

Appendix C:

Mount Carleton Archaeological Testing Project and Pedestrian Survey

Department of Tourism, Heritage and Culture

Annexe C :

Projet d'analyse archéologique et enquête relative aux piétons du mont Carleton

Ministère de Tourisme, du Patrimoine et de la Culture

Mount Carleton Archaeological Testing Project and Pedestrian Survey



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April 12, 2016

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List of Abbreviations

AIA – Archaeological Impact Assessment

ASU – Archaeological Services Unit

DBS – Depth Below Surface

NB – New Brunswick

STP – Standardized Test Pits

1.0 Introduction

Archaeological Services Unit (ASU) conducted an archaeological impact assessment (AIA) in Mount Carleton Provincial Park, New Brunswick (NB) between the 3rd and 6th of November 2015. The AIA consisted of archaeological testing at both Bathurst Lake and Moose Brook (Figures 1, 2 and 3) where two wooden bridges have been proposed for replacement, and a pedestrian survey of approximately 900m where a new snowmobile trail has been proposed. Staff archaeologists Brent Suttie (MA, RPA), Tricia Jarratt (MA, RPA), and Ashley Brzezicki (MA, RPA) were joined by a crew of 15 archaeological field technicians from Tobique First Nation (Figure 4) on the 4th and 5th of November in order to complete the testing portion of the assessment. The pedestrian survey was conducted on November 6th (Figures 5 and 6).

Artifacts dating to the Pre-Contact period were recovered at both the northern extent of the existing Bathurst Lake bridge and at the southern extent of the existing Moose Brook bridge. No items of archaeological significance were recovered during the pedestrian survey.

All field activities for the AIA were co-directed by the abovementioned archaeologists, and followed both the *Guidelines and Procedures for Conducting Professional Archaeological Assessments in New Brunswick* (Archaeological Services Unit 2012) as well as the *Heritage Conservation Act* (Province of New Brunswick 2010).

2.0 Project Area

Landscape and Geology

Mount Carleton Provincial Park is located in North-central Highlands Ecoregion of NB and is situated within the Ganong Ecodistrict (Zelazny 2007:91). The Mount Carleton area, well-known for its “landscape of mountains, valleys, rivers and lakes, far removed from any developed areas” (High Country Research and Development 1972:12) is home to the highest peak in NB, Mount Carleton, at 820m (2690 ft.) above sea level (PNB 2015). The geology in the area is largely composed of “Ordovician volcanic, metasedimentary and granitic rock...overlain

by several types of Devonian rocks” (Zelazny 2007:100). An interesting geological formation called “tors” can be seen amongst the highest peaks in the Mount Carleton area. These tors were formed during the last deglaciation, when their peaks protruded above the ice and became susceptible to “intense frost shattering,” resulting in their angular appearance (Zelazny 2007:100). Surrounding these high peaks lays a “deeply incised terrain” through which “furious torrents...and impressive rapids or falls” pass through (Zelazny 2007:92).

The headwaters of both the Nepisiguit and Tobique Rivers, the tributaries of the Upsalquitch and Miramichi Rivers as well as several lakes (including the Big and Little Nictau, Bathurst, Camp and Teneriffe) are located within the boundaries of Mount Carleton Provincial Park (Ferguson 1990: 1). Smaller, shallower lakes in the Park were, in 1972, described as “ecologically fragile, with Moose Brook (Bogan) and Little Nictau Lake both described as in “the latter stages of eutrophication, following a natural process of filling with silt and vegetation” (High Country Research and Development 1972:13).

