PROVINCIAL ARCHAEOLOGY OFFICE

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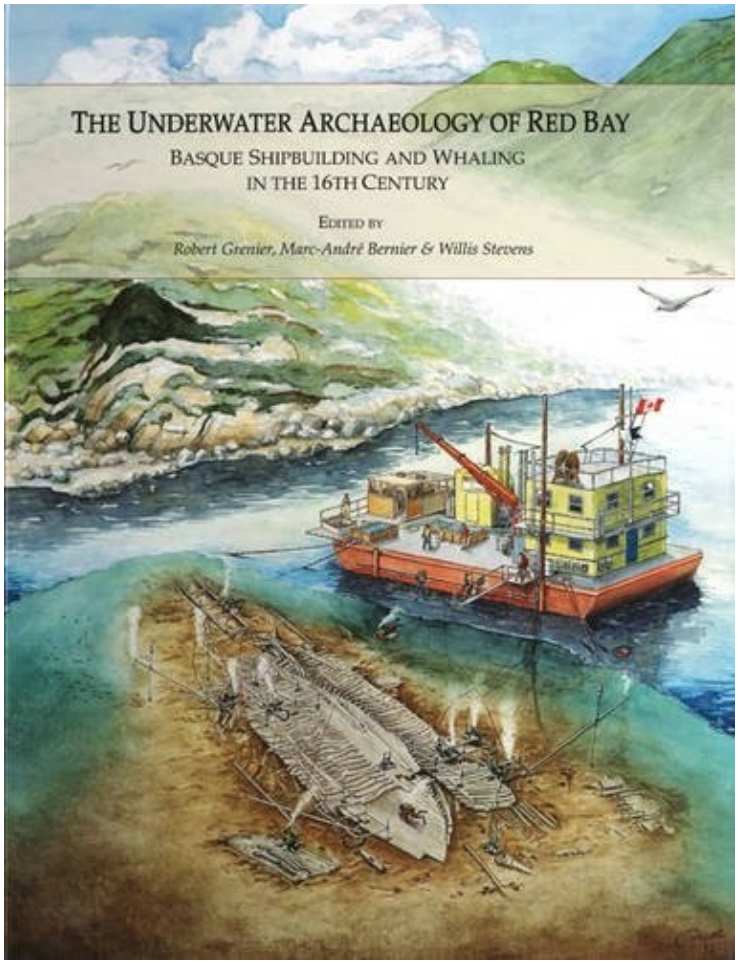
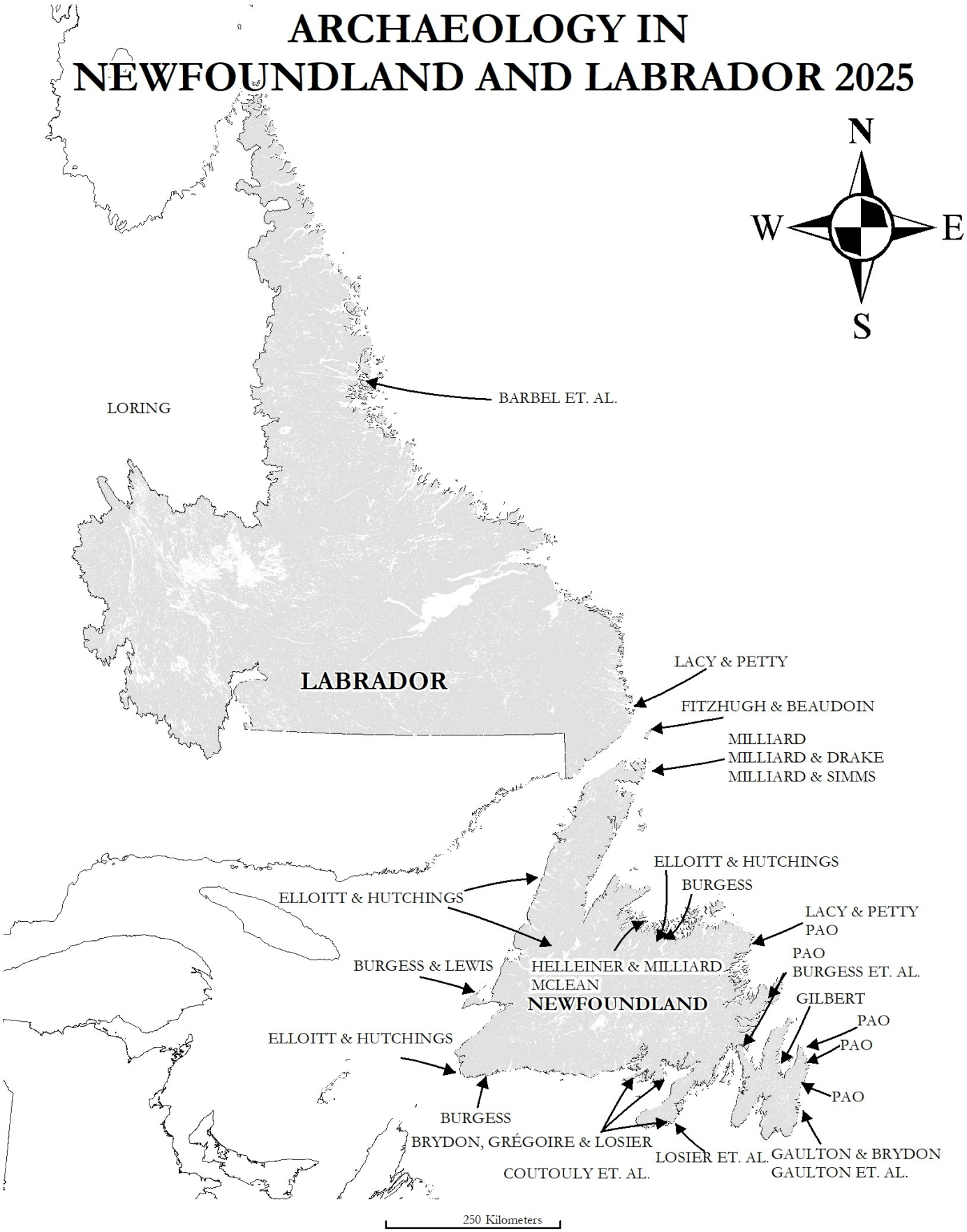
Cover: Lady Edith Blake's watercolour drawing of Beothuk bone pendants. Labeled on reverse:
"Bone ornaments etc. found in a Beothuk grave on Pilley's Island, Notre Dame Bay."
See Loring "Excavations in the Archives". This volume.

Editors
Provincial Archaeology Office

The Provincial Archaeology Office was saddened to learn of the passing of Dr. Robert Grenier on January 3, 2026 (1937 - 2026).

Dr. Grenier was the chief of Parks Canada's Underwater Archaeology section, a figurehead in the world of underwater archaeology and underwater conservation and he was appointed an Officer of the Order of Canada in 2005. He was a very significant character in the archaeology of Newfoundland and Labrador. Among other things he led the excavation of the San Jaun, the 16th century Basque whaling vessel in Red Bay, Labrador. This work led to the publication of the five volume book set called "The Underwater Archaeology of Red Bay: Basque shipbuilding and whaling in the 16th century"





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(Re)connecting past, present and future: engaging with a community-based archaeology of care as a way to counter Nunatsiavummiut heritage loss

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Introduction

This community-based research emerged from a tight collaboration between the Archaeology Office of the Nunatsiavut Government (Lena Onalik, Liz Pijogge), Laval University (Héloïg Barbel[1]), Memorial University of Newfoundland (Lisa Rankin, Peter Whitridge) and the Nain community (Nunatsiavut, Labrador), that we developed through several projects we conducted over the recent years. The summer 2025 project was co-led by Héloïg Barbel (Memorial University of Newfoundland), Liz Pijogge (Heritage Program Coordinator, Archaeology Office, Nunatsiavut Government) Lena Onalik (Archaeologist, Archaeology Office, Nunatsiavut Government), Lisa Rankin (Professor, Department of Archaeology, MUN), and Peter Whitridge (Professor, Department of Archaeology, MUN). The other team members were William Ikkusek, Shawn Brayden Salomon and Edward Sillitt (guides and boat drivers), Joe Atsatata and Jimmy Jararuse (bear guards), Lauren Pilgrim, Nancy Nochasak , Connor Ikkusek, and Charlie Terriak (student archaeologists), and Tom Angnatok, Diane Obed and Elaine Obed (community members who contributed occasionally). Moreover, other community members contributed to this project through informal talks. This was notably the case for Henry Webb, who shared memories and suggestions regarding some locales where small communities used to live.

