

# Parks Canada 2019

## Archaeological Field Activities

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### Introduction

In 2019, Parks Canada’s Atlantic Terrestrial Archaeology Office conducted Archaeological Impact Assessments (AIAs) and other fieldwork throughout many of Newfoundland and Labrador National Parks and National Historic Sites to ensure that cultural resources were not negatively impacted by proposed visitor experience and infrastructure related project activities. While not an extensive account of all Parks Canada field activities conducted within the province, this article highlights some of the fieldwork conducted in:

- Torngat Mountains National Park
- Red Bay National Historic Site
- Terra Nova National Park
- Gros Morne National Park

### Use of Drones (UAVs/UAVs) in National Parks and National Historic Sites

Since a drone or UAS (2019 Aerial Systems) was used during the course of fieldwork, it is worth noting that all Parks Canada places, including both national parks and national historic sites are “no drone zones” for recreation use, as they pose risks to wildlife and visitors. With this, all non-recreation drone usage, even by Parks Canada staff, require permission from the Field Unit Superintendent associated with the site/park, as well as confirmation that the drone operator meets Transport Canada’s requirements. When conducting scientific research, you must also identify the desire to fly a drone in your Research and Collection Permit application (Parks Canada 2019b).

See <https://www.pc.gc.ca/en/voyage-travel/regles-rules/drones> for more information.

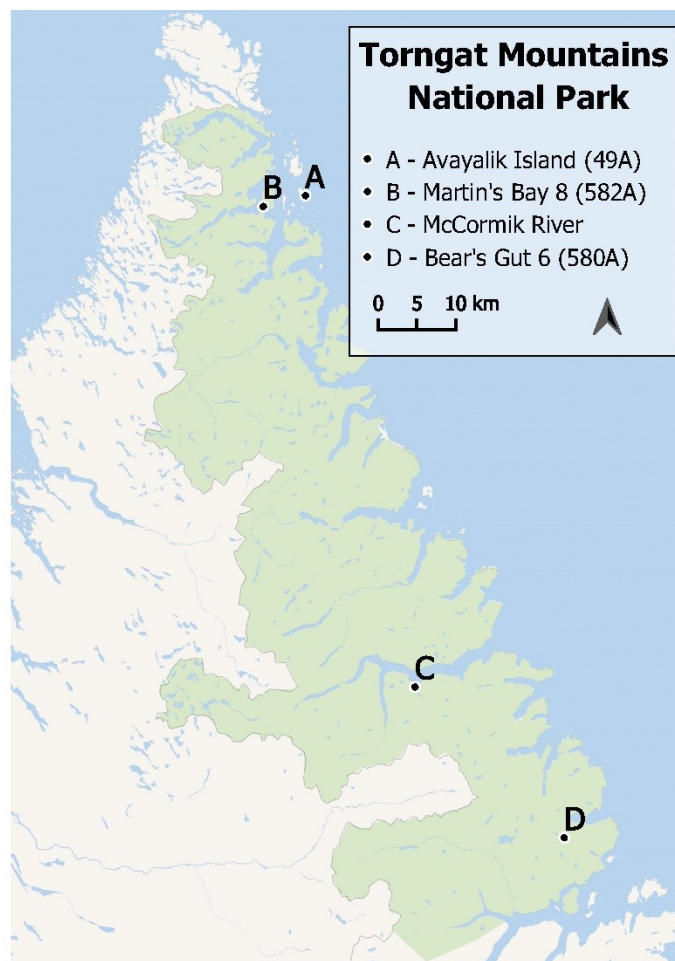
### Torngat Mountains National Park

Located in northern Labrador, Torngat Mountains National Park became a park reserve in 2005, with the implementation of the Labrador Inuit Land Claims Agreement and officially obtained national park status with the ratification of the Nunavik Inuit Land Claims Agreement in 2008 (Figure 1). From the Inuktitut word Torngait, meaning “place of the spir-

its,” this area has been home to Inuit and their predecessors for thousands of years. This rich cultural heritage is reflected in oral and written histories, as well as by the 424 known archaeological sites documented throughout the park. Archaeological impact assessments were conducted to ensure that these resources are protected for Nunatsiavut and Nunavik beneficiaries, as well as visitors, for generations to come.

The main project undertaken in July and August 2019 was the continuation of a multi-year archaeological assessment associated with the creation of a intershelter dome and hiking route network. The

Figure 1: Areas of Interest within Torngat Mountains National Park



discovery and return of a serpent side plate, and a quick site visit to Avayalik Island 1 (49A) will also be discussed.

**Intershelter Domes and Hiking Route Assessment (Bear’s Gut)**

In an effort to open up the interior of the Park to visitors and communicate the Inuit story on Inuit homeland, Torngat Mountains National Park (TMNP) is in the process of developing a new visitor offer. This includes the placement of eight bear-proof Intershelter Domes at regular intervals approximately a day-hike apart along routes between Saglek Fiord and Ramah Bay to create a “hut to hut” style hiking experience. Visitors will either trek between domes or stay for multiple days at one location and undertake

of high archaeological potential were the focus of the 2019 field season

Assessment of the dome locations began in 2016 and continued in 2017, with the intention that the domes could be installed, as soon as possible. Additional survey was required in 2018, following the relocation of some domes and realignment of hiking routes (Higdon 2017, Higdon 2017, Higdon and Weatherbee 2018. Hutchings 2019). As part of his 2018 assessment, Hutchings conducted an initial survey of the Bear’s Gut hiking route, recording numerous flake scatters, tent rings, caches and temporary shelters or caches beneath large boulders and other features. “Due to the number and density of features,” it quickly became evident that additional survey would be needed adequately document the nature and extent of the site (Hutchings 2019). The 2019 fieldwork focused primarily on the Bear’s Gut hiking route and associated boat landing areas.

