

NSM Geology Visit to Acadia University - Historical Geology Collections

Summary Prepared by Dr. Tim Fedak, Nova Scotia Museum. Wednesday, March 5, 2020.

Pam Frail (Acadia University) provided an opportunity for **Tim Fedak**, Curator of Geology to examine the historical fossil and geology collection that are in the palaeontology teaching lab of Acadia University. **Chris Mansky** (Blue Beach) also assisted with examining specimens and provided helpful interpretations of some historical items.



Items had been laid out on a lab bench, and a back room with some additional material from Barry Cameron was also briefly examined.

Approximately 15 trays/boxes of specimens were briefly examined. Some historically interesting specimens were noted, with handwritten labels and dates from 1880s to 1930s.

Material included specimens donated by

- George M. Dawson, 1881
- T. Weston, 1891
- Weston and Tyrell, 1882

Specimen and samples do include some Nova Scotia sites, but the majority appear to be western Canada or international comparative material. These would represent early teaching and reference collections.



At this time, there is no urgency for documenting and moving specimens to another institution. The Earth Science department is in the process of hiring a new sedimentologist who will also be responsible for teaching paleontology. It could be that the new hire will have an interest in the specimens, or the department may consider options for clearing out the specimens.

- Based on the initial examination – there does appear to be at least some specimens that would be of potential interest to the Nova Scotia Museum. Historical specimens, particularly from Nova Scotia localities or specimens that represent international geologists working in Nova Scotia – would be of potential value for future research and curation.
- There were some specimens noted from New Brunswick, and the NB Museum may have an interest in those specimens.
- Other specimens not of interest for the NSM or NBM, may be of interest to museums in Ottawa or British Columbia. The ideal situation would be to find public institutions that would be interested in specimens and samples that are no longer wanted by Acadia.

In the future, an inventory and photographic record of the historical specimens may be helpful for curating and distributing specimens to other institutions. This could be done over the course of a couple of days (NSM Curator), or by a diligent student interested in curatorial experience. An inventory could result in an Excel spreadsheet that lists specimen number(s), descriptions, collector's names, dates, and include a photograph of the sample. The inventory process would result in a greater understanding of what specimens are present, and themes for future curation or research.

Other Notes for Consideration:

1. The historical labels will hold valuable information. Many are in good condition, but excessive handling will increase likelihood of damage and decay. Ideally historical labels would be put into archival mylar protective wrappers.
2. Many if not all of the specimens have specimen numbers, but the department is not aware of the location of the 'catalogue'. The catalogue/ledger would be highly valuable source of information. It is possible it is within the Acadia collection already donated to the NSM (in storage), or with Steve Davis' notes due to the archaeology material that was at Acadia that went to SMU. Faculty recall a large bound volume with colourful inlayed sheet binding, that had a list of specimens.
3. A large amount of material from Barry Cameron's collection has already been relocated at the Blue Beach Museum. This was largely Blue Beach material – and remains in the care of Chris Mansky.
4. Barry Cameron's material in the back room includes a drawer full of Semionotid fish from the McCoy Brook (Scots Bay?). These specimens would be of research value and of interest for the NSM to be located at Fundy Geological Museum.

Historic Geologists

George M. Dawson	Acadia specimens from 1881
Weston and Tyrell	Acadia specimens from 1882
T. Weston	Acadia specimens from 1891

In July 1873, Weston describes a visit to Arisaig to capture a series of photographs of the coastline (1899, p. 83; NRCan Photo Collection 1873). In 1879, Weston returned to Nova Scotia. He visited his friend, Dr. David Honeyman in Halifax and then stopped in Joggins to get photographs for Dawson to use in his report (Dawson 1882, Plate 46). Along with the 1873 photographs, these fourteen historic geology landscapes (NRCan Photo Collection 1879) may provide valuable baseline references for studies of coastal erosion of significant fossil sites.

Related Note: *The history of Thomas Weston in Nova Scotia may provide an opportunity to identify the photographer being a series of historic photographs that have recently been located in the collections of the Nova Scotia Museum. The thirty photographs include sites of Joggins, as well as along the Parrsboro Shore at Partridge Island, Two Islands, and the other side of Minas Basin at Blomidon. Typed labels were added to the bottom of the mounted prints sometime later.*



Weston helped to pack up specimens and move the survey from Montreal to Ottawa in 1881 and resumed field work that included a trip to Nova Scotia again in 1882 (Weston 1899, p 136). From his summary of this trip, this does not seem to be a trip when the NSM Historical

Photographs could have been taken. He does mention being assisted by Mr. James Devine, a coal miner (p 138).