Ecological and Environmental Conditions

Due to the extreme elevations of the Mount Carleton area, the environmental conditions are generally cold and wet; annual average temperatures are the lowest in NB, and the region is one of the most precipitous in the province (Zelazny 2007:101). Snow in the region often arrives around mid-November and sometimes lasts in the upper reaches until June (High Country Research and Development 1972:23)

A mixture of balsam fir, black, white and red spruce, white and yellow birch, red maple, and American mountain ash can be found in the Ecodistrict, while beech species are entirely absent (Zelazny 2007:102). A number of rare flora call the Ecodistrict their home, including the highland rush, dwarf birch, Bigelow’s sedge, tiny mingan moonwort, and alpine berry (Zelazny 2007:103). Fauna in the Ecodistrict is just as diverse as its flora, and includes the Bicknell’s thrush, the purple lesser fritillary butterfly, and the Gaspé shrew, which is “one of four mammals found only in Canada” (Zelazny 2007:103). The Park contains elements representative of a northern or boreal ecology (Zelazny 2007, High Country Research and Development 1972).

Past and Present Land Use Practices

Mount Carleton Provincial Park straddles the traditional territories of Wolastoqiyik and Mi'kmaq people; both cultural groups have a deep affiliation to this mountainous region. This long standing connection to the area is supported by artifactual evidence; prior to the archaeological testing described herein, artifacts dating to the Pre-Contact period have been recovered from the north end of Bathurst Lake (CiDq-1), at the western end of Nictau Lake (CiDr-1), at Visitor's Island towards the eastern end of Nictau Lake (CiDr-2), at Nictau Lake Narrow (CiDr-3), along the south shore of Nictau Lake (CiDr-4) as well as at the northern side of thoroughfare between Bathurst Lake and Camp Lake (CiDq-2)¹. These artifact forms include adzes, choppers, projectile point fragments, flakes, a core, and a scraper.

Ancient portage routes between the lakes and river systems within Mount Carleton Provincial Park have provided people with access to the region for thousands of years. Travel to the area via watercraft would have been possible from distant parts of the province, including present-day Saint John and Bathurst. The same watercourses used to travel to or from the interior of the Province's highlands provided ample opportunities for fishing and hunting waterfowl. Abundant wildlife, including large game animals such caribou and moose inhabited the boreal-like terrain of the Mount Carleton area and would have been hunted by early inhabitants of the region (Zelazny 2007:103).

While the rugged landscape of the Ecodistrict was not conducive to the establishment of permanent settlements, early European immigrants began commercial lumbering in the region in the early 1800s and lumbering camps were built to house workers. The plentiful natural resources also attracted prospectors, outfitters and sportsman to the area (Marsh 2006). Remnants of a logging bridge and a log driving dam are visible at the head of Nictau Lake and many camps still exist within Mount Carleton Provincial Park.

In both 1923 and 1934, forest fires swept through the Mount Carleton region. Following the fire of 1923, a fire tower was built atop of Mount Carleton so that a watch for any sign of

¹ Archaeological site CiDq-2 is situated within 200m of the proposed construction activities for bridge replacement.

fire outbreak could be kept. Mount Carleton Provincial Park was formally established in 1970 and is the largest provincial park in New Brunswick with thousands of visitors each year.

3.0 Methodology

Archaeological testing involved establishing 50 cm x 50 cm standardized test pits (STP) within the projected footprint of the bridges slated for replacement at Bathurst Lake and Moose Brook. STPs were placed 5m apart, except in circumstances where proximity to water, slope, and existing roadways prevented the exact placement of the pits. All STPs were dug to glacial till and the excavated soil was screened through ¼" galvanized mesh. Any archaeological objects discovered were handled using powder-free nitrile gloves; the gloves were changed between artifacts in order to avoid cross-contaminating the specimens.

Positive STPs (i.e., those that contained archaeological objects) were documented following the *Guidelines and Procedures for Conducting Professional Archaeological Assessments in New Brunswick* (Archaeological Services Unit 2012). The documentation of all field activities included manual paperwork (i.e., STP forms, mapping, field notes), as well as digital data (i.e., photographs and GPS coordinates). All archaeological objects, including soil samples, were collected in plastic bags; the bags were then labelled with associated provenance information. Standard documentation of provenance information included: STP identification, GPS coordinates, depth below surface (DBS), date, and crew member initials. Once collected, the objects were transported to ASU's climate-controlled facility in Fredericton, NB, for accessioning and curation.