**Figure 2: Bear's Gut 6 (580A). Eastern extent of 2019 Survey Area, facing northeast**



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**580A Bear’s Gut 6**

Situated 30km northwest of the Torngat Mountains Base Camp, the Bear’s Gut assessment area is located at the southern extent of the inlet known as Bear’s Gut (Figures 1 - 4). While Inuit and Pre-Inuit sites have been documented along the northern

day hikes. Hiking routes between camp locations range from 10 to 15 km, for a total of ~80 km.

A desk-based Archaeological Overview Assessment (AOA) was conducted to evaluate potential impacts that this visitor experience offer may have on known archaeological sites and areas of archaeological potential. It determined that an archaeological impact assessment of the dome and boat landing areas would be highest priority, as these areas would see the highest concentration of visitor activity, especially since the boat landing areas would most likely overlap with areas that people brought their boats ashore in the past (Higdon 2018). While assessing the hiking routes is important, due to time and budgetary constraints, areas associated with known sites and areas

extent of Bear’s Gut, as part of the 1970s Torngat Archaeology Project and other research projects, no archaeological sites were previously documented for the southern extent of the inlet (Fitzhugh et al. 1979:9, Kaplan 1983:608-618). The new site was assigned Parks Canada provenience number 580A, Bears Gut 6. Higdon was accompanied in the field by FSWEF (Federal Student Work Experience Program) Student, Megan MacKinnon, Nunatsiavut Group of Companies Bear Monitors, Herman and Ryan Merkeratsuk, and Parks Canada Resource Management Technician, Jacko Merkeratsuk.

Survey began with a brief helicopter survey of the area to relocate the area Hutchings surveyed in 2018, gauge the extent of the cultural resources and



Figure 3: Bear's Gut 6 (580A). Boat Landing Area and Trail

Figure 4: Bear's Gut 6 (580A). Western extent of 2019 survey area, facing west.

Note caribou trails extending from bottom centre of image, across lightly vegetated and often exposed gravel patches and onward toward the gravel/rocky point of the land which overlooks the water





**Figure 5: Bear's Gut 6 (580A). Black bear overlooking cache built along bedrock outcrop, facing northwest**

bears in the area. Terrestrial survey began with the systematic survey of the proposed boat landing areas at the eastern extent of the site. As with other surveys of this nature, we walked transects of the area, flagging cultural features with pin flags, so that we could go back and systematically record them at the end of the day with photos, field notes and geospatial data. Geospatial and feature data were recorded using a Juniper Geode (GNSS) and Rugged Tablet with Android OS. Freeware app SW Maps was used to record feature information via the use of point, line and polygon shapefiles. A DJI Phantom 4 Drone was used to capture additional aerial images and to aid in the creation of a site map.

The system of flagging cultural features and recording them later in the day had to be adjusted, as some of the initial flags that we set in the morning ended up being prayed upon by a black bear. It was probably the same one that visited us while we were recording a cache that had been built between two large boulder outcrops (Figure 5).

The survey extended from the boat landing areas to the east, along the northern bank of the river, along a large flat grassy area interspersed with archae-

ological features and multiple over-lapping caribou trails. Over 70 distinct archaeological features were recorded in this area, including caches or shelters built against boulders, tent rings, lithic scatters, hunting blinds, rock alignments or rock, as well as two potential shallow sod house depressions (Figures 6 to 9). While the bulk of the lithic scatters were Ramah chert flakes, a few worked artifacts were also recorded during the course of the survey (Figures 10 and 11). No artifacts were collected during the course of this fieldwork.

A map and visitor experience plan will be developed to ensure that cultural resources are not negatively impacted by visitors hiking throughout the area. This plan may include areas of interest that allow visitors for view and learn about cultural resources from a safe distance.

While recording the boulder features along one of the gravel terraces, Nunatsiavut Government Bear Guard and beneficiary, Ryan Merkeratsuk, noted how hunters could have easily hidden behind the boulders to surprise caribou as they made their way along the caribou trail and up over the edge of the terrace (Figure 12).



**Figure 6: Bear's Gut 6 (580A).  
Tent ring,  
facing south**



**Figure 7: Bear's Gut 6 (580A).  
Ring of stones  
built against  
boulder,  
facing southeast**

Figure 8. Bear's Gut 6 (580A). Flakes and flake scatters eroding out of caribou path, facing east



Figure 9: Bear's Gut 6 (580A). Close up of flake scatter



**Figure 10: Bear's Gut 6 (580A).**  
Black chert biface preform found along gravel terrace

**Figure 11: Bear's Gut 6 (580A).**  
Base fragment of stemmed Ramah chert endblade





Figure 12: Bear's Gut 6 (580A). Top: gravel terrace with cultural features along western extent of image, caribou trails and flake scatters to the east, facing northwest; Middle: view of gravel terrace showing and placement of two boulder features, facing northeast; Bottom Left: Boulder with single tier ring of stone, facing east; bottom right: boulder with single tier ring of stone, facing east

### Discovery and Return of Serpent Side Plate

During our stay at the kANGIDLUASuk Torngat Mountains Base Camp and Research Station (<https://thetorngats.com/>) located in St. John's Harbour (Saglek Bay), we were serendipitously visited by a Vincent Fauteux, a sailor from Quebec, who had first

contacted Parks Canada back in 2016 about a brass object that he had picked up while hiking in northern Labrador in 2000).