Weston then assisted Dawson, Tyrell and others in the North West Territories during the summer of 1883 (Weston 1899, p. 144-175), returned to Nova Scotia in the fall of 1883 (p 176), and again on September 9, 1887(?) (p. 245). It is possible that the NSM Historic Photographs were taken during one of these trips.

The specimens of Dawson, Tyrell and Weston, located in the Acadia historic collection relate to the Geologic Survey of Canada expeditions to North West Territories in the 1880s. As such, they are historically important in documenting these early Canadian geology expeditions, and importance of comparative collections in geoscience.

References

Dawson, G M, 1883. *Preliminary report on the geology of the Bow and Belly River region, NW Territory, with special reference to the coal deposits.*

Dawson, J W, 1882. XII. On the results of recent explorations of erect trees containing animal remains in the coal-formation of Nova Scotia. *Philosophical Transactions of the Royal Society of London*, (173), pp. 621-659.

<https://archive.org/details/philosophicaltr173royaa/page/620/mode/2up>

Plate 46 : <https://archive.org/details/philosophicaltr173royaa/page/n875/mode/2up>

NRCan Photo Collection 1873. Photographs of Nova Scotia sites by Thomas Weston.

[https://geoscan.nrcan.gc.ca/starweb/nrcanphoto/servlet.starweb?path=nrcanphoto/nrcanphoto/fastlink_e.web&search1=\(BI%2cBIWEB%3d%28%28%22ARISAIG%22%29%29%29+AND+%28M100%3d%28%28%22WESTON%22%29%29%29+AND+%28M950%3dA%3aZZZ%29+AND+%28M591%3d%22%22\)](https://geoscan.nrcan.gc.ca/starweb/nrcanphoto/servlet.starweb?path=nrcanphoto/nrcanphoto/fastlink_e.web&search1=(BI%2cBIWEB%3d%28%28%22ARISAIG%22%29%29%29+AND+%28M100%3d%28%28%22WESTON%22%29%29%29+AND+%28M950%3dA%3aZZZ%29+AND+%28M591%3d%22%22))

NRCan Photo Collection 1879. Photographs of Nova Scotia sites by Thomas Weston.

[https://geoscan.nrcan.gc.ca/starweb/nrcanphoto/servlet.starweb?path=nrcanphoto/nrcanphoto/fastlink_e.web&search1=\(M100%3d%28%28%22WESTON%22%29%29%29+AND+%28M261%3d1879%29+AND+%28M950%3dA%3aZZZ%29+AND+%28M591%3d%22%22\)](https://geoscan.nrcan.gc.ca/starweb/nrcanphoto/servlet.starweb?path=nrcanphoto/nrcanphoto/fastlink_e.web&search1=(M100%3d%28%28%22WESTON%22%29%29%29+AND+%28M261%3d1879%29+AND+%28M950%3dA%3aZZZ%29+AND+%28M591%3d%22%22))

Weston, T. C. 1899. Reminiscences among the rocks: in connection with the Geological Survey of Canada. Warwick Bro's and Rutter, Toronto. 328 p.

<https://archive.org/details/reminiscencesamo00westuoft/page/n5/mode/2up>

Whiteaves, J F 1885. Report on the Invertebrata of the Laramie and Cretaceous Rocks of the Vicinity of the Bow and Belly Rivers and Adjacent Localities in the North-west Territory. Contributions to Canadian Palaeontology, Vol 1 (1), pp. 1-89.

<https://archive.org/details/cu31924003872409/page/n5/mode/2up>

Plates I-XI <https://archive.org/details/cu31924003872409/page/n447/mode/2up>

Connecticut Dinosaur Footprints (NSM)

The visit to the Acadia historic collections was also initiated in order to determine if a series of historic specimens in the Nova Scotia Museum collections originated from a previous trip to Acadia by the previous curator (Deborah Skilliter). A historic specimen of a dinosaur footprint from Connecticut (Edward Hitchcock era) includes a modern label of white paint and black pen with the number "F61F01".



The style of white paint label was also observed on some of the historic Acadia specimens during the March 2020 visit. The similarity in labels offers some support that the Hitchcock era footprint had been previously located in the Acadia historic collection. Additional work is required to clarify the numbers. The location of the catalogue of Acadia historic fossil specimens is currently not known.