The archaeological research in Nunatsiavut is rooted in a research tradition originating in the 1970's -1980's by the constitution of large-scale archaeological surveys; some of these sites were further documented during the following decades (e.g., Fitzhugh 1976, Kaplan 1983, Woollett 2003). This work was conducted upon request of the Labrador Inuit Association to enhance regional documentation regarding the long-lasting history of the relationships Labrador Inuit have had with their land (Brice-Bennett 1977). Most of the archaeological investigations focused on the study of the large communal sod houses that Inuit inhabited during the 17th-18th century. Past research questions addressed the modalities of the social structuration of Inuit communities at the beginning of the European colonisation of Labrador (e.g., Kaplan and Woollett 2000). Despite its preponderance in the coastal landscape, remarkably little attention was given to the coastal material heritage related to Inuit housing on the land during the 19th-20th century. The elaboration of historical narratives related to this period mostly relied on the study of the written archives produced by the colonizers, including the Moravian missionaries (e.g., Brice-Bennett 1981, Richling 1978, Treude 1974). The Moravians founded Nain in 1771, which initiated more than two centuries of colonial policies that aimed to transform Inuit lifeways and dispossess them of their land, their bodies and their identities (Procter 2012, 2020; all the work conducted by the Truth and Reconciliation Commission of Canada). The Moravians aimed to settle Inuit in houses that hosted nuclear families, gathered in Protestant congregations, and were dedicated to the production of seal by-products, cod and pelts, under the authority of the missionaries, who exported and sold the goods in Europe (Brice-Bennett 1981, 1990). Inuit constantly offered resistance to the missionary system and continued to engage with their own lifeways on the land (Brice-Bennett 1981, Brice-Bennett, et al. 2023). In that context, the coastal material heritage related to Inuit housing on the land, apart from the former mission stations, is part of Nunatsiavummiut collective and family histories. Hence, it provides a powerful support for the elaboration of counter-narratives that promote Inuit resistances and lifeways apart from the Moravian congregations. However, the Archaeology Division of the Nunatsiavut Government estimates that, nowadays, most of the Inuit material heritage in

[1]This affiliation refers to the work conducted in collaboration with the Archaeology and Heritage Office of the Nunatsiavut Government as part of Heloig Barbel's PhD research at Laval University; the present project is parallel to this PhD research.

Figure 1: Location of the locales surveyed during the summer 2025

daily life (midden deposits). In that context, we adopted community-based research as a way to take action and document this heritage currently at risk.

Principle of the approach

The project intended to survey late 18th-20th century Inuit housing in the Nain archipelago. This survey allowed the identification of locales where there are the material remains related to a diversity of life ways on the land throughout the year, at all seasons. Most of these locales had not yet been surveyed and displayed a notable potential for archaeological research (Figure 1). We conducted the survey through daily back and forth travel from Nain to most of the parts of the archipelago (Figure 1), except in the fjords and in the Dog Island area, where James Wollett (Laval University) conducted several studies in the past decades.

Some of these locales (Nukasusutok 8, Aupaluktuk, House Harbor, Siugak, Niatak, Bridges Passage and the neck of the Iglosiatik Island) had already been visited by archaeologists. These sites were inventoried initially in the course of survey projects conducted in the 1960's and 1970's (see for example Kaplan 1983, Spiess 1978) and/or documented through the study of Moravian archives carried out by Taylor (1974). These sites had seen little or no significant archaeological investigation. Some of these sites saw some initial test excavations while others are known only through a brief visual inspection and text description.

However, these recorded sites represent only a small range of Nunatsiavummiut material heritage on the land. Indeed, most of the places we visited were officially surveyed for the first time within this

Nunatsiavut faces preservation threats related to climate change. Indeed, the deepening of the permafrost active layer exposes unconsolidated deposits to coastal erosion that results from tides and storm surges. Moreover, the root activity related to the expansion of the shrub and bush cover generates mechanical and chemical decay of the organic remains that constitute a substantial part of the material heritage related to architectural features and the wastes of

project, based on the interests expressed by community members. It should be noted that we privilege the use of local toponyms to refer to the locales instead of those related to the colonial history of place naming. The official name of the archaeological sites (when they already exist) are used to refer to the sites as entities constructed by the archaeologists. Further, the name of the island that was officially recorded (by colonial administrations) as Nukasusutok Island is spelled differently by community members, to correspond to the actual Inuttitut pronunciation. Nukadjutok is one of these spellings that we use in the following pages.

Most of these areas are located close to the bush or the seashore, and therefore these remains are currently at risk of loss through soil warming, coastal erosion, shrub-cover expansion and other related processes (Figure 2). Indeed, recent estimates of sea level rise (of up to 1 m to 2 m), widespread permafrost melting, change in sea ice conditions and related coastal erosion and vulnerability to storm surge are specific problems affecting the preservation of archaeological sites in the circumpolar zone generally. Numerous Inuit sites in Labrador are located at low elevation (approx. 5 m asl or less), and many of the most significant draw their value from excellent preservation conditions provided by permafrost patches. The majority of Inuit archaeological heritage in the coastal zone should therefore be considered under potential if not imminent threat. The development of effective policies for responding to this problem is complicated by the number of sites needing documentation or monitoring and a general lack of understanding of the type of processes in play and their rapidity. Through an evaluation of the current state of sites in the study region, the project seeks to obtain basic information regarding the seriousness of immediate to medium term risks to Nunatsiavut's archaeological heritage. Thus, this project contributes to the generation of information regarding the preservation and deterioration of archaeological material heritage that will aid the Nunatsiavut Government in developing effective heritage management policies.

Our project also engages with a conception of heritage that acknowledges the entanglement of the artefacts within an emotional landscape that presents a diversity of material and immaterial ramifications. By embracing the complexity of the relationships between bodies, the land, identity, the past, the present and the future, this project considers archaeological activity as part of a social landscape that embraces the historical depth of the current concerns of

Figure 2: View of the inside of house #1 at the Nukasusutok 8 site, completely covered by a dense and high shrub cover. The picture was taken from the top of the sod wall. Lauren Pilgrim and Nancy Nochasak are standing on the opposite wall (they are about 5 feet tall). Connor Ikkusek is standing inside the house, on the floor (he is about 6,2 feet tall).

Nunatsiavut communities. This led us to elaborate a way of engaging with archaeology that supports the elaboration of a desirable future, not only through the outcomes, but also through the ways the activity of research in itself can embody, in the present, some seeds that contribute to shaping perspectives for the future, within the community and for the community members. This leads us to conceptualize archaeology as a space for intergenerational (re)connections, relying on a conception of the materiality of the remains as a support for the elaboration of narratives. Hence, this research project appears to be located at the crossroads of research-action and research-creation, by mobilizing creativity and imagination to engage with community-based research as a way to contribute to the social landscape of communities (Figure 3).

The anchoring of the project in the communities allows us a way to address complexities regarding the social history of the land, which is illustrated by the diversity of locales that we documented during summer 2025. In addition to the professional archaeologists, the research team gathered guides, non-professional archaeologists and storytellers from the coastal communities. Through these surveys, we provided care to the remains affected by shrubification, by delaying the expansion of the shrub cover, and the decay of the organic remains underneath (see below).

Outcomes

The survey we conducted during the summer of 2025 generated significant up-to-date information regarding the state of preservation of the remains related to housing in the Nain archipelago. This project led to the creation of spaces for community members to engage with their heritage related to late 18th – mid 20th century housing on the land. Our team gathered professional and non-professional Nain community members of all ages (between 18 and 81), which allowed a broad sharing of knowledge and perspectives. The information (detailed in the report, see Barbel Le Page 2025) reflects this philosophy. Indeed, relatively few archaeological sites had been documented so far in comparison to the density of the

Figure 3: View of house #3 (to the southwest). Joe Atsatata, Connor Ikkusek and Lauren Pilgrim are sitting on the western of the house; Nancy Nochasak and Diane Obed are standing over the floor (from left to right). The tunnel entrance is oriented toward the sea (on the left).

material heritage encountered in the area. In particular, most of the locales inhabited after 1771 that were already registered in the archaeological records had been documented based on the information obtained from the Moravian missionaries' archives. The community-based approach adopted within this project allowed a shift in perspective away from the Moravian lens/filter to engage with a geographical approach rooted in the memoryscape of Nain community members. In this context, working with knowledge holders, and Elders in particular, constituted a core foundation of this work. This approach led us to document unrecorded material heritage in twelve of the seventeen areas we surveyed (in addition to the three locations on Paul Island, Satorsoak Island and Kiuvik Island where we failed to identify any; Figure 4).

Figure 4: View of the cabin located in the eastern cove of Kiuvik Island after we cut the shrub cover (view to the southeast). Lauren Pilgrim is standing in the background. Notice the low height of the walls, that were still standing. The long planks inside the house corresponded to the collapse of the roof.

Most of the locales that we documented within this survey are currently facing preservation issues related to permafrost thawing and the deepening of the active layer. One of the main consequences is the extension of shrub cover over areas that had from time immemorial been covered by herbaceous tundra (Figure 5). The spruce, willow and birch root systems lead to acidification of the soils and decay of the organic remains (Figure 6). Moreover, we noticed that this new vegetation cover tends to seek nutrient-rich elements in the ground, including midden deposits and buried wood architectural elements, adding to the chemical decay through mechanical degradation of the remains. The increased susceptibility of unconsolidated shore deposits to erosion and storm surges is another consequence of the deepening of the active layer in coastal areas. This issue is not only observed in direct relation to water-driven erosion, but also mass movements, as is the case for the retreat of the cliff at the Kamarsuk site (Figure 7 and Figure 8).

In addition to documenting the preservation state of the material heritage and its vulnerability to erosion and shrub growth, our work initiated a protocol to delay the degradation of the material remains. The systematic cutting of the shrubs and spruce that

Figure 5: Test pitting the midden at the Aupaluktuk site. Nancy Nochasak and Liz Pijogge (left and right) are sitting next to the test pit excavated in the midden deposit, east of the southern house. The dashed lines represent the eastern wall of the house (the tunnel entrance is in the middle). The content of the midden was completely decayed (dark brown decayed organic matter).

Figure 6: Test pit excavated next to an old test pit at the Aupaluktuk site (likely the one excavated by James Woollet last time he surveyed the site). While the remains were still well preserved at that time, they are completely decayed now, due to the development of the shrub cover.

Figure 7: View of house #5 (oval shape) at the Kamarsuk site. This house is currently suffering major erosion along the edge of the micro-cliff.

Figure 8: Close view of the erosion effecting house #5 and the midden deposits surrounding (Kamarsuk site, see also Figure 7). Notice the artifacts and faunal remains that are currently being eroded along with the cliff retreat.