He indicated that he picked up the brass object while on route from Nachvak Fiord's Ivitak Cove to the summit of Mount Caubvik (also known as





**Figure 13: View from terrace overlooking McCormik River, Ivitak Cove and Nachvak Fiord**

Mont D'Iberville in Quebec). The brass object was picked up while fetching water along the McCormik River and had remained in his possession ever since (Figures 13 & 14). After having undertaken some research on his own, he reached out to Parks Canada for assistance in identifying the artifact. While discussing the nature and possible origin of the artifact, he was reminded that it is illegal to remove artifacts from known or previously undocumented archaeological sites, as per National Parks General Regulations (SOR/78-213, Section 14(1)). With this, he apologized for taking the object and indicated that he would return the artifact to the Inuit of Labrador, in person. True to his word, after many years of prepa-

rations, he sailed back to the Torngat Mountains National Park in early August 2019 to return the artifact.

Preliminary research suggests that this brass object is a serpent side plate from a 19th century/early 20th century musket, often referred to as a "Northwest Gun" (Hanson 1955, 1966) (Figure 15). This is significant, as muskets with serpent side plates were commonly brought to North America by the Hudson's Bay Company for trade with local Indigenous groups. Gooding notes that developing a stylistic time-table for serpent patterns is problematic, as there are too many variables in 250 years, too many similarities in shape which could be altered during hand finishing, and that many of the side plates may

**Figure 14: 19th century/Early 20th century serpent side plate from McCormik River. Missing tail portion of serpent and right most screw hole**





**Figure 15: Complete serpent side plate highlighting placement on rifle, mounting crews and additional details (Worthpoint 2020)**

have been produced by a single brass foundry (2003: 72-73). Unlike the barrel, lock plate or butt plate of muskets made at that time, the side plates of this type did not commonly have clearly identifiable maker's marks. A plate in Hanson 1955's 'The Northwest Gun' includes an image of a similar looking side plate with the caption "Very late type serpent plate on Hollis percussion gun, 1880 period" (1955: 71, Plate XVB).

identical side plate was found outside of Kangiqsu-alujjuaq (George River) in 1987 (George 2007, Schubert 2013: 12). Based on maker's mark on the lock portion of the rifle, a Nunatsiaq News article indicated that the rifle dated from the late 1800s and that it could correspond with the presence of HBC's Fort George River Post, which was in operation from 1876 to 1915 (George 2007). While the 130km distance between George River and Nachvak Fiord may seem far today, oral history and archaeological evi-

While the context in which this artifact has been found is lost, this reporting and eventual return of this artifact helps to tell the story of interactions between the Inuit and Hudson's Bay Company in the area. There are numerous Thule/Inuit habitation sites along the shorelines of Nachvak Fiord, within 3 to 10 kilometers of the McCormik River, as well as the Nachvak Hudson's Bay Post which was in operation between 1868 to 1906 (Figure 16).

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**Figure 16: Nachvak Hudson Bay Post (180A, IgCx-02) in foreground, middle-left; Ivatak Cove and McCormik River/Ivatak Cove, background, top-right. Facing east (Higdon 2004)**





**Figure 17: Martin's Bay 8 (582A). Narrow isthmus with multiple Inuit tent rings, facing west**



**Figure 18: Martin's Bay 8 (582A).  
Inuit tent ring with paved area, facing north**

dence suggest an Inuit and potentially Pre-Inuit (Dorset) travel route between George River, along the Koroc River, to Palmer River, to Nackvak Fiord's Tallek Arm (Loring 1979) A journey of approximately 160 km.

**Avayalik Island 1 (49A - JaDb-10) Site Visit**

Avayalik Island 1 (49A) is located 30km from the northern tip of Labrador/Torngat Mountains National Park. 49A is a major Pre-Inuit site with structures and frozen middens that have excellent organic preservation (Fitzhugh et al. 1979: 16). Small Late Dorset semi-subterranean rectangular structures were found within which was a cobble and slab axial fea-

ture without hearth or lamp supports and with cleared lateral areas interpreted as sleeping platforms (Renouf 2003). It was first tested/excavated in 1978 by Richard Jordan and team as part of the Smithsonian's Torngat Archaeological Project (Fitzhugh et al. 1979:16-17, Fitzhugh 1980). Subsequent visits to the site suggest that the site may be impacted by coastal erosion and permafrost thaw.

The purpose of the site visit was to determine if any additional artifacts had eroded out of the banks since Kaplan et. al.'s visit in 2016 (2017) and to use a drone to create a detailed site map, to help with the cultural resource management of the area.

While on route to the site we soon found out a thick blanket of fog had encased much of the shoreline and nearby islands in our survey area. Rather than turning back immediately, we opted to land on a small point of land within Martin's Bay to wait and see if the fog would lift. Having landed in an area known for its Pre-Inuit and Thule/Inuit habitation sites and 1943 German Weather Station Kurt from World War II (Martin's Bay 7 [64A - JaDb-07], Douglas 1982, Kaplan 1983, Fitzhugh et et. 1977), we, not surprisingly, came across a previously undocumented Inuit campsite. A quick survey of the area

**Figure 19: Avayalik Island 1 (49A).  
Dorset structure excavated by Richard Jordan and team located in middle of the image, facing east**



revealed a series of tent rings on a low-lying narrow isthmus with bedrock outcrops to the east and west (Figure 17). One tent ring included a paved area for a stove (Figure 18), while another included nylon rope and plywood fragments, suggesting a more recent occupation. Documented as Martin's Bay 8 (582A), additional survey is needed to determine the nature and extent of the site.

After a quick lunch, our pilot, observed that the weather had cleared up enough for a safe landing on the island. We then flew to the island, relocated the site and installed some Ground Control points to aid with the mapping of the site. In the end, we had less than an hour on site, before the fog started to return. Such as we were not able to map the site and survey the area, as planned, but were able to get some useful imagery to help plan future fieldwork and the cultural resource management of the site (Figure 19).