The pedestrian survey was conducted by ASU archaeologists, who followed the cutline/pre-flagged route in the location of the proposed trail (Figure 5). All areas were assessed for archaeological potential. One hundred percent of the proposed trail was surveyed on foot. A GPS track log was recorded for the entire assessment. All items or areas of interest were documented by recording a waypoint on the GPS device, taking appropriate photographs and detailed field notes.

4.0 Findings

Resource Inventory: Bathurst Lake

Both the Bathurst Lake and Moose Brook areas were sub-divided into “North” and “South” (i.e., “Bathurst Lake North “refers to the northernmost extent of the assessment area). In the Bathurst Lake area, a total of 19 STPs were dug; 13 of these STPs were dug in Bathurst Lake North (Figure 6) and 6 in Bathurst Lake South (Figure 7). Based on the results of the archaeological testing, Bathurst Lake North represents the densest area of cultural material for all the areas tested. The artifacts collected from Bathurst Lake North include: quartz, chert, and volcanic flakes, a quartz scraper, spokeshave, biface, and bipolar core, burnt ceramic, and charcoal samples. Only 5 of the 13 STPS (38 %) in the Bathurst Lake North area were negative (i.e., did not contain any archaeological objects). No artifacts were collected from the Bathurst Lake South area.

Resource Inventory: Moose Brook

In the Moose Brook area, a total of 11 STPs were dug; 6 of these STPs were dug in Moose Brook North (Figure 8) and 5 in Moose Brook South (Figure 9). A single STP (N11, E5) in the Moose Brook South area contained an archaeological object; a large cobble abrader. A soil sample was collected from directly below this artifact. No artifacts were collected from the Moose Brook North area.

Resource Inventory: Pedestrian Survey

No objects of archaeological significance were discovered during the pedestrian surface survey.

Resource Significance

Based on the archaeological objects found, the Bathurst Lake North site has at least one Middle Maritime Woodland period (ca. 2300 – 1800 BP) component. These dates are inferred using the Pre-Contact ceramics found on site; the remainder of the assemblage does not

contain a sufficient amount of diagnostic artifacts in order to determine age. Further analytical studies (e.g., protein and usewear analyses) on the artifacts could provide further information on what the artifacts were used for, which may subsequently indicate a temporal range.

5.0 Conclusion and Recommendations

The AIA conclusively demonstrated the presence of intact archaeological sites at Bathurst Lake North and Moose Brook South. It is likely that the archaeological sites date to the Middle Maritime Woodland period (ca. 2300 – 1800 BP) but further analytical studies on the assemblage may provide a clearer understanding of age. Due to the density of the Pre-Contact artifacts on Bathurst Lake North site, and the presence of the abrader in the Moose Brook South area, it is the Crown's recommendation that the Proponent restrict the disturbance both locations. If the Proponent chooses to pursue construction in these locations, they will be required to consult with both the Crown and First Nations in order to develop a mitigation plan for the archaeological sites.

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Appendix



Figure 1: Map, yellow stars indicate locations of archaeological testing at Bathurst Lake and Moose Brook.



Figure 2: Aerial photo of Bathurst Lake, prior to archaeological testing, archaeological site CiDq-2 documented as area where parking lot now sits.



Figure 3: Aerial photo of Moose Brook, prior to archaeological testing.



Figure 4: Photo of field crew who participated in AIA testing at Mount Carleton, November 2015.



Figure 5: ASU archaeologists conducted pedestrian survey along the cutline for the proposed snowmobile trail at Mount Carleton Provincial Park.