Figure 9: Joe Atsatata and Connor Ikkusek (left to right) cutting willows that were growing inside the middle house at the Niatak site. (see also Figure 10)

were growing over the house remains allowed us to remove the thick shrub cover, including as much of the root systems as possible without disrupting the remains (Figure 9 and Figure 10). In the context of rapid climate change and related fears of losing the material heritage, this approach allowed us to cultivate an alternative that provides more time to think about the heritage policies that the Nunatsiavut Government and Nunatsiavummiut wish for themselves, and avoid destructive archaeological approaches that may be driven by a sense of urgency. In addition, the development of the shrub cover not only implies the decay of a great part of the organic material heritage, but also a transformation of the landscape that contributes to the shaping of the memoryscapes. From this perspective, the community work conducted aimed to keep the heritage visible in the landscape as a way to contribute to the living memory of these places. All the team members expressed in their own ways the benefits they encountered in spending time on the land to care for the remains related to the houses of their ancestors. Hence, despite being tempted by productivity considerations, we do not recommend using noisy equipment such as chain saws for this work. Indeed, the building of a sense of place around sharing and doing-together represents a great part of the meaningfulness of the approach to heritage studies we developed within this project.

Perspectives

This project illustrates the ways in which archaeological-survey methods can be remobilised in a community-based framework to develop more meaningful approaches that go beyond the implementation of archaeological site management policies. Conversely, our approach is rooted on an acknowledgement of the social roots that feed the need to conduct such surveys. Indeed, the effects of climate change on coastal material heritage represent a threat because of what this heritage means for Nunatsiavut communities, in light of the emotional, social, historical and cultural dimensions related to these remains of past lives on the land. Our intergenerational training-working program considered the current preservation stakes that affect material heritage as a starting point to elaborate a project aligned with the desire of community members to engage with spaces of (re)connection with their ancestors' heritage and their land. The 'site maintenance' activities carried out at the visited locales appeared to us as ways to provide care to the house foundations, while engaging our bodies and leading the team members to nourish a sense of place in the course of daily activities.

Based on the meaningful outcomes of this project and the interests of the different contributors and parties involved in this program to see its expansion in the future, we are currently developing two facets of activities that will be conducted in the upcoming years. We hope to conduct deeper studies at locales of interest for Labrador Inuit history, that are currently at risk. In particular, we are currently hold-

Figure 10: View of the middle house after the cut of the shrub cover (view to the southeast, see also Figure 9). Liz Pijogge is sitting on the wall at the back of the house (left), Joe Atsatata is sitting in the tunnel entrance and Connor Ikkusek is walking down the tunnel entrance.

ing discussion with the Provincial Archaeology Office to conduct further studies at the Iglosiatik 1 site, located on Iglosiatik Island, where some of the oldest remains related to Inuit housing in Labrador can be found. In addition, we are currently planning to expand our program of site documentation and maintenance that we developed in the Nain area to other Nunatsiavut communities.

References

Barbel Le Page, H. (2025). Archaeological survey of late 18th-20th c. dwelling structures across the Nain Archipelago (NG25.002) - Interim Report. Memorial University, St. John's, 151 p.

Brice-Bennett, C. (1977). Our footprints are everywhere: Inuit land use and occupancy in Labrador. Labrador Inuit Association, Nain, Newfoundland, xii, 380 p p.

Brice-Bennett, C. (1981). Two Opinions: Inuit and Moravian Missionaries in Labrador 1804-1860. Unpublished Master's thesis, Memorial University of Newfoundland, St. Jonh's Newfoundland.

Brice-Bennett, C. (1990). Missionaries as Traders : Moravians and the Inuit, 1771-1860. Merchant credit and labour strategies in historical perspective Acadiensis Press, Fredericton, pp. 223-246.

Brice-Bennett, C., Onalik, L.,Procter, A. (2023). Avanimiut: A History of Inuit Independence in Northern Labrador. Memorial University Press, St. John's, 414 p.

Fitzhugh, W. W. (1976). Preliminary Culture History of Nain, Labrador: Smithsonian Fieldwork, 1975. Journal of Field Archaeology 3 (2) 123-142 p.
Kaplan, S. A. (1983). Economic and social change in Labrador Neo-E***** culture. Unpublished doctoral's thesis, Bryn Mawr College, Bryn Mawr.
Kaplan, S. A.,Woollett, J. M. (2000). Challenges and Choices: Exploring the Interplay of Climate, History, and Culture on Canada's Labrador Coast. Arctic, Antarctic, and Alpine Research 32 (3) 351-359 p.
Procter, A. (2012). The Prospects of Culture: Resource Management and the Production of Difference in Nunatsiavut, Labrador. Memorial University of Newfoundland, St. John's, 325 p.
Procter, A. (2020). A long Journey, Residential Schools in Labrador and Newfoundland. Social and Economic Studies 528 p.
Richling, B. (1978). Hard Times Them Times: An Interpretative Ethnohistory of Inuit and Settlers in the Hopedale District of Northern Labrador, 1752-1977. McGill University, Montréal, 529 p.
Spiess, A. E. (1978). Zooarchaeological evidence bearing on the Nain area Middle Dorset subsistence-settlement cycle. Arctic Anthropology 15 48-60 p.
Taylor, J. G. (1974). Labrador E***** settlements of the early contact period. Publications in ethnology 9.
Taylor, J. G. (1984). Historical Ethnography of the Labrador Coast. Handbook of North American I******. Arctic 5. Smithsonian Institution, Washington, pp. 508-521.
Treude, E. (1974). Nordlabrador : Entwicklung und Struktur von Siedlung und Wirtschaft in einem polaren Grenzraum der Okumene mit 37 Tabellen und 30 Abbildungen. Westfälische Geographische Studien 29. Institut für Geographie und Länderkunde der Universität und der Geographischen Kommission für Westfalen, Münster, 300 p.
Woollett, J. M. (2003). An historical ecology of Labrador Inuit culture change Unpublished PhD Thesis, University of New York, New York, 681 p.

Provincial Archaeology Office Fieldwork 2025

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Introduction

The Provincial Archaeology Office (PAO) has reviewed tens of thousands of various Land Use Referrals over the last 10 years. In 2025 we reviewed 1876 Land Use Referrals, issued 38 archaeological permits and seven palaeontological permits. We also awarded five Archaeology Research Grants. Table 1 provides a summary of the referrals received and permits issued. The table is different this year because we received no TCII Proposals (ACOA etc), Engineering Consultants, Protected Road Zoning Regulations and no 'Other Projects' this year.

The remainder of this article provides an overview of archaeological activity undertaken by the PAO during the 2025 field season. We undertook fieldwork at Trinity, Sunnyside, St. John's, Cape St. Francis, Cape Freels and Shambler's Cove. We also have an update on the Cape Ray wreck. Overviews of each field project are presented below in chronological order, each prepared by the respective permit holder.

Trinity, Trinity East, Sunnyside (25.02)

Trinity -- In May, personnel with the PAO conducted test excavations at the Ryan's Store (Mercantile Premises) structure, one of the several structures that comprise the Provincial Historic Site (PHS) at Trinity. The site was the location of archaeological excavations in 1978 for an unfinished M.A. thesis project and was designated DcAi-03.

The construction date of the building is unclear. A structure is known for the property dating to the early 1760s, and was later substantially expanded, with additional floors added. It is possible that the existing structural footprint relates to this initial ground-floor expansion. Off the structure's rear exists a modern extension or linney, with a concrete foundation. According to the PHS staff, the current linney's footprint overlies an earlier extension, which had been long removed prior to the 1978 excavations (25.02 Figure 1). Whether this was part of the initial expansion is unclear.

Provincial Historic Sites was planning a substantial repair to the modern linney, including the removal of existing bedrock to avoid snow buildup, which hastened the rotting of clapboard. The PAO conducted test excavations to determine whether secure archaeological deposits existed immediately adjacent to the linney, and if so, would they be impacted by the repair and bedrock removal.

Two 1.0 m x 0.5 m units were excavated extending out from the linney's concrete foundation (25.02 Figure 2). These were positioned to determine the extent of bedrock in relation to the addition (south unit; Trench #1), and the nature of the existing stratigraphy (north unit; Trench #2).

Trench #1 overlay bedrock through much of its length. In fact, the c. 30 cm closest to the structure contained most soils in the unit. While most of the

Table 1: Summary of land use referrals reviewed by the PAO over the past 10 years.

Type of Land use Application	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Crown Land	1466	2542	1813	1579	1217	1749	1751	1605	1588	1297
Environmental Assessment	48	73	48	67	51	68	50	54	57	41
Mineral Exploration	339	355	354	371	380	725	226	177	114	136
Prospecting (MLD)	0	0	0	0	0	0	399	273	388	279
Quarry	618	207	150	120	131	53	93	145	106	69
Aquaculture	1	1	23	4	10	8	5	8	2	0
ILUC	71	51	33	30	44	31	33	30	50	18
Municipal Affairs	0	0	0	0	0	0	0	0	4	2
NL Hydro	0	0	0	0	2	9	5	2	7	5
NL Towns	0	0	0	0	0	11	13	7	12	29
Total	**2543**	**3229**	**2421**	**2171**	**1835**	**2654**	**2575**	**2301**	**2328**	**1876**

25.02
Figure 1: Photo from 1978, showing the Ryan's Store/ Mercantile Premises structure. Note the absence of an extension, though signs of its previous existence are visible on the structure. The ruins of the Lester-Garland building are to its right (PAO 1978 00-0006).