### **Red Bay National Historic Site (9A)**

Red Bay National Historic Site (NHS), located on the Labrador side of the Strait of Belle Isle, commemorates the largest known 16th century Basque whaling station in North America. “These resources are found on the mainland shore of Red Bay Harbour, on Saddle Island at the mouth of the harbour, and underwater. The range of cultural resources is broad, consisting of sunken vessels associated with cultural materi-

al, terrestrial sites such as tryworks, where whale blubber was processed, a cemetery, cooperage stations, structural remains, and ballast piles that may be the remains of wharves” (Stopp 2013). According to Tuck (2015) “‘Try’ is an obsolete English verb that means ‘to render or purify’. The word ‘tryworks’ was used by New England whalers until well into the last century to describe the furnaces aboard the ship in which whale blubber was rendered.” (2015:3)

While not the reason for designation, it is important to reiterate that the Red Bay area has been occupied up to 9000 years, including occupations from the Archaic to 19th century European fishermen, whose descendants still occupy the small village today (Tuck 2005: 34).

The objectives for the 2019 Red Bay NHS fieldwork were as follows:

1. Urine Diversion Toilet Archaeological Impact Assessment,
2. Coastal Erosion and Visitor Experience Site Survey,
3. UAS (Unmanned Aerial System) or Drone Survey of the Island.

We arrived in Red Bay during a fierce September wind. Adverse conditions on the south coast of Labrador meant a three-day weather hold in St. Barbe, as high seas made the Strait of Belle Isle impassible by

**Figure 20: Red Bay NHS (9A).**

**Aerial view of wharf, shed and urine diversion toilet archaeological impact assessment area, facing east.**





**Figure 21: Red Bay NHS (9A12). Surveying assessment area with Juniper Geode GNSS and tablet**

ferry. Though we were eventually able to cross the strait, the short motorboat voyage from the Red Bay NHS visitor center wharf to Saddle Island would not be possible for another two days after our arrival. We were told that it was a similar northerly gale that sank the San Juan. Red Bay NHS's Cindy Gibbons and Phil Bridle welcomed us to the site and eagerly shared what it was all about.

**Urine Diverting Toilet**

**Archaeological Impact Assessment**

A low impact, urine diversion toilet was requested to improve visitor comfort and potentially increase visitation to the island, while at the same time providing minimal impact to the site. A urine diversion toilet essentially separates the urine from the solid waste. Urine trickles out while solid waste is removed, as needed.

With help from site staff, a location was chosen directly behind the south wall of the extant Coast Guard building, 15 meters south of the main wharf (Figures 20 and 21). This location was chosen by site management in an effort to hide the 3x5 m toilet structure from Saddle Island's north shore viewscape. Two alternate locations were located to the west, in the event that the area behind the Coast Guard building was deemed unsuitable for the installation of the toilet. The main goal of the assessment was to find a suitable location, close to the wharf, which would not disturb the network of 16th century Basque features and any other archaeological resources located along the north shore of the island.

Previous archaeological testing was completed by Parks Canada archaeologist Jenneth Curtis, north of the proposed toilet location, on the seaward side of the former coast guard building. These excavations confirmed the presence of a Basque tryworks (EkBc-65), and noted the feature remained seemingly undisturbed by the construction of the building (Curtis 2009). Other examples of tryworks on Saddle Island measure over 12 metres in length, with some comprised of up to six fireboxes (Tuck 2005). In many instances, previous excavations have revealed multiple rows of fireboxes with initial fireboxes constructed as close as possible to the shoreline for easy access. Intense heat and repeated use eventually deteriorated the stone used to build the fireboxes, thus leading to the construction of additional fireboxes to the south.

With that in mind, the potential for the feature to extend beneath the proposed toilet location was significant. The extent of construction-related disturbance on the south side of the coast guard building however, was unknown.

Two 50cm x 50cm test units (9A12A & 9A12B) were excavated to the south of the former coast guard building/shed, revealing a layer of densely rooted sod (Lot 1), followed by a layer of dark brown soil containing fire-cracked rock and crusty burnt fat deposits (Lot 2). Test Pit A revealed a glass Pepsi bottle fragment in Lot 1 and orange/red Basque tile fragments amongst the fire-cracked rock in Lot 2. Excavation continued to determine the extent of the fire-cracked rock. No additional artifacts or cultural features were observed.

**Figure 22: Red Bay NHS (9A). Test Unit 9A12B highlighting Basque tile in situ among fire cracked rock**





**Figure 23: Red Bay NHS (9A). Aerial view of eastern extent of Saddle Island with Area C Tryworks in foreground, half-sunken French ship, the Bernier, and cemetery and other feature in the distance, facing east**

Test Pit 9A12B was excavated to determine the extent and confirm the presence of the tryworks feature. No artifacts were recovered from Lot 1. In addition to the fire-cracked rock and charred fat, Lot 2 contained a single wrought iron nail, fragments of Basque Roofing tile and a bone fragment that has yet to be analysed (Figure 22). This pattern of fire-cracked rock and fat deposits, intermixed with Basque artifacts is consistent with previous excavations of known tryworks on Saddle Island. With enough in-situ evidence to confirm the presence of a Basque feature, excavation stopped at ~20cm and the units lined with geotextile and preserved for future research. The feature may represent a line of fireboxes to the south of the fireboxes/tryworks noted by Curtis in 2009.

With the initial area deemed to be unsuitable for construction, the two alternate locations were test pitted. The terrain was boggy and the test pits yielded no evidence of tryworks or other cultural features or

artifacts, except for coal fragments, likely related to the 19<sup>th</sup> century occupation of the island by local families. Pending an environmental assessment, a toilet could be built in either of the alternate locations.

