

## Education

### University of Toronto

*Masters of Science in Forestry (Ongoing)*

*HBSc with High Distinction in Forest Conservation Science & Mathematics (Graduated 2025)*

- Edward H. Buckley and Grace B. Buckley Undergraduate Scholarship 2025
- NSERC Undergraduate Student Research Award 2023
- Dean's List Scholar 2022, 2023, 2025
- Victoria College Regents Scholar 2022

### Teaneck High School, New Jersey

- Principal's Honor Roll 2017-2021
- National Honor Society Graduate

## Experience

### *Research Assistant - James Lab, UofT Forestry (Nov 2023 - Ongoing)*

At the James Lab, I previously worked on a project concerning forest fire burn severity and spruce budworm outbreak spatial relationships. I applied various programming languages and software including Google Earth Engine, ArcGIS, and R. I was also tasked with using structural equations and mixed effect models in R to explore the budworm fire relationship in Ontario and Quebec. Currently, I am working to publish my undergraduate thesis which applies forest landscape simulation to quantify trade-offs between timber and conservation values. I plan to tackle issues in forest fire exposure metrics, fire connectivity, fuel dynamics, and conservation for my master's thesis.

### *Arborist Assistant - Mighty Cedar Tree Care (June 2024 - Oct 2024)*

At Mighty Cedar, I assisted the lead climbing arborist in tree pruning, planting, and removal. I worked with and maintained a variety of tools including chainsaws, hedge trimmers, pruners, pole saws, leaf blowers, and handsaws. I often had to explain high level concepts to customers and concerned homeowners which improved my communication skills in bridging the gap between experts and the public.

***NSERC Student Researcher - Thomas Lab, UofT Forestry (May 2023 - Aug 2023)***

My work for the Thomas Lab was funded by a highly competitive undergraduate research award administered by the Natural Sciences and Engineering Research Council of Canada. My position was based out of the Smithsonian ForestGEO Network Haliburton Forest Dynamics Plot in Haliburton, Ontario. I assisted in the re-census of a 13.5-hectare forest plot containing over 46,000 individual trees. This included measuring, mapping, and identifying trees across 30 species. I collaborated with the research team to consolidate and interpret mensuration data which will contribute to ongoing forestry research with the University of Toronto and the ForestGEO Network.

***Creative and Executive Director, Live Events Coordinator - CIUT 89.5FM (Sep 2022 - Apr 2023)***

I was a founding member of my university's student radio show *Launch TO*, which platformed local music acts in Toronto. I led a production team of students who worked on the research, production, and broadcast of interviews, live performances, and social media promotion. This role was challenging in that many people relied on me for the scheduling and coordination of a live broadcast with strict due dates, however I gained a stronger sense of leadership and accountability through our team's success.

***Seasonal Trail Steward - NJ Dept. of Environmental Protection (Apr 2022 - Aug 2022)***

I worked with the Department of Environmental Protection to maintain trails and enforce the park rules of Ringwood State Forest. I was responsible for overseeing the stewardship of local wildlife and preventing forest fires. I maintained and rerouted trails around fallen trees, assisted in the survey and inventory of the parks, and managed bear activity near hikers.

## **Skills**

Through my various academic and professional experiences, I have developed advanced systems based problem solving skills. In terms of software, I am capable of using ArcGIS and QGIS for data analysis and map creation, R for various statistical uses, Google Earth Engine for experimental spatial analyses, and LaTeX. I also have specialist knowledge in SELES, a programming language used in landscape ecology for advanced forest simulation and model design. In 2024 I completed an intensive field methods in forest conservation course at the Koffler Scientific Reserve in King City, Ontario, culminating in a full tree inventory for a section of Durham Regional Forest to be used by their management authority. Beyond forest inventories, I have a comprehensive set of field skills including camping, off-roading, wildlife management, mammal trapping, tree identification, canoeing, and orienteering.

My personal passions include songwriting, live music, cooking, hiking, and canned seafood. I am currently the guitarist, singer, and songwriter for the Toronto indie-alternative rock band *Pistol Shrimp* and the bassist for the Toronto *North River* country band.