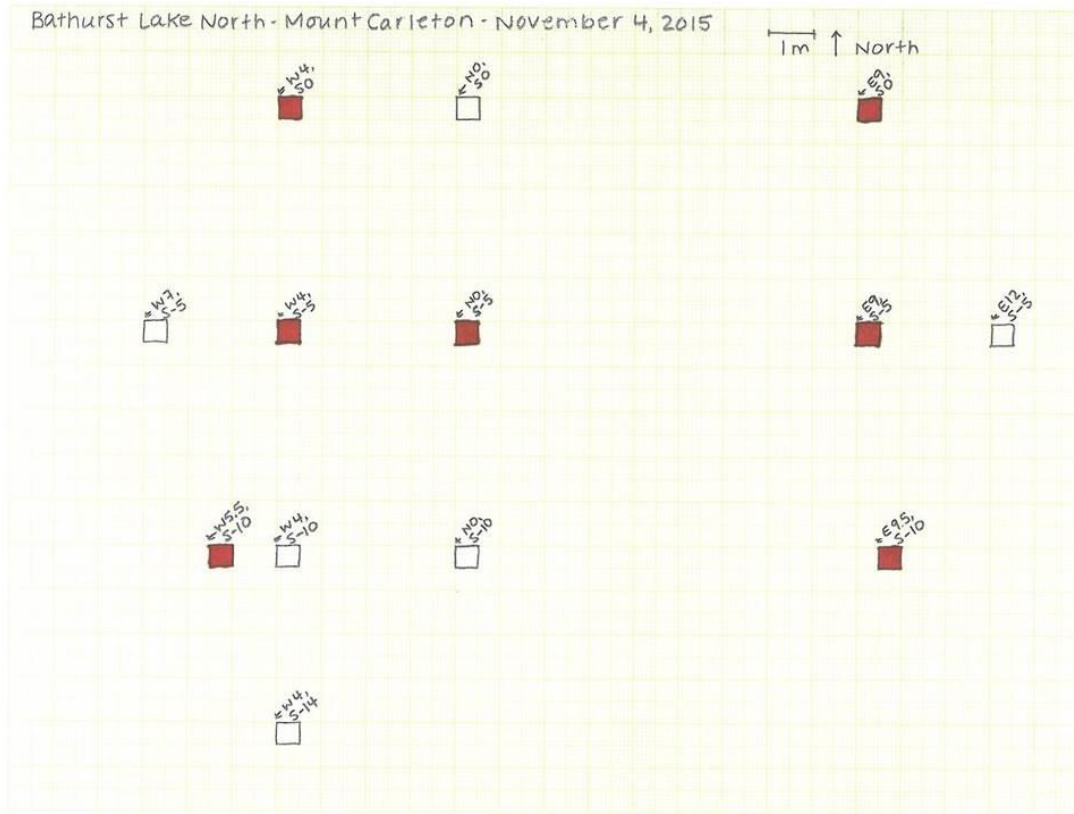


Figure 6: Sketch map showing STPs at Bathurst Lake north, red indicating positive STPs.