25.02
Figure 2: View of the rear of the Mercantile Premises' modern addition, showing the location of Trench #1 and #2 (rear and foreground arrows, respectively). The proximity of bedrock to the structure is clear.

bedrock was already exposed, a small "ledge" did contain soil with a small quantity of early to mid-19th century ceramics and may not be mixed or modern. The limited stratigraphy against the linney produced evidence of its construction, and a possible repair. Finds ranged from numerous galvanized nails (scattered throughout the rear of the building, both buried and at surface), two screwdrivers, and potato chip and cheezie bags dating approximately to the early 1990s. Approximately 30 cm below surface, fine blue gravel was encountered which contained weeping tile. It is uncertain whether this weeping tile dates to the linney's original construction, or a later repair.

The northern unit (Trench #2) was positioned to avoid bedrock and better understand the soils that would be impacted. A brown, rocky stratum was most commonly encountered and lay directly against the foundation. It contained a large patch of roofing felt, also abutting the concrete foundation (suggestive of a later repair). In addition to numerous galvanized nails, artifacts included a small quantity of mid to late 19th century ceramics. At ~30 cm below surface, fine blue gravel and more weeping tile was encountered.

An additional test pit was excavated on the hill immediately above to compare the stratigraphy with that encountered in Trench's 1 and 2, to determine if any soil encountered below resulted from ground gradually sloping downward. The soils were found to bear little resemblance.

Testing determined that no secure or unmixed redeposits existed at the rear of the structure, and no historic resources would be impacted by the structural repairs or the removal of bedrock.

Trinity East

During the same field trip, a site visit was made to nearby Sam White's Cove (DcAi-29), at the approximate southern end of Trinity East. This site was first identified in 1995 and produced 19th century artifacts, as well as possible 18th century ceramics and lithics (Skanes and Reynolds 1996). Surface survey in 2025 identified evidence of 19th and 20th century gardening throughout, as well as other landscape modifications.

25.02
Figure 3: View of Sam White's Cove, facing northwest. The test pit location is indicated.

Pieces of possible chert were identified in the Skerwink Trail but could not be confirmed as cultural. Examination of the eroding bank above the beach identified a thin, dark stratum with specks of charcoal, possibly cultural. A text excavation at the edge of the bank measuring 1.0 m x 0.35 m did not recover any artifacts (25.02 Figure 3). Regardless, the entire cove warrants a thorough testing program. 18th century cartography indicates cultural features such as structures or fisheries infrastructure at Sam White's Cove.

During this same reconnaissance, two additional locations in Trinity East were investigated. Surface survey of the southeast side of Pease [or Peace]

25.02
Figure 4: Stone retaining wall feature (at centre, Jobs Head) separating the path down to the beach from a cellar pit, above.

Cove (DcAi-45) and nearby Jobs Head (DcAi-46) identified several features and indications of historic occupation and usage (c. 460 m NNW and 300 m WNW from Sam White's Cove, respectively). At Pease Cove, the remains of a concrete cellar, and a rectangular mound and chimney base from a former structure, were identified on a small field above the steep bank. At Jobs Head, surface indications of past gardening, as well as the remnants of former structures were visible at surface. A cellar pit was recorded at the edge of a steep bank, accessible via a trail that ran down from the head to the beach below; the cellar and path were separated by a stone retaining wall (25.02 Figure 4). At the base of this trail lay a small concrete "box" feature, possible a receptacle for water. Eighteenth-century cartography indicates cultural features such as structures or fisheries infrastructure at Jobs Head and Pease (Peace) Cove.

Sunnyside

On the return trip back to St. John's, a brief visit was made to the 1858 Bull Arm telegraph cable station site at Sunnyside (ClAl-04). The PAO had received reports of unpermitted "investigations" at the site, and the visit was intended to determine if there had been any impact on the historical resources, and whether metal detecting had occurred. Fortunately, no indication of disturbance nor metal detecting was found (though some of the collapsed brickwork appears to have been removed, based on past recollection). The site warrants further archaeological study and would make a great M.A. thesis project.

Tinker Point (25.10)

In July, personnel with the PAO conducted an archaeological reconnaissance of a c. 2.0 km section of shoreline between Tors Cove and Tinker Point (its southern end was c. 650 north of Fox Island, north to midway between Tors Cove and Mobile). Surface inspection of the shore proximate to the East Coast Trail determined that most of the area was ill-suited for precontact habitation, with rocky shorelines and beaches fronted by numerous rock sunkers or breakers, making access difficult except for very calm days.

At the southern end of the study area is an archaeological site (Fern Hill, ChAf-03) that was initially thought to lie outside the survey area but was found to be larger than thought. Surface inspection identified evidence of 19th and 20th century land usage and occupation spread throughout an area several hundred m² in size. Part of the East Coast Trail running through this area is an old road, large enough for vehicles (as evidenced by an abandoned mid (?) 20th century vehicle in the woods). In addition to exten-

25.10 Figure 1: A concrete foundation on the East Coast Trail at ChAf-03.

sive clearing, other surface features include the remains of a concrete foundation (25.10 Figure 1), a possible stone foundation, and linear piles of picked stone (from vegetable gardening).

At Tinker Point (ChAe-19), also known as Vale's Meadow, several features are visible at surface. One is a shallow stone well, measuring c. 0.7-0.8 m wide at surface. Piles of picked stone were visible in at least three places, one being a linear pile over 11 m long. The most prominent features are the remains of two cellars or cellar-like features. The largest was roughly square-shaped and located along the upper tree line. It measures c. 5.2 m x c. 4.8 m (c. 2.5 m x c. 2.0 m at its base) and is c. 1.2-1.3 m deep. Closer to the East Coast Trail was a rectangular feature with three mound earthen(?) walls, measuring c. 5.3 m x c. 2.7 m (25.10 Figure 2). Its eastern end is not mounded and has a line of three large stones at surface, possibly indicating an entrance. Its interior depth from the top of the mounds is c. 0.8 m. This feature, while not as "cellar-like" as the other feature, likely served a similar storage function.

The overall function of the site is uncertain, though agriculture and/or animal pasturing is the most likely usage. Aerial photos from the 1950s show that the cleared portion was once substantially larger than today (25.10 Figure 3). Surface examination of the East Coast Trail through the site identified no artifacts, nor were any found elsewhere, suggesting that there was limited domestic usage or habitation. Its date is uncertain, though 19th century is possible.

Cape St. Francis (25.14)

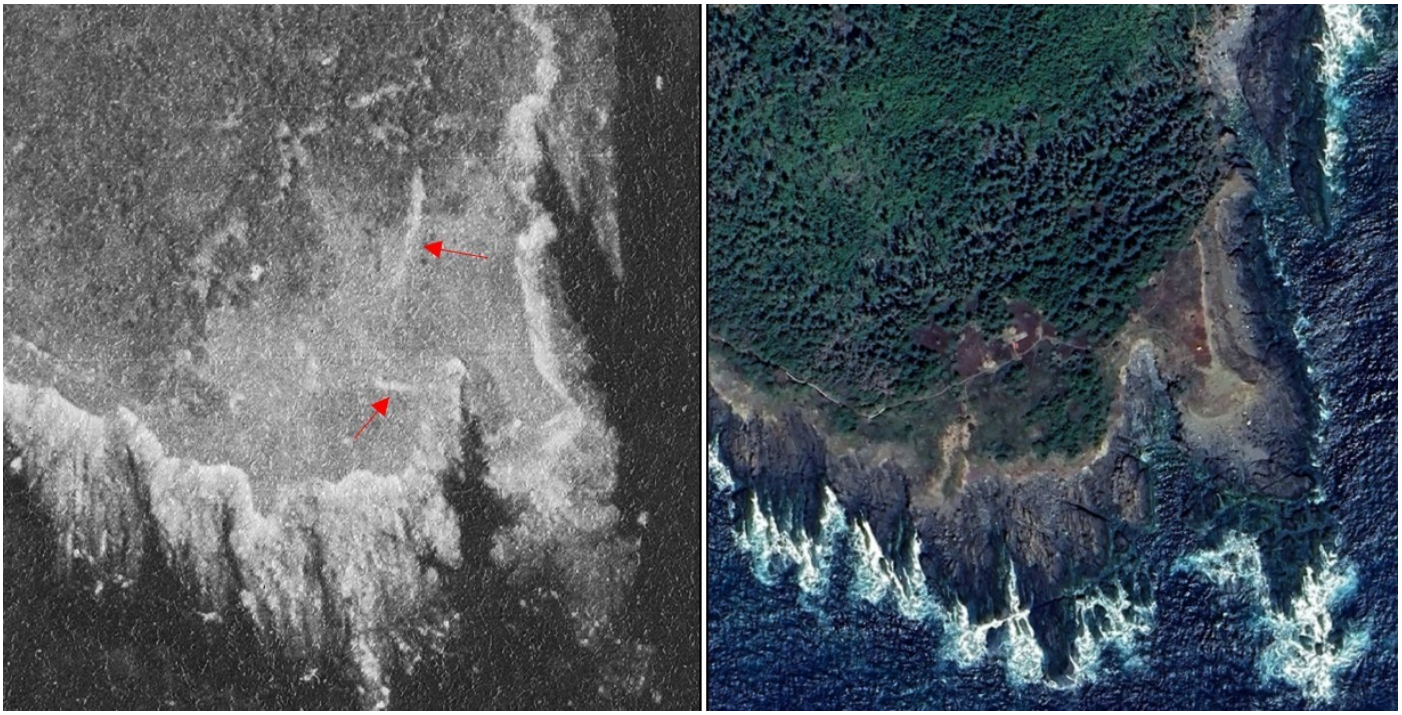
Background

Dr. James Tuck recorded a precontact era archaeological site at Cape St. Francis in 1978, however, almost nothing was known about it until last summer. During a hike at the cape in 2024, Brake encountered an area in Biscayan Bay that had clearly been disturbed by metal detectorists. Open shovel holes were noted as well as discarded nails and scraps of metal near the holes. A concentration of lithic debitage was noted in two of these holes, and a couple of flakes were also visible on the trail nearby. This is likely the same site, or part of the same site, that Tuck recorded 48 years ago.

