

# **Report on the Geological Mapping of Parrsboro, NS, Canada**

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Over summer, six of us travelled to the small coastal town of Parrsboro, Nova Scotia, to do our mapping project. We chose Parrsboro because it is famous for its fossils, many of which are relatively rare vertebrates, but we did manage to see some preserved trackways (see photo!) as well. The area also includes a section of the Cobequid fault, which separates Neoproterozoic rocks from more recent Carboniferous and Triassic rocks.

The southern section of our area was perfect for an undergraduate mapping project, as it had rocks with interesting geological features, good exposure, and complex structure. However, the northern section of our area was much too complicated, as the rocks had undergone multiple phases of complex deformation, were extremely weathered, and poorly exposed. A positive aspect of this disparity was that the project was invaluable for teaching us how to deal with academic adversity and think outside the box. Another positive was that the project involved being outside every day and fully exploring an area of natural beauty (some photos are included below).

We also hoped to explore Nova Scotia, as none of us had ever been to Canada before, and we were all excited to experience the country. We went on lots of adventures and day trips on our rest days, and met lots of local people, including our very welcoming AirBnB host, Jim, and his family. In addition, we met Georgia Pe-Piper and David Piper, two Cambridge alumni who did most of the work on the geology of the area. It was extremely useful to talk to them about our work, and to hear their experiences as renowned geologists.

We all had a wonderful, unique experience this summer, and we would like to thank the Classes of 2005 and 2008 for their generosity.

## Photographs



^ Our mapping group (L to R: Jamie, Charlotte, Charlotte, Nat, Will and Saffy) at our lovely AirBnB host's Canada party!



^ A view of the Bay of Fundy (, which has the highest tides in the world!) from the top of Partridge Island.



^ Mapping partners Will and Nat at the top of a (very steep!) outcrop of lava in the north of their mapping area.



^ A set of tetrapod trackways found in the West Bay Formation (outlined in red to make clearer!).



^ Saffy, Charlotte, and Nat at Joggins Fossil Cliffs, a UNESCO heritage site we visited to see fossilised trees from an ancient swamp deposit.



^ Saffy, Charlotte, and Jamie visiting Halifax.