### **Coastal Erosion and Visitor Experience Site Survey**

Since it was our first trip to Red Bay as Park Canada archaeologists, we took the opportunity to accompany acting park staff to discuss the nature of the site, issues related to coastal erosion, as well as potential visitor experience and research opportunities. While weather-related delays prevents us from conducting a systematic assessment of how the site is being actively impacted by coastal erosion, we were able to visit three key areas, including Saddle Island's Area A, Area C and Cemetery (Figures 23 and 24).

A Juniper Geode GNSS unit with Rugged Android Tablet and Freeware app SWMaps was used to capture point, line and polygon data associated with features throughout the island. This included the re-



**Figure 24: Red Bay NHS (9A). Aerial view of Area C Tryworks**

cording of the shoreline of “Area C,” along the northeast coast of the island. The area is associated with the tryworks excavated by Memorial University in the late 70s/early 80s. Despite regular monitoring and interventions, including the addition of sand bags and sod to the structure, natural erosion continues to undercut the shoreline in this area. Parks Canada is currently undertaking a study to determine how to protect the resource/mitigate the impacts caused by coastal erosion.

The Juniper Geode was also used to measure the approximate extent of the unexcavated tryworks at Area A to inform the potential remote sensing of the area. For instance, results from a GPR and Electromagnetic survey of a known unexcavated tryworks could be compared to previously excavated tryworks. Depending on the results, this information could then

be used to help interpret remote sensing of previously tested/suspected tryworks.

**UAS (Unmanned Aerial System) or Drone Survey of Saddle Island**

A DJI Phantom 4 was used to help in the creation of a high definition map of Saddle Island and its cultural resources, trails, buildings, etc. While such a map would ultimately help with natural and cultural resource management, and visitor experience decisions, the survey didn’t go as planned. Initial survey of the island was stymied by the arrival of a Coast Guard helicopter and their use of a drone to conduct a condition assessment of Coast Guard buildings still in operation on the island. As per Transport Canada regulations, we grounded our drone immediately upon seeing the helicopter and went to speak with the Coast Guard folks. We were not able to continue with the survey, as the wind had picked up by the



Figure 25: Areas of interest within Terra Nova National Park

time the helicopter left. While they admitted that their visit to the island was unplanned, the arrival of the helicopter and concurrent drone survey underscores the need for better communication about use of air-space and a discussion about use of drones within Parks Canada’s National Parks and National Historic Sites.

Only on the island for a few days, we were able to capture some images of the survey areas, areas being impacted by coastal erosion and the cemetery area, before the wind became too strong to operate the drone safely (Figures 23 & 24).

**Terra Nova National Park**

Terra Nova National Park (TNNP) is situated on the northern coast of the island of Newfoundland and has a cultural history stretching back more than 5000 years. Thirty-two archaeological sites have been docu-

mented within the park limits. They represent Maritime Archaic, Pre-Inuit, Recent Indigenous occupations, as well as more recent European operations, including numerous 20th century forestry/sawmill related sites. While these sites are predominately located along the coast, recent surveys have shown there are also numerous forestry related sites in the interior of the park, along its rivers and ponds, such as cribbing along rivers and corduroy roads embedded in the bog along well traversed logging paths (Curtis 2010, Higdon 2017).

In May 2019, three archaeological impact assessments were conducted within the park, they include:

1. Restoring Forest Health Project (Focusing Specifically on Park Harbour Hill Complex Prescribed Burn Units)
2. Coastal Erosion Monitoring and Test Excavations at 31A (Chandler’s Reach 2) (DdAk-11)
3. Terra Nova National Park Utility Systems Recapitalization Project

**Restoring Forest Health Project (Focusing Specifically on Park Harbour Hill Complex Prescribed Burn Units)**

“Parks Canada directives (Directive 2.4.4) and policy (National Fire Management Strategy) encourage restoring the ecological role of fire through the application of prescribed fire where appropriate” (Parks Canada 2016: 1). With this, Terra Nova National Park

Figure 26: Test pitting at southern extent of prescribed burn area, facing east







Figure 27: Prescribed Burn Unit test pit with charcoal layer

has created a plan and procedures document outlining the prescribed burn of numerous zones throughout the park. This involves the use of fire-guard lines with sprinklers and/or natural water bodies to ensure that specific areas are burnt by trained Parks Canada staff in a controlled manner. “The primary objective of the prescribed burns is to create a “suitable seedbed for black spruce seedlings” (Parks Canada 2016:9) by reducing the depth of organic matter to a depth of 0-5cm throughout 80% of the burn areas (Parks Canada 2016:7). It is this burning and removal of organic matter which has the greatest potential impact on cultural resources (Higdon 2016:2).

The prescribed burn area assessed during the 2019 field season encompassed a large area along the southern portion of Park Harbour, extending inland along the shores and rivers of Spruce Pond, Park Harbour Pond and Rattle Pond. Previous prescribed burn assessments conducted revealed that locations along the watercourses to the east and west of the prescribed burn unit have been used as part of the 20th/21st century forestry industry, including cribbing at Rattle Pond Brook (411A) and a corduroy road embedded in the bog at Spruce Pond 1 (450A) (Curtis 2010, Higdon 2017). These sites may be part of a larger logging-related network of sites, as they are

located along a series of ponds and rivers which eventually empty into the ocean adjacent to the former 20th century Park Harbour Sawmill site (29A).

Based out of a cabin at Park Harbour, surveys were conducted on foot and by canoe to help determine areas of archaeological potential. Proposed guard lines along the outlines of the prescribed burn units, shorelines, rivers, islands and other well-drained areas of archaeological potential were assessed and in some instances test pitted. No cultural resources or artifacts were observed during the course of the survey and test pitting. Lenses of

charcoal were observed in test pits throughout the prescribed burn area, but these may be related to natural forest fire events (Figures 25 and 26).