The site was revisited and tested in July of 2024 and a 1m x 1.5m unit was excavated. The excavation produced an interesting collection of debitage representing all stages of stone tool manufacture, including first, second, and third stage flakes, broken biface fragments and preforms. A hammerstone was also found in association with these materials. The locus in question appears to be a workshop and the material culture suggests that the worked stone had

25.10 Figure 2: South facing view of the rectangular pit. A portion of the East Coast Trail is visible in the top of the photo.

25.10 Figure 3: 1951 (A3270-27) and modern (Google Earth) aerial photos of Tinker Point. The 1951 image shows the extent of land clearance during the mid-20th century. Two linear piles of picked stone are visible (the upper pile is located within the woods and was not identified during field survey). The two cellar pits are not clearly visible.



likely been quarried a short time before being worked, possibly from nearby. Diagnostic tools were not recovered during the brief 2024 visit, so the cultural affiliation and timeframe for the archaeological deposit is still something of a mystery, though we did have ideas for both after the work there that summer ago (see Brake et al. 2025).

In 2025 the plan was to continue excavating at the site in the hopes of recovering diagnostic material as well as scientific samples for radiocarbon dating. We also hoped to conduct additional testing at other high potential parts of the site to try to locate other activity areas that may well be present. The chert collected from the site in 2024 was all the same grey-white weathered material that is commonly found on precontact sites in Trinity Bay, which stands out from the Tuck collection, which contains several different types of stone. This, as well as the presence of the lithic workshop itself, suggest that there are likely other precontact components in the vicinity.

Visiting this site and continuing excavation and testing to determine the cultural affiliation, age and significance of the site were the main goals of the proposed 2025 fieldwork. Our activities there were documented with photography, fieldnotes, GPS data and drone images.

The site has already been impacted by unauthorized collecting, and it is important to learn more about the site and to recover the significant historic resources that have already been documented there. We had some additional concerns in 2025 related to the establishment of a film set very close to the site, as well as new road work at the cape.

Results

The PAO undertook fieldwork at Cape St. Francis in both early June and in late September of 2025 (25.14 Figure 1). The initial site work took place on the 5th of June with a crew of four and involved the excavation of a 2m x 2m unit adjacent to the 1m x 1.5m unit that was dug the year before (25.14 Figure 2). The new unit was directly south and east of the original. This activity allowed us to document and to learn more about the stratigraphy of the site, and recover additional lithics, including additional biface preforms and another hammerstone (25.14 Figure 3).

25.14 Figure 1: Aerial shot of Cape St. Francis in June of 2025. View southeast with test pit in the foreground.

The stratigraphy is relatively simple consisting of a layer of dark soil, usually about 5-10 cm thick, containing pebbles, organic material, recent historic artifacts and some flakes. This overlays a thinner, darker layer of buried peat mixed with charcoal and which is greasy in some areas, and which contains the vast majority of lithics. Beneath this is a layer of beige sand, also containing flakes, particularly on the surface of this level.

One of the recovered preforms exhibits some edge retouch and may represent a complete expedient tool. A soil sample was collected from an area near the centre of the excavation unit where the buried

25.14 Figure 2: Excavation underway at Cape St. Francis in June of 2025.

25.14 Figure 3: Aerial view of active excavation area in June.
Trowel points to an exposed preform, and another is visible in the open unit in the upper right (red circles).

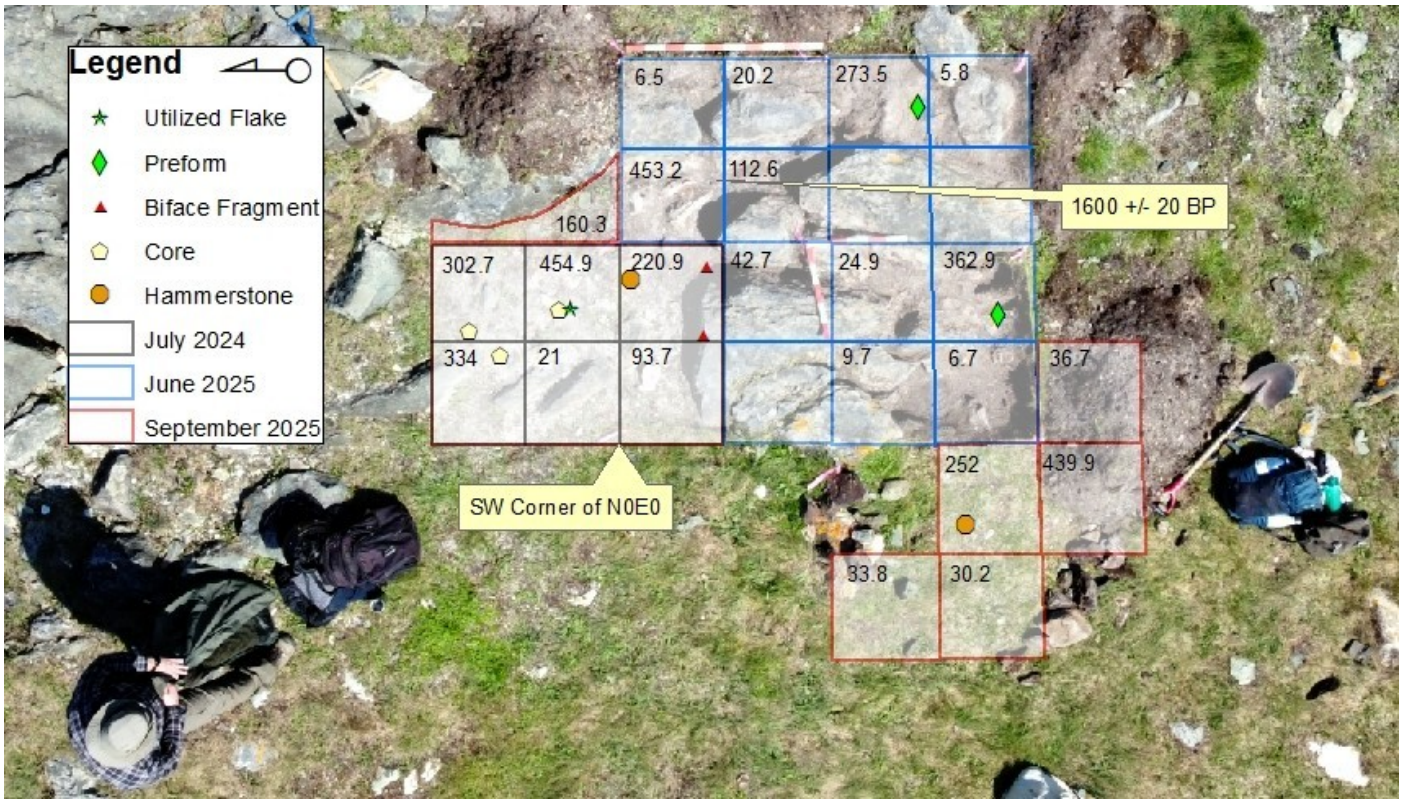
layer containing the bulk of the material culture was thickest. A sample of buried peat containing charcoal was also collected from this level for radiocarbon dating. The latter was submitted to the André E. Lalonde National Facility AMS Laboratory at the University of Ottawa for processing and analysis. The sample produced a date of 1600 +/- 20 BP (UOC-29761), calibrated to 1526-1412 (96%) BP, which is in perfect alignment with the probable age that we suggested for the site following our work there in 2024 (Brake et al. 2025:26). This, along with the ovate biface fragments and a biface fragment that is likely a broken stem, gives us a reasonably high level of confidence that this is in fact a Cow Head complex component. None of the material culture hints at a Pre-Inuit affiliation, and the broken tools are quite different from known Recent First Nations Tradition forms from the same period.

Testing was also conducted along the grass covered shoreline north of the excavation area to learn more about the archeological potential along the coast relating to both the precontact and historic periods. Historical records make mention of the cape as far back as the early 16th century, and there are some indications of seasonal use of this location by European fishers as early as the first half of the 17th century (Poole & Cuff 1993:427). A photo from the early 20th century shows fish flakes and dwellings built around Biscayan Cove, where our work occurred, and the former may well have protected archaeological deposits from disturbance, including at our excavation area (25.14 Figure 4). Four test pits produced mixed historic period materials, the earliest dating to the 19th century. High potential areas were observed nearby but were not tested as they lie on what appears to be private property and permission will need to be acquired for access.

The site was visited again by Brake on September 22nd and 23rd. The film set mentioned above had been constructed after our spring trip to the site and a new turn-around had been built on the road above the site to allow easier access for film crew vehicles. These developments had not been referred to the PAO so a visit to determine whether historic resources had been impacted was in order, as was additional recovery considering the various known threats to this small and interesting component. Recovery is especially important considering how rare Indigenous archaeological sites appear to be on the eastern Avalon peninsula.

Luckily the film-related installments and the road work had no impact on the precontact site, though some recent historic period archaeology was disturbed by the latter, unfortunately. During the September visits the focus was on a small triangle of undisturbed soil in N0E1, as well as in expanding the excavated area a little further to the south and to the southwest where the main precontact cultural level

25.14 Figure 4: Early 20th century photo looking northeast at Biscayan Bay showing dwellings and fish flakes.



25.14 Figure 5: Plan showing 2025 excavations with artifacts plotted and the debitage weights shown by quadrant.

had been seen continuing into those units in the profiles that were exposed in June. A little under another 1.5 m² of the site were excavated in these areas during the September visits which produced a surprisingly large amount of debitage and another hammerstone (25.14 Figure 5). The second concentration of debitage and associated hammerstone are interpreted as another activity area where chert knapping occurred. The relative positions of these artifacts suggest that, in this case, the knapper was facing Biscayan Bay when the hammerstone was dropped.

