Sawyer Balint

599 Ford Rd Melrose NY 12121
(518) 258-9510 | sawyer_balint@alumni.brown.edu

Curriculum Vitae

RESEARCH INTERESTS

I am interested in estuarian biogeochemistry and the utilization of stable isotopes to understand the cycling of nutrients in eutrophic ecosystems.

EDUCATION

Bachelor of Science in Environmental Science with Honors **May 2020**
Brown University, Providence, RI
Senior Thesis: *Quantifying the Impact of Atmospheric Nitrogen Deposition in Narragansett Bay, RI*
GPA: 3.88

RESEARCH EXPERIENCE

Undergraduate Research Fellow: Brown U. Department of Earth, Environmental, and Planetary Sciences **Sep. 2019 - June 2020**

- Estuarian biogeochemistry and atmospheric chemistry with a focus on nitrogen cycling
- Dry atmospheric deposition of ammonia/ammonium in Narragansett Bay quantified at ultra-high time resolution using novel relaxed eddy accumulation techniques.
- Influence of precipitation on nitrogen cycling in Narragansett Bay, RI investigated using stable isotopes.

Fieldwork Assistant: Brown U. Department of Ecology and Evolutionary Biology **Jan. 2017 - May 2019**

- Terrestrial biogeochemistry with a focus on nutrient cycling in tropical rainforests
- Collaborated with graduate students and postdoctoral research associates on experimental design and sample analysis.
- Traveled to Bahía, Brazil to examine the effect of water and nutrient limitation on nitrogen fixation in tropical legumes.

Research Assistant: Brown U. Department of Ecology and Evolutionary Biology **Jan. 2017 - May 2017**

- Ecology and Evolutionary Biology
- Catalogued dispersal and reproductive patterns of endemic plants in the continental United States to investigate their resilience to increased surface air temperatures over the next century.

CONFERENCE PRESENTATIONS

2019 American Geophysical Union Fall Meeting **Dec. 2019**

- Presented poster entitled “Quantifying the Impact of Atmospheric Nitrogen Deposition in Narragansett Bay, RI”
- https://doi.org/10.26300/jyrh-wt98

EMPLOYMENT

Ice Nine Development **Summer 2014-2020**

- Building construction

SKILLS

Environmental Stable Isotopes

- Bulk N and C isotopes using EA and CF-IRMS
- N and O isotopes using denitrifier method

Atmospheric Gas and Particulate Sampling

- Quantification of gaseous NH_3 and particulate NH_4^+ concentration and isotopic composition using active sampling techniques

Estuarian Field Sampling

- Collection and processing of macroalgae for stable isotopic analysis
- Water column profiling using CTDs

Precipitation Collection

- Monitoring of reactive N concentration and isotopic composition using event-based precipitation collection techniques
- Quantification of N concentration using colorimetric (UV-Vis) methods

Data Analysis

- Fluent in Microsoft Office, Python, and R-Studio
- Remote sensing analysis using ENVI
- GIS analysis using ArcGIS Pro