### Coastal Erosion Monitoring and Test Excavations at 31A

#### (Chandler’s Reach 2 - DdAk-11)

31A Chandler’s Reach 2 (DdAk-11) is located within Chandler’s Reach, Bonavista Bay, in a cove on the south shore of the southernmost island in the Over Islands Group (Figure 25). The site was initially recorded in 1979, during Parks Canada commissioned survey of the park. At this time, Memorial University’s Dr. James Tuck, noted that the site extended “close to 50m along the eroding bank along a south-facing beach on the southern most of the Olford Islands [Over Islands]” (Tuck 1979:45) (Figure 28). He noted material washing from a narrow band between the poorly developed humus and underlying gravel subsoil, and that it was “1m above sea level, but [was] probably washed by heavy seas” (1979:45). Testing behind the site produced little material more than 1 to 2 meters behind the eroding bank. He concluded that the site appeared to be “virtually completely eroded.” Two artifacts (midsection of a straight-based biface, and a notched flake) and 32 flakes of various cherts, and a single small spall of quartz crystal were



Figure 28: Chandler’s Reach 2 (31A). Southern beach, facing east



Figure 29: Chandler’s Reach 2 (31A).  
Artifacts from Curtis’ 2009 coastal survey. Biface  
31A1A2-3, Endblade 31A1A2-1, notched knife 31A1A2-2



**Figure 30: 31A Chandler's Reach: Southern shoreline.**  
**Note eroding bank and undercutting of vegetation**

recovered from the face of the bank. The size and nature of the assemblage meant that it was impossible to determine the cultural affiliation of the tools.

As part of a Coastal Erosion monitoring program, Parks Canada archaeologist, Jenneth Curtis visited the site in 2007, 2009 and 2011. In 2009, she indicated that “based on artifacts observed in the eroding shoreline this site stretches from the middle of the south shore all the way around the [eastern] end of the island - a distance of more than 100 m” (Curtis 2009) (Figure 28). Artifacts found in 2009 included a Dorset Pre-Inuit endblade and knife and a pointed biface possibly attributable to the Cow Head Complex” (Curtis 2010:8) (Figure 29). In 2011, she noted “extensive erosion evident along the southern shore with cultural material exposed over a length of 200m.” Curtis went on to recommend test excavations to determine the nature and extent of the site.

As part of a multi-year coastal erosion monitoring and testing strategy, a terrestrial survey and systematic test excavations were undertaken in 2019 to help determine the nature and extent of the site, and to determine how much of the site remained. Survey started by walking transects of the beach with staff from the park. While not all present at the same

time, these included: Resource Management Officer, Rod Cox; Visitor Safety and/or Fire Operations Coordinator, Barbara Linehan; Fire Crew Leader Robert Richards; and two Resource Conservation summer students. Artifacts were flagged along the beach and eroding bank edges to help determine artifact distribution and to pinpoint areas of highest archaeological potential. Test pits were excavated in the high potential areas to help determine the extent of the site.

The 2019 survey revealed additional lithic scatters throughout the southern and eastern beaches (Figures 28, 29 and 30), including various colours of rhyolite and

chert flakes, biface fragments and biface preforms (31A1A4-1) (Figure 31). Test pits excavated 1 to 2 meters behind the southern eroding bank revealed a ground slate fragment (31A2B2-1) found in a grey-brown sandy gravel layer at a depth of 37cm below surface. Unifacially worked on the narrow edge and bifacially worked on two sides a groove running the length of the artifact may have been used to sharpen bone or other media (Corey Hutchings, pers. comm. 2020). Other artifacts include a linear flake and a thick lens of chert and rhyolite flakes.

While the test pits inland from the eroding bank along the eastern beach contained few flakes, a single in situ Pre-Inuit endblade (31A2G1-1) with a concave base (Figure 31), similar to the one found by Curtis in 2009 (Figure 29) was found in a mixed black organic gravel layer at a depth of 20cm. While survey and testing of 31A revealed a site that is larger and more complex than anticipated, the large quantity of artifacts found along the southern and eastern beaches indicate that much of the site has been lost due to coastal erosion.