This work also showed that the main precontact layer continues into undisturbed areas towards the south and to the west, indicating that that additional work at the site can tell us more about what life was like at Cape St. Francis at around 1600 uncalibrated years BP.

Cape Freels (25.24)

Background

Cape Freels has long been recognized as a highly important area for precontact archaeology in Newfoundland (see Tuck 1976; Carignan 1977; Austin 1980 for examples of research undertaken there). There are a dozen archaeological sites registered on a portion of the cape that is approximately 1 kilometer in length. However, because excavations at some of these sites took place before the use of GPS, the precise locations of these sites, and how they relate to each other has become a matter of growing confusion over the years as new sites have been encountered and added to the inventory for the area. Sand covered sites along the cape, frequently exposed by wind, have been subjected to unauthorized collecting for generations, which was noted during the earliest documented professional archaeological activity there. The level of archaeological potential remaining in the area, nearly 50 years after the last major excavations at the cape, is therefore an important question.

The importance of the archaeology at Cape Freels for Beothuk history was highlighted by Tuck in 1976 who connected results of work done there by Carignan (1977 – Tuck clearly had access to Carignan's radiocarbon dates and artifact data prior to their publication) to what was then known about the archaeology of Labrador. In fact, in describing long term Beothuk history Tuck stated that "Our story begins at Cape Freels…" (1976:64). He explained that a series of radiocarbon dates associated with notched points, like those produced by the Beothuk of the historic period, suggested that they had made use of

the cape between about 1850 and 1200 years ago. As Tuck put it:

> *Even though the results of excavations at Cape Freels add significantly to the picture of prehistoric Newfoundland, they do not tell us from where these people came, nor what became of them. The first of these questions is the most difficult to answer, but sites elsewhere in the province have provided at least a few clues (Tuck 1976:68).*

Sites dating to the same period with the same tool form had already been documented in Labrador and Tuck was certain that these were related. He also argued that they were likely related to earlier sites dating to what is now known as the Intermediate period (referred to by him and his colleagues, including Madden, as 'late archaic'), as well as to the even earlier archaic period. Madden's work at important intermediate period sites in southern Labrador also led her to argue for cultural continuity from the Intermediate period down to historic times. Specifically she suggested that the roots of Beothuk culture could be traced back to what is now referred to as the Saunders phase which disappeared at about 2800 BP from central Labrador, but persisted until about 2000 BP in southern Labrador (Madden 1976:129-138). Cape Freels was a key part of her argument:

> …*historic Beothuck groups were the descendants of those Maritime Indian people represented at the earlier Beaches, Cape Freels and Fox Bar sites in Newfoundland, as well as the Point Revenge cultures in Labrador (Madden 1976:138).*

The biggest problem for Madden's argument for cultural continuity was a 700-year gap between the most recent components then known at Cape Freels, and the historic period Beothuk assemblages containing similar notched points. This gap was filled very shortly thereafter in the 1980s by Penney (1985) and Pastore (1984).

Accumulating archaeological data (Holly et al. 2022) and paleogenetic research (Duggan et al. 2017) no longer supports continuity back to the archaic period, and Tuck noted long ago that "… the thread that connects these cultures with the earlier Maritime Archaic tradition is certainly slender" (1976:68). However, the links between the Beothuk and the Intermediate period Saunders phase still seem well supported by available data, and by researchers who have considered this question (Madden 1976; Fitzhugh 1978:170-172; Pintal 2001). There appears to be a clear evolution in projectile point forms from Saunders to Beaches/Daniel Rattle, and there are dated components from 3500 – 2800 in central Labrador (Fitzhugh & Martin 2021) and a continuing Saunders occupation in the Straits region down to 2100 BP. Some uncertainty remains because there are only a few dates after 2800 BP, though this is at least partially mitigated by the similarities in stone tool assemblages. Our interest in Cape Freels is partly due to its potential for components that might shed light on the suggested relationship between the Saunders phase and the Beaches complex.

Our goals in 2025 were to gain a first-hand understanding of the cape and the sites that have been documented there thus far, to address some of the confusion related to the locations of sites and the possibility that there might actually be more than one record for single sites in some cases, to evaluate the remaining research potential of the area, and to document any archeological resources exposed by wind or through limited testing.

25.24 Figure 1: Aerial image of Cape Freels, taken just north of Cape Island and looking northwest.

Results

Cape Freels was visited on July 16th and 18th by Brake and his father Allan. Field activity consisted of a general survey between the north-

ern end of Cape Cove Beach and Cape Island to the south (25.24 Figure 1). The various landforms present in the area were walked over, and some limited testing was conducted to learn about stratigraphy and remaining archaeological potential. An attempt to develop an understanding of the locations and the nature of previously documented sites was made with a particular focus on the sites originally documented by Carignan in the 1970s.

Carignan's sites were considered to be important because his work was the first professional archaeology at the cape, making it crucial for understanding the complex history of site designation there, and also because he was able to date components that are the oldest that can currently be traced down to the Beothuk of the historic period, as mentioned above. We were able to relocate the areas he called Cape Freels 1, 2 and 3 without any trouble. We encountered precontact cultural materials exposed at Cape Freels 1 and 2, giving us confidence that our general understanding of Carignan's sites is correct.

However, in the years since his original work at the cape, other archaeologists have recorded a series of new sites in the same general areas, largely because the material they observed could not be linked precisely with Carignan's original three locations. The use of GPS has added to this problem, in a way, since it has allowed archaeologists to become increasingly precise when documenting cultural materials during surveys. Normally this is a good thing, however, at Cape Freels slight differences between the locations of previously observed artifacts and new findings has resulted in new site names and new Borden numbers for every newly discovered flake scatter – even those in proximity with one another. This has led to a confusing jumble of designations as artifacts continue to be repeatedly covered and re-exposed by the elements over the years.

We could have added to this confusion in 2025 by creating additional site names and issuing new Borden numbers to the material we found nearby. But instead, we have opted to try to reduce it by going back to Carignan's original sites and associating those and each of the subsequently recorded sites with the major landforms they are found on. This allows us to organize all existing site records geographically under three site names and Borden numbers, as opposed to ten. It also allows us to add new information to each of these sites, which are now much easier to identify on the ground and in the existing records. Further details on the new geographical organization and precise locations of these sites will be included in the final report.

At Cape Freels 2 we recorded two exposed and partially disturbed archaeological features. The first was in the lower part of a large and vegetated sand dune and had been badly impacted by ATV use. A trail over the dune had gone through the feature destroying at least a portion of it (25.24 Figure 2). We excavated a few centimeters back into the still vegetated edge of the path and found a few cobbles on top of a darker layer of what appears to be heated sand, along with some debitage. A portion of the hearth may still be intact in this area. Nothing diagnostic was found.

A second hearth was found on the flat ground on the north side of the same dune. This one had been exposed by wind, and it appeared to have a shovel hole in one side of it. We excavated the remaining portion of it on the 18th, recovering a few flakes and little charcoal but unfortunately no diagnostic cultural materials (25.24 Figure 3).

One test pit was excavated at Cape Freels 1, and two others were dug in a peat covered portion of Cape Freels 2. Neither of these produced cultural material.

Shambler's Cove (25.24)

Background

Shambler's Cove is a multi-component archaeological site with Groswater, Dorset, Recent First Nations and European occupations. Excavations were conducted there under the direction of Dr. James Tuck in 1982 in advance of the construction of a causeway to nearby Greenspond Island (Tuck 1983). It is also one of just two known sites on the island of Newfoundland that has produced both radiocarbon dates and artifacts that appear to relate to the Intermediate Period. Several diagnostic tools bearing a very strong resemblance to Saunders phase tools known from Labrador were recovered from the site and two radiocarbon dates from hearth features likely relate to early post-archaic occupations by First Nations groups that are almost totally unknown on the island. As already discussed, the Saunders phase might represent the earliest ancestors of the Beothuk to arrive in Newfoundland and Shambler's Cove has good potential for

25.24 Figure 2: Archaeological feature disturbed by ATV use at Cape Freels.

25.24 Figure 3: Excavating a deflated and looted hearth at Cape Freels.

shedding light on this question, though its condition and how much is left there in terms of secure deposits is not clear. PAO archaeologist Ken Reynolds visited the site briefly in 2016 and reported material culture at each of the main excavation areas, as well as a small island now linked by the causeway that was never surveyed. There is also excellent archaeological potential in the vicinity of the site, including at a precontact site that was identified by Ken Reynolds in 2016 on Greenspond Island which was not investigated or tested.

Most of the work done to date at the site occurred in 1982 when more than 130 square meters of the site were excavated. Areas 1, 5 and 7 were the most productive. While dense concentrations of material culture were recovered from Area 1, which had Dorset, First Nations and European components, it turned out to be quite disturbed and work there was eventually stopped in favour of Areas 5 and 7. Area 5 contained Dorset and much more recent European components, while Area 7 produced evidence relating to several different Pre-Inuit and First Nations occupations, in addition to material culture related to recent European activity. The artifacts that strongly resemble those of the Saunders complex and the radiocarbon date of 3040 +/- 140 BP (BETA 5371) both came from Area 7 (though were not directly associated). A trade bead from Area 1, like some of those found at Boyd's Cove, raised the possibility of contact or intended contact between Europeans and the Beothuk in the area during the historic period (Tuck 1983:12).