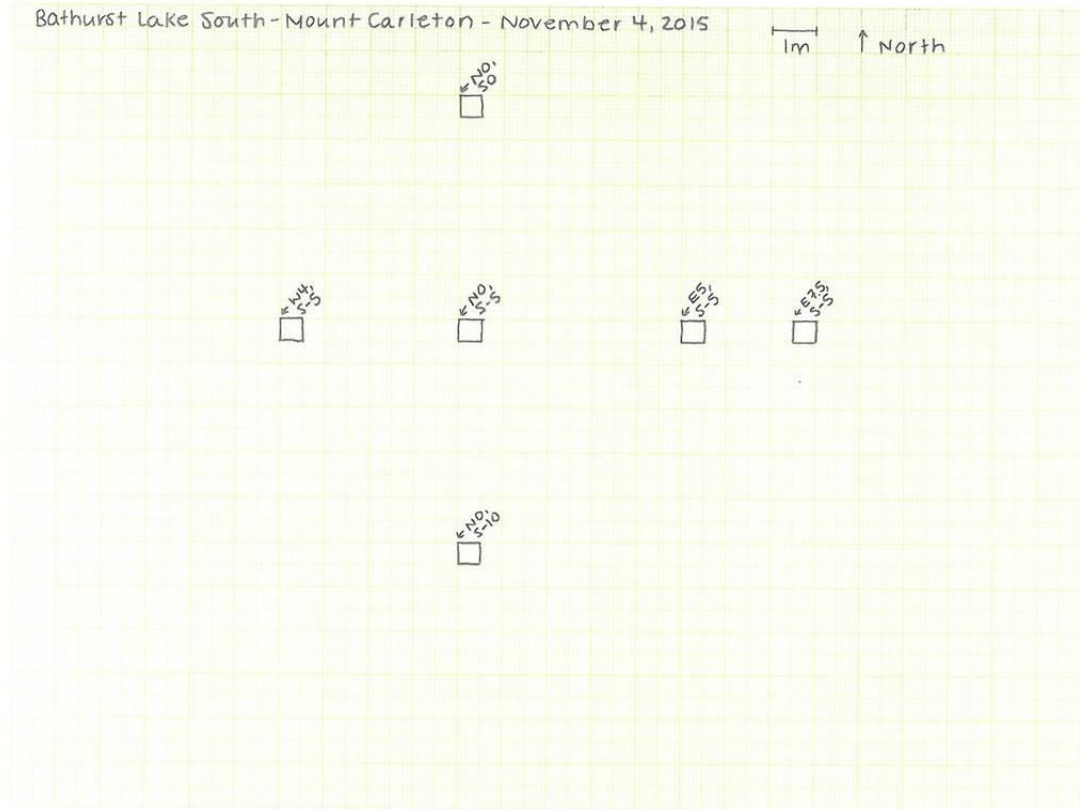


Figure 7: Sketch map showing STPs at Bathurst Lake south, no positive STPs.

