of data collection app and new citizen science web portal

**Program Outreach Assistant, Friends of Tualatin NWR** Sherwood, OR 2/2015- 4/2015

- Provided support for the shared Tualatin River National Wildlife Refuge and Friends of the Refuge programs
- Assisted with interpretive and public programming focusing on targeted populations and underserved youth
- Researched community groups and established working relationships for outreach
- Assisted with youth group programs such as summer camp including logistics, outreach, and implementation

**Pollinator Coordinator Volunteer, U.S. Fish & Wildlife Service** Vancouver, WA 11/2014- 4/2015

- Assisted Regional Refuge Biologist with baseline pollinator survey on wildlife refuges
- Processed pollinator samples
- Pinned and identified pollinator specimens
- Maintained and updated regional pollinator Access database

**Research Assistant, CCAFS at The Gund Institute** Burlington, VT 6/2013-6/2014

- CGIAR Research Program on Climate Change, Agriculture, and Food Security (CCAFS) – Theme: Pro-Poor Climate Change Mitigation
- Calculated estimate of greenhouse gas emissions from smallholder farmers (< 2 hectares) in developing countries

- Created and managed Excel spreadsheets
- Created system for finding and manipulating agricultural emissions data
- Wrote blog articles on data findings
- Contacted various UN Food & Agricultural Organization (FAO) scientists for missing data

**Geological Society of America Intern, Gateway National Park** Sandy Hook, NJ 6/ 2011

- Monitored coastal topography and shoreline boundaries
- Tested and developed data collection protocols for U.S. Fish & Wildlife and National Park Service
- Collected data from the field with GPS units
- Downloaded field data and cleaned it up with GIS programs for analysis

**Data Entry Volunteer, University of Vermont** Burlington, VT 1/ 2011

- Assisted UVM PhD candidate on Fisher Cat study
- Digitized historic fisher cat necropsy reports into Excel for further analysis

## HONORS AND AWARDS

**2018 First Place in Student Poster Competition**  
Annual Maine GIS Users Group Conference at Bates College

**2014 James Wilson Globe Award**  
Geography Department Award based on high academic achievement, service to geography department, and active engagement with the discipline of geography

**2014 Geography Honors Society – Gamma Theta Upsilon**  
Chapter President

**2013 Geography Honors Society – Gamma Theta Upsilon**  
Chapter Secretary

## PRESENTATIONS, POSTERS, AND PUBLICATIONS

**2019** Dilts, T.E., Steele, M.O., Engler, J.D., Pelton, E.M., Jepsen, S.J., McKnight, S., Taylor, A.R., Fallon, C., Black, S.H., Cruz, E., Craver, D.R., and Forister, M.L. (In preparation) Host plants and climate structure habitat associations of the western monarch butterfly. For submission to *Frontiers in Ecology and Evolution*.

**2018 Taylor, A., Johnson, T., & Disney, J.E.** Mobile mapping: A new tool for eelgrass monitoring around Mount Desert Island. *Poster Presentation*. Maine GIS Users Conference. Lewiston, ME. November 9, 2018

**2018 Taylor, A., Bailey, D., Farrell, A., Disney, J.E.** Anecdota.org Lightning Talk. *Presentation*. Community-Driven Citizen Science for Health and the Environment Symposium, Washington, D.C. June 14, 2018

**2018** Disney, J.E., Bailey, D., Farrell, A., **Taylor, A.** Mobile Citizen Science using the new Anecdota.org app. *Presentation*. 2018 Maine Sustainability and Water Conference, Augusta, ME. March 29, 2018.

**2018** Dilts, T.D., Steele, M., Black, S., Craver, D., Cruz, E., Engler, J., Jepsen, S., Jones, A., McKnight, S., Pelton, E.,

Taylor A, Forister M. 2018. Western Monarch and Milkweed Habitat Suitability Modeling Project Version 2 – Maxent Model Outputs. Xerces Society/US Fish and Wildlife Society/University of Nevada Reno. Available at: <https://www.monarchmilkweedmapper.org/habitatsuitabilitymodels>.

**2017** Disney, Jane, Duncan Bailey, Anna Farrell, and Ashley Taylor. "Next Generation Citizen Science Using Anecdotal.org." *Maine Policy Review* 26.2 (2017) : 70 -79, <http://digitalcommons.library.umaine.edu/mpr/vol26/iss2/15>.

**2017** Farrell, A.E., **Taylor, A.R.**, Bailey, C.D., Disney, J.E. Marine and coastal citizen science: a tale of eelgrass restoration. *Poster Presentation*. College of the Atlantic Science Symposium. Bar Harbor, ME. October 27, 2017.

## **CERTIFICATIONS**

<b>2018</b>	Advanced GIS Certificate
<b>2017</b>	SSI Open Water and Advanced Open Water SCUBA certifications
<b>2017</b>	Underwater Visual Census – Identification and Methodology
<b>2017</b>	Coral Restoration and Monitoring