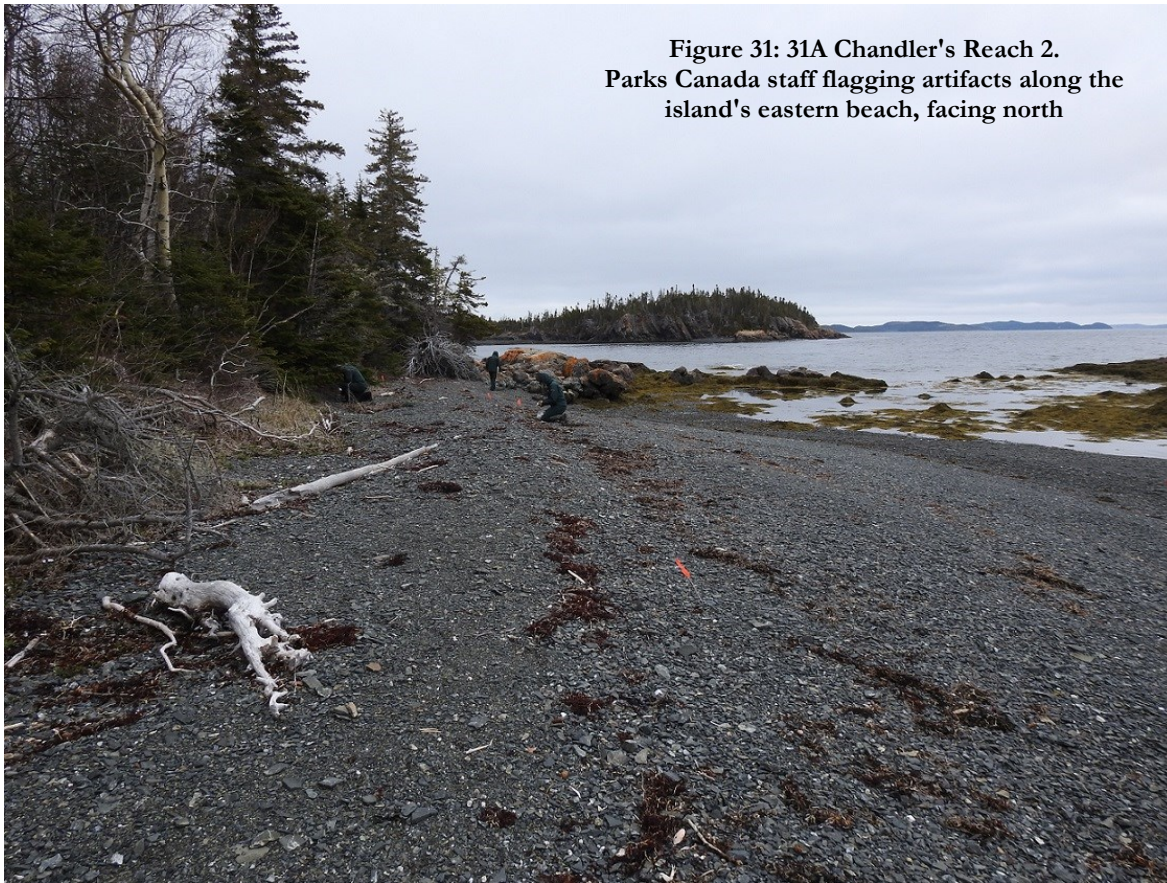


Figure 31: 31A Chandler's Reach 2. Parks Canada staff flagging artifacts along the island's eastern beach, facing north

Figure 32: 31A Chandler's Reach 2. 2019 Artifacts. Biface preform (31A1A4-1), Dorset endblade with concave base (31A2G1-1) and a ground slate tool with incised line (31A2B2-1)





Figure 33 : Test pitting along Newman Sound Day Use Area

**Terra Nova National Park  
Utility Systems Recapitalization Project**

The Terra Nova National Park Utility Systems Recapitalization project involved improvements to water and electrical infrastructure throughout the park, including locations at Newman Sound Campgrounds, Malady Head Campground, as well as associated administration infrastructure (Figure 25). The bulk of the work was intentionally planned to occur within previously disturbed trenches and/or within the footprints of existing roadways to limit impacts on the parks cultural and natural resources. A desk-based archaeological overview assessment was conducted to determine potential impacts to known and previously unknown archaeological/cultural resources.

Fieldwork consisted of site visits to determine if test pitting was required, as well as test pitting areas of archaeological potential. The areas of highest archaeological potential were those adjacent to the water, including locations along the Newman Sound Day Use Area (Figure 25) and along the portion of the Malady Head Campground that is situated along the shores of Beach Cove. Aside from a few fragments of recent ceramic, blue glass and translucent Coke bottle glass, from the test pits in Newman

Sound Day Use Area, no cultural material was found during the course of the work. As a result of the assessment, it was determined that planned utility upgrades could continue as planned.

**Gros Morne National Park**

Gros Morne National Park is located on the west coast of Newfoundland (Figure 34) and has a cultural history stretching back more than 5000 years. Gros Morne National Park Reserve was established in 1973, as part of a Federal-Provincial Agreement (Parks Canada 2019a:2) and officially became a National Park in October 2000 (Bourdages and Craig 2000).

There are ten known archaeological sites located within the park boundaries and 29 within a 5km radius of the park. These include archaeological sites at Cow Head and along the beach at Shallow Bay. The known sites are primarily located along low-lying coastal areas. These sites show evidence of prehistoric (Pre-Inuit) and historic occupations, including numerous 19th century related sites containing building foundations, a shipwreck and a cemetery (Krol and Tuck 1985, Krol 1986, Stopp 1990, Stopp 1989, Renouf 1992, Tuck 1972 & Tuck 1982).

While most archaeological sites in Newfoundland are coastal, it is important to note that adjoining interior areas would have also been utilized to access inland fish resources and caribou herds (Renouf 1992:2). Like Terra Nova National Park, the use of the interior could also be extended to include trapping and hunting by indigenous and non-indigenous people, as well as small-scale logging for personal use and large-scale logging to support the lumber industry in the area.

