

Taya Lucas-Desmond

I am doing an Honours in Environmental Science with a minor in Biology. My honours project is investigating how native Nova Scotian flora is responding to climate change, and which species may become at risk from climate change in the future.



I have always been passionate about plants, animals, and conservation which is why I believe Environmental Science is perfect for me. I have grown up and lived in Nova Scotia my entire life, so I am especially passionate to see how plant species from my home province are responding to climate change. I believe that topics involving climate change will become valuable in the near future, and I hope that my research will help to better understand and conserve species native to Nova Scotia.

I like research because it gives me the opportunity to learn something new, I'm always up for a challenge! I hope to go into the field of conservation in the future and this research project is a perfect start for me.

Assessing climate change risk of native Nova Scotia flora

Taya Lucas-Desmond and Dr. Zoe Panchen

Objectives:

- Determine if native Nova Scotia plant species are:
 - Shifting their flowering times earlier and in line with climate change
 - Responding differentially to climate change
- Identify species that have the potential to be more at risk from climate change than others

With temperatures warming, we expect to see that some species will shift their flowering times to earlier in the year. Species that are able to shift their flowering times in line with climate change are thought to be less at risk from climate change than those that cannot.

Using herbarium specimens accessioned in the EC Smith Herbarium as a source of historic flowering data, I will construct a time series of flowering times for different native Nova Scotia species.



Fig. 1. *Fragaria virginiana* herbarium specimen, EC Smith Herbarium



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