Results

Shamber's Cove was visited on July 17th by Brake and Brake. A walkover and surface inspection was undertaken first which allowed for the development of a firsthand understanding of each of the site areas originally designated by Tuck and his crew in 1982. It was clear that the road and causeway passed through parts of Areas 1 and 5 (25.24 Figure 1), and that much of Area 7 was impacted as well. Precontact lithics were encountered north of the causeway at Area 1 and were also recovered from two test pits at Area 5 on the south side of the road that now runs through the site. All the material recovered from the testing at Area 5 almost certainly relates to Dorset activity, based on previous work there. A charcoal sample was also collected from the first test pit, which may prove interesting considering the surprisingly early date of 2340 +/-60 (BETA 5372) from Area 5 which seemed

25.24 Figure 1: Aerial image at Shambler's Cove looking northwest towards Areas 1 and 5.

25.24 Figure 2: Base of a Dorset endblade recovered from a test pit south of Area 7 at Shambler's Cove.

to only have a Dorset component in its precontact period record. Because this date was quite a bit earlier than expected it raised questions for Tuck (1983:39-40). Additional testing was conducted further south on this side of the cove which produced historic period materials that were also abundant in the shallow tidal pools at the site.

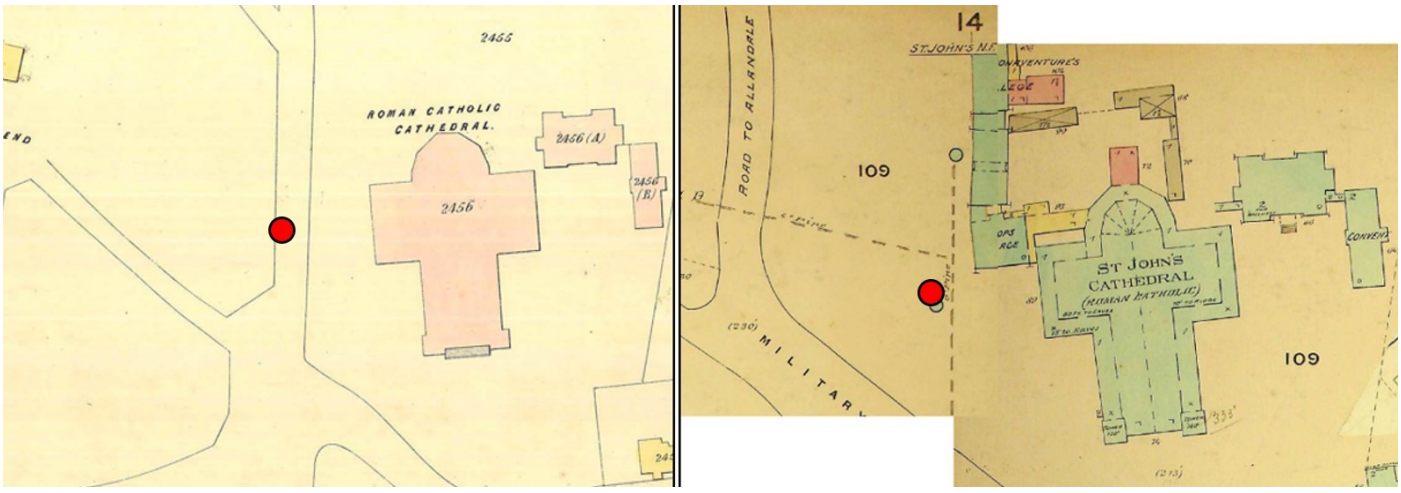
Pits previously dug for unknown reasons (perhaps peat harvesting?) north of the causeway in the vicinity of Area 7 were closely examined but this did not reveal any cultural stratigraphy or materials. Test pits on Ford Island were negative as well. The final test pit of the expedition was dug on a knoll overlooking the cove to the south of Area 7. This one was positive and produced historic and precontact artifacts, including the base of a Dorset harpoon endblade (25.24 Figure 2). We have no record of previous work at this part of the site, which clearly has research potential.

The visit demonstrated that intact archaeological deposits relating to both precontact and historic times are present at Shambler's Cove, and that some areas are well protected by thick layers of peat that overlie occupation levels. Clearly there is a remaining substantial Dorset component, and there are vast 19th and early 20th century components. Whether potential Saunders and possible early historic occupations have survived will require additional work. The fact that large portions of the site remain undisturbed is encouraging.

Roman Catholic Basilica property (25.28)

In July, the PAO made a site visit to the Roman Catholic Basilica of St. John the Baptist property, St. John's, to follow up on reports of mechanical excavations. The Basilica-Cathedral was completed in 1855, and the property is a registered archaeological site (CjAe-124). The excavations were for a pending monument, and most had been completed upon arrival, to a depth of c. 0.25-0.35 m. Inspection of the excavated area identified entirely mixed soils. Artifacts found in the backdirt and within the exposed profiles dated

25.28 Figure 1: Views of the Basilica-Cathedral and Bonaventure Avenue in 1852 and 1880. The approximate location of the 2025 excavations are indicated (red). Note the change in the avenue's location. The old route is visible on mapping to at least 1863.



25.29 Figure 1: View of the foundation remains at Middle Cove beach.

to the mid to late 19th century, though a couple could be older.

The excavation area was not always within the bounds of the Basilica property (25.28 Figure 1). Prior to the late 1860s/1870s, this area lay partially within the former route of Bonaventure Avenue (variously called "Upper Long Pond Road" or "The Road to Allendale"), potentially extending into the eastern property of Fort Townshend. Research conducted by members of the Basilica Foundation suggests that an unrecorded burial ground may exist in the area as well. The mixed and redeposited soils encountered are consistent with the landscaping expected with roadworks, and fortunately, no human remains were found.

Middle Cove Beach (25.29)

In July, personnel with the PAO visited Middle Cove Beach to investigate reports from a local resident of a stone foundation eroding out of the bank at the beach's southeast end. Two attached sections of dry-laid stone foundation were recorded, forming a corner. The two sections measured 1.45 m and 1.05 m in length (25.29 Figure 1), and a maximum of 0.95 m of their height remained. No artifacts were observed to assist in dating the feature. Most of the feature has been lost to erosion, and no further soils were moved or disturbed as it may hasten

25.29 Figure 2: Aerial image of Middle Cove Beach from 1987. The red line shows the approximate quantity of erosion in the subsequent c. 38 years (when compared to modern aerial photos).

25.30 Figure 1: View of the stonework along the retaining wall at Belvedere Lane.

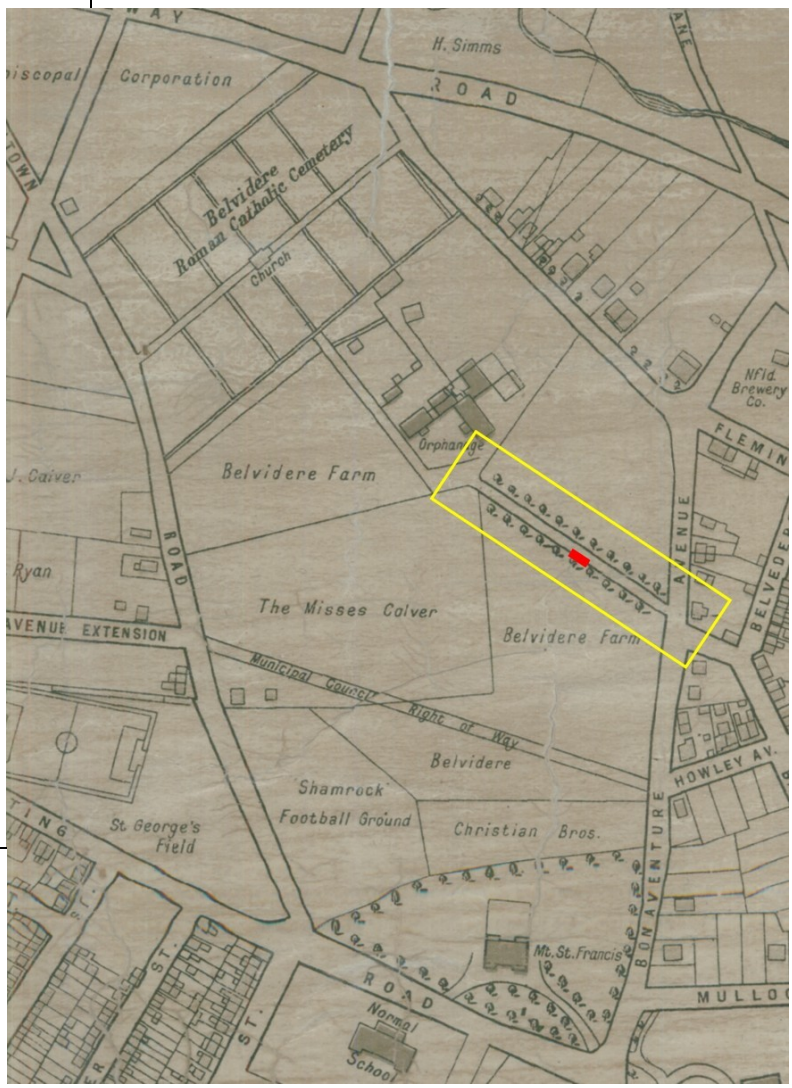
planning to widen the laneway, and there were concerns on part of locals that a visible dry-laid stone wall may be impacted (25.30 Figure 1). This laneway leads to a former complex of structures that formed the Belvedere Orphanage, with the Belvedere Cemetery immediately behind. The feature is likely a retaining wall, with approximately 13.1 m of its length visible. Most of the wall's existing portion is c. 0.8-0.9 m in height, but its most

further erosion of the bank and feature. Analysis of aerial photographs from the 1950s, 1980s and 2020s show that significant erosion has occurred over those years, much of it within the past couple of decades (25.29 Figure 2), accounting for its exposure and destruction.