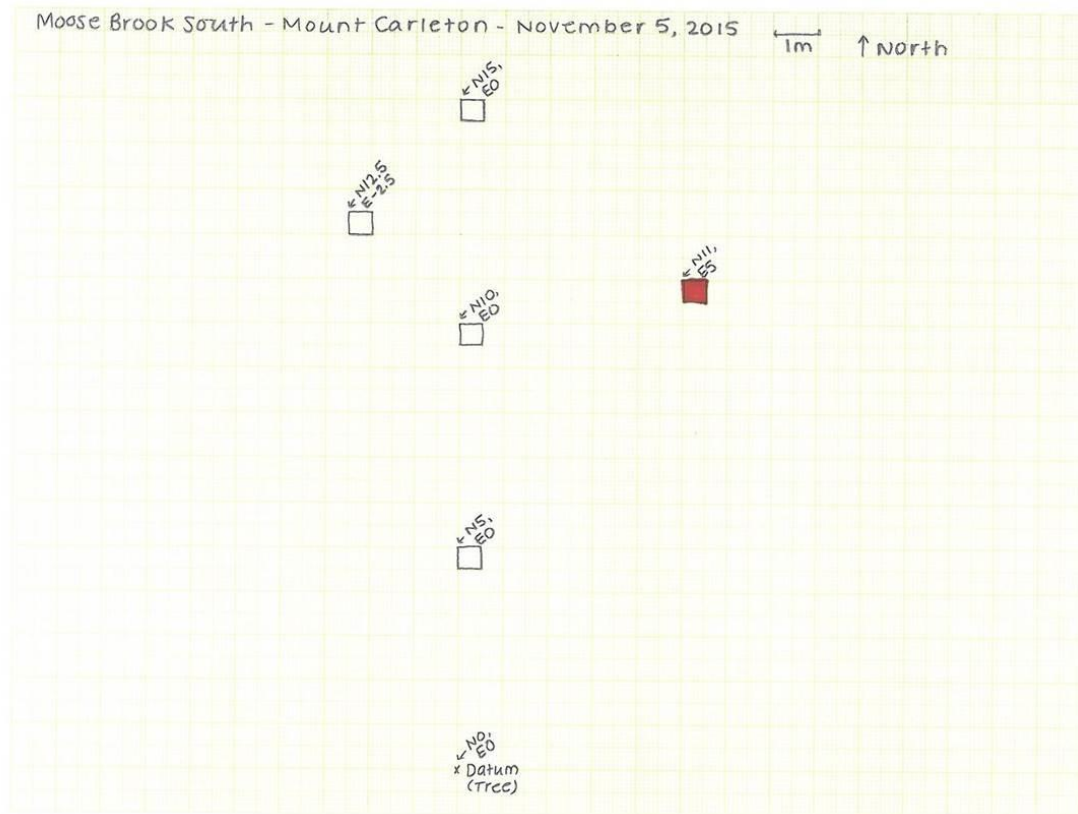


Figure 8: Sketch map showing STPs at Moose Brook south, red indicating positive STPs.

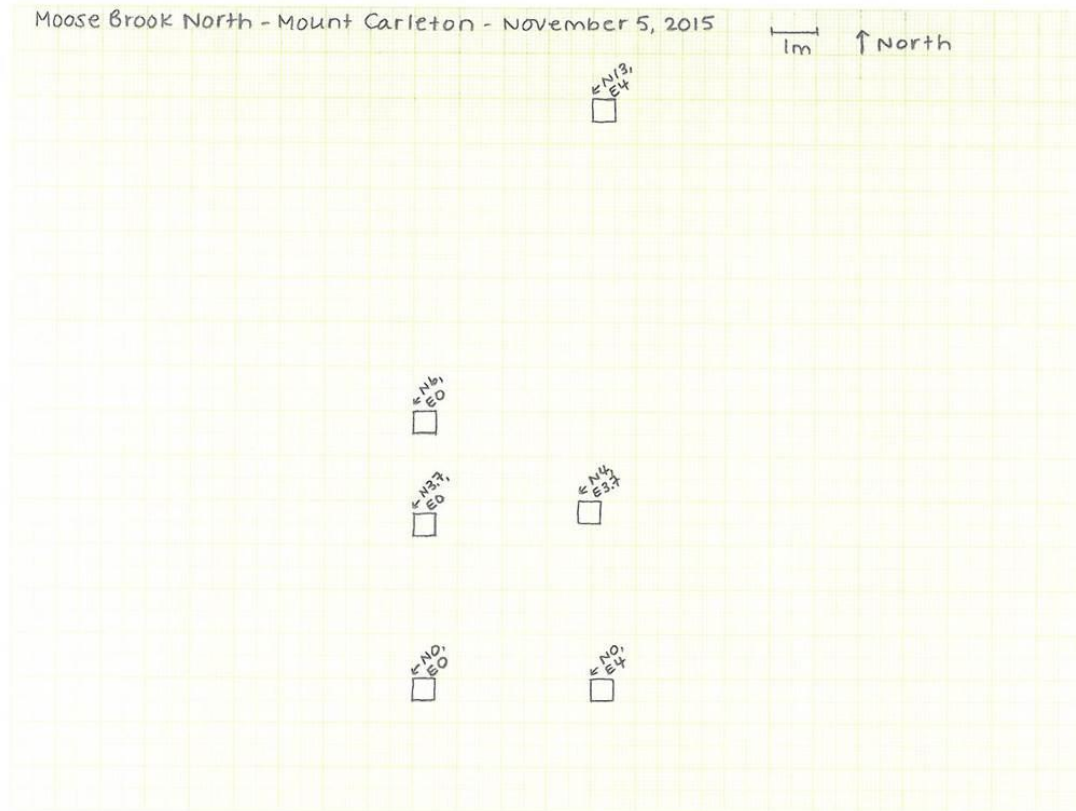


Figure 9: Sketch map showing STPs at Moose Brook south, no positive STPs.