2019 Some of the fieldwork projects included:

1. Gros Morne National Park Mountain Biking Trail Development
2. Lomond River 1 (578A) Archaeological Survey

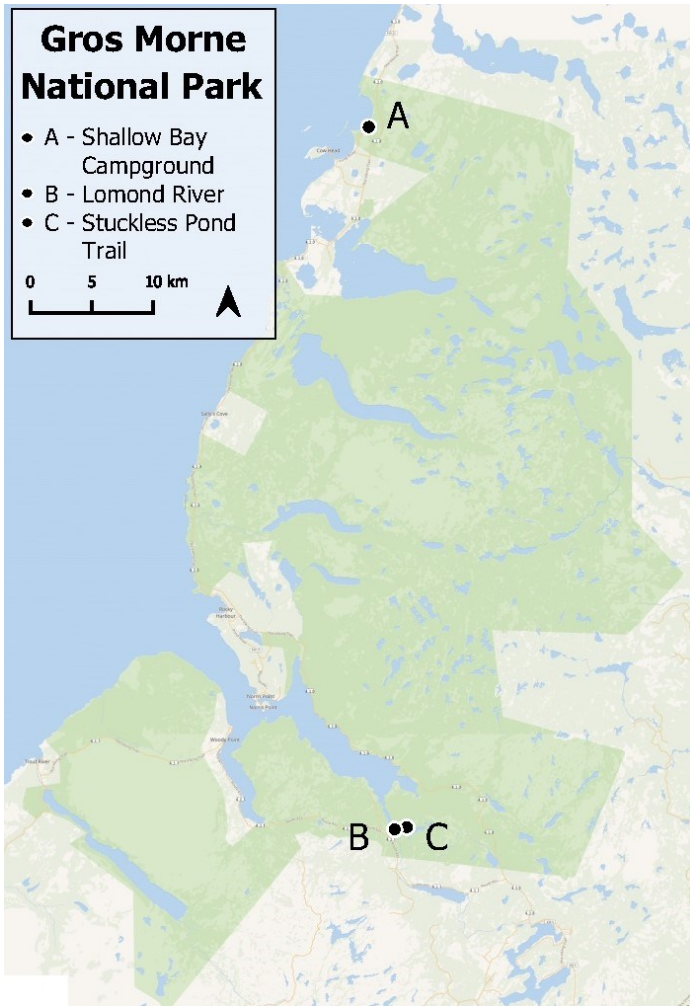


Figure 34: Areas of interest within Gros Morne National Park

3. Shallow Bay Campground Upgrades to Semi-Serviced Site.

**Gros Morne National Park Mountain Biking Trail Development**

The proposed biking trail development includes upgrades to the Stuckless Pond Trail (Figure 34), located at the southeastern extent of the park, and tentatively the installation of a bike-friendly route from Stuckless Pond, northward along the Southeast Hills to a visitor lookout located along Highway 430 (Figures 34 – 36). While assessment of the hill top route

revealed no cultural resources, the survey of the proposed adjustments to the Stuckless Pond trail revealed trails along numerous cleared areas and former logging roads (Figure 36 and 37), as well as artifacts that may have been associated with the early 20<sup>th</sup> century logging of the area. These included: barrels, cast iron door or machine parts, and iron sled runner (Figures 38, 39 and 40). All artifacts were left in situ with the hope that this rich part of the park’s history can be eventually incorporated into the Stuckless Pond visitor experience. While changes to the trail should have minimal impact on these cultural resources, additional survey is needed to determine the extent and nature cultural resources in this area.

**Lomond River 1 (578A) Archaeological Survey**

In 2017, Gros Morne NP Partnering and Engagement Officer and avid salmon angler, Danny Major, contacted the Parks Canada Terrestrial Office to indicate that he found some Ramah Chert artifacts along the shore of the Lomond River (Figure 41). Higdon and Major went to the find location in June 2019 to relocate and potentially determine the extent of the site. While much of the site appears to have been impacted by extreme weather and flooding, the 2019 survey of the eroding coast revealed a single Ramah Chert flake (Figures 42 and 43) and a large iron spike on the beach, potentially related to cribbing used to channel logs for the logging industry in the area (Figure 44 and 45 ). Two test pits were excavated to sterile, but no artifacts were found. The site has been recorded in the Parks Canada database as Lomond

Figure 35: View of Bonne Bay from proposed Southeast Hills Trail, facing west





**Figure 36:**  
Clearing along  
northwest portion  
of Stuckless Pond  
Trail. Probably  
associated with  
former logging  
industry, facing  
southeast



**Figure 37:**  
Example of  
former  
abandoned  
logging road along  
northern extent of  
Stuckless Pond  
Trail



Figure 38: Cast iron piece of stove or machinery

tential because of its proximity to the old community of Bells Downes and Cow Head, 1.0km and 3.0km respectively (Tinker et al. 1976). There are also known Pre-Inuit sites located at Cow Head within 3.4 km to the southwest and along a river that feeds into Shallow Bay, approximately 1.6km to the northeast. The project area is also located within 125m of the current Shallow Bay beach.

The area was surveyed with drone and Juniper Geode GNSS. Based on field survey and assessment, six test pits were excavated along the underground utilities trench situated between camp sites and an additional test pit

River 1 (578A) Additional survey and test pitting is required to determine the nature and extent of the site and whether or not there are other sites in the area.

**Shallow Bay Campground Upgrades to Semi-Serviced Site**

The Shallow Bay campground buildings within Gros Morne NP are all over 30 years old and require infrastructure investment, including the upgrading of campsite amenities to add to the visitor experience offer for the area (Figures 34 and 46). Proposed upgrades to the Shallow Bay Campground that are of concern to terrestrial archaeology include the excavation of trenches associated with the installation of water and electric utilities.

A desk-based archaeological assessment determined that the project area has some archaeological po-

was excavated at the location of the proposed electrical building to determine the nature of the mound of rock and soil in that location. The areas along the roadways and within the camp site areas themselves were not tested, as they were deemed to be previously disturbed or of low archaeological potential.

Figure 39: Iron sled runner embedded in the ground







Figure 40: Midden of barrels, barrel hoops, Coke bottles and other debris



Figure 41: Lomond River 1 (578A). Artifacts observed by D. Major. Biface is approximately 10cm, flake approximately 5cm



Figure 42: Lomond River 1 (578A). Single chert flake found on beach, noted with orange flag



Figure 43: Lomond River 1 (578A). Ramah chert flake found on beach beneath fallen trees (578A1-1)



Figure 44: Lomond River 1 (578A). Cobble and sand beach with large iron spike

Figure 45: Lomond River 1 (578A). Large iron spike found on beach





**Figure 46: Aerial View of Shallow Bay Campground Assessment Area**

Aside from a single recent 10” wire nail found in Test Pit 80A81E, no cultural material was found during the course of the excavations. Survey and test pitting suggest that the mound found in the trees along the eastern extent of the project area appears to be gravel and rock associated with the clearing and construction of the initial roadway.

While additional areas throughout the park were visited/assessed to determine archaeological potential, no additional testing occurred during the 2019 field season.

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