The exact function of the feature is unclear. Historic photography indicates that several structures were in this area during the early 20th century (likely earlier), and it may be a cellar or similar storage feature related to one of those buildings. Cellar pits were (and still are) ubiquitous on the rural Newfoundland landscape. Considering the community's agricultural history – an Admiralty chart from 1897 illustrates no less than 13 features as "Farm" or "Barn" (Lockyer 1897) within a three km radius – such features would be common throughout the community.

Belvedere Lane (25.30)

In August, personnel with the PAO visited Belvedere Lane, a small laneway off Bonaventure Avenue, St. John's. The City of St. John's was



25.30 Figure 2: Section from W.P. Ryan's 1922 "Map of Saint John's Newfoundland." It depicts the large Roman Catholic property bound by "Merry Meeting Road", Newtown Road, Mayor Avenue, "Railway Road" [Empire Avenue], and Bonaventure Avenue. Belvedere Lane is indicated (yellow), as is the approximate location of the remaining stone retaining wall (red).

intact portion has c. 1.2 m of stonework remaining. The feature may once have run along most or all the lane and probably was partially removed during landscaping for the nearby Holy Heart of Mary school parking lot.

The area bound by Merrymeeting Road, Newtown Road, Mayor Avenue, Empire Avenue, and Bonaventure Avenue, has a long association with the Roman Catholic Church in St. John's (25.30 Figure 2), the oldest usage being the aforementioned cemetery and complex of structures within the northern part of the property (one of the buildings is St. Michael's Convent, built 1826, and one of the oldest standing structures in the city). It is probable that Belvedere Lane dates to this early usage; it could pre-date it and be a vestige of the property's earlier agricultural history, namely McKie's (aka. McKee's) Grove, and later Emerson's Belvedere Estate.

Bay Bulls (25.32)

In August, the PAO conducted surface and subsurface investigation at a property on the north side of Bay Bulls. A pending land sale and proposed development was planned for the property (project area), which was one of several candidates for the location of human remains discovered in the mid-1970s.

In 1975, human remains were exposed during mechanical excavations for a road widening project on the north side of Bay Bulls. Dr. James A. Tuck and a small crew from Memorial University of Newfoundland excavated the remains of three individuals, as well as fragments of possible coffin hardware. The human remains were analyzed years later, with two individuals tentatively identified as male, while the third was less clear due to its poor preservation but leaned towards female. No date could be attributed to the burials other than historic (Hill 2009).

The PAO was aware of these human remains, though the location of these burial finds was uncertain. Dr. Tuck's recollection (in 2004) placed the location on Northside Road (c. 800 m southeast of the project area). Another source placed the mechanical excavations, and human remains closer to the project area, in the vicinity of Stanley's River, proximate to Northside Road and the modern Gatherall's Wharf (though that source states that the excavations were for a water line) (Hill 2009; O'Neill 1983:50-51). Most local sources placed it proximate to the development, stating that the widening project was along the west side of Alley Road. One individual we spoke to during our field investigations grew up on the opposite

25.32 Figure 1: View of the test pit excavation, looking approximately southeast towards Bay Bulls harbour.

side of Alley Road and could remember the archaeologists being on-site.

Fortunately, the PAO had recently obtained a large collection of photographs taken by Dr. Tuck throughout his career, including a small number of photos from the 1975 excavation in Bay Bulls. Most images were focused on the burials and were of little use in determining location. One photo, however, was compared to the pending land sale/development area on Alley Road, and found to be a match, and was consistent with the location identified by the local informants.

Upon arrival on site, the entire project area was surface surveyed to determine if unmarked burials may still be present on the property and gain a sense of the pending development's position and scale in relation to the probable burial location. No indication of additional burials was identified during surface survey. Similarly, the entire exposed bank along the west side of Alley Road was thoroughly examined, with no human remains identified nor indication of other burials.

A test trench was excavated adjacent to Alley Road and the presumed burial location, but south of (outside) the project area. It measured 3.5 m x 0.4 m, and produced mixed soils, with sterile at c. 0.5 m. A small quantity of 18th century ceramic sherds were the only finds. Approximately 11 m northward, a 0.5 m x 0.6 m test pit was excavated, also adjacent to Alley Road and the presumed burial location, but deliberately positioned within the southern end of the project area (25.32 Figure 1). This excavation encountered the same mixed stratigraphy, with sterile ground encountered at 0.7 m. No human remains or evidence of burials were encountered in either excavation.

Investigations suggest that a narrow ridge may have run downhill adjacent to Alley Road and sloped off gradually towards Stanleys Brook (immediate west), and the burials may have been placed upon this ridge. Analysis of pre-1975 aerial photography shows that a substantial quantity of soil was removed during excavations to widen the road, removing much of this ridge and hence the burials within. It is possible (though uncertain) that road widening efforts continued once the human remains were removed, with some of the excavated material placed inward within the property, creating part of the "plateau" that exists today.

The origin of the burials remains unknown. Numerous local stories exist, such as Dutch, Spanish or English sailors. The latter is interesting as it has a known historical event to support it. In 1794, Aaron Thomas noted an occurrence during the previous year:

> *The Boston Frigate was on this Station last year. In the month of October when she laid in St. John's harbour three of her Seamen deserted. The Frigate sail'd for England in December, herd nothing of her men untill her return to this place in May last, when we learned that these unfortunate men had attempt'd to cross a slip of land no more than Twenty Miles athwart St. John's, to the Bay of Bulls, but they missed her path and were found frozen to death in the woods, From their dress and other concurring circumstances no doubt was left but they were the Boston's people. They had gotten within three miles of the Bay of Bulls when the poor deluded fellows wandered into a path led to the wreck of a deserted Iron Foundry which the French has made some progress in establishing when they were in possession of Newfoundland. Their Bodys were found lying close together, and in a perfect state, the frost having kept them from putrefaction (Murray 1968:124-125).*

The number of individuals recovered in 1975 is consistent with the description, though this assumes that those human remains exhumed form the entirety of the burials. Also, a "lost" burial ground located outside consecrated ground is not inconsistent with the burial of individuals of presumed uncertain denomination. It remains a possible interpretation.

Through analysis of the recently acquired 1975 photographs, coupled with local recollection of events that summer, the location of the human remains exposed and excavated in 1975 has been identified with confidence.

Cape Ray Wreck Update

In 2025 the PAO commissioned Dr. Amanda Crompton to conduct a desk-based study to identify underwater archaeological resources around the island of Newfoundland. A similar project was completed by Dr. Crompton for the office in 2023 for underwater archaeological sites in Labrador. The latter project had been highly successful and generated records for more than 500 new sites (Crompton 2023). We antici-

pate the final results of the 2025 project in the coming weeks.

During the work for the 2025 project, Dr. Crompton identified historical records for a vessel that is about as good of a candidate for the Cape Ray wreck as we are ever likely to find. A three-masted barque called the Lotus, built in New Brunswick in 1842, was deliberately run aground at Cape Ray Cove on the 19th of May 1872, two days after striking Shag Island where she broke her rudder and had begun to take on water. There was no reported loss of life. The ship later dragged her anchor but was retrieved by the crew members who grounded her. Valuable materials were then stripped from the ship and sold at auction (Crompton 2025).

The Lotus is a reasonably good candidate for the Cape Ray wreck for a few reasons. First, the Lotus was grounded near where the wreck came ashore in early 2024. Second the size of the Lotus is comparable to the measurements we were able to get from the wreck. The original construction date and long use life fit with our estimations based on the metal fasteners, treenails, and the Muntz metal sheathing that was collected from the wreck, and with the fact that there was evidence that the hull had been stripped and re-sheathed on at least one occasion. Some of the wood species used in the vessel's construction have been identified in Dr. Carissa Brown's study of the wood samples we collected (Brown 2025). On the other hand, some of the types of wood identified by Brown are not mentioned in any of the records we have for the Lotus, and there is no mention of the metal sheathing in the records. The fact that the Lotus had several major repairs throughout its use life could account for this. But we should remain cautious and keep in mind that with the large number of shipwrecks in this area, there are other potential candidates. We will likely never know the identity of the Cape Ray wreck with certainty.

Straight Shore

In the fall, a Rooms staff member was contacted by a private citizen regarding a possible stone tool found in the Straight Shore area, north of Bonavista Bay, by his mother-in-law. The Rooms staff member shared photos of the tool with members of the PAO.

If the artifact is what we think it is, it's extremely rare for Newfoundland and Labrador. In our province the oldest known Indigenous sites are in southern Labrador and are about 9000 years old. We suspect the Straight Shore biface is older, a fluted Paleo-First Nations point perhaps more than 10,000 years old. The private citizen has agreed to show us where the artifact was found and we will be visiting the area this coming season. We have heard rumours of Paleo-First Nations material having been found in this area in the past, but this case seems to be true.

Possible Paleo-First Nations projectile found on the Straight Shore

References

Austin, Shaun

1980 Cape Cove Beach (DhAi-5, 6, 7), Newfoundland: Prehistoric Cultures. MA, MUN.

Brake, Jamie, Blair Temple, Stephen Hull & Delphina Mercer

2025 Provincial Archaeology Office Fieldwork 2024. In Provincial Archaeology Office Review 23:9-49.

Brown, Carissa

2025 Identifying and Dating Wood Samples from the Cape Ray Shipwreck. In Provincial Archaeology Office Review 23:49-50.

Carignan, Paul

1977 Beothuck Archaeology in Bonavista Bay. National Museum of Man Mercury Series, Archaeological Survey of Canada, no.69. Ottawa.

Crompton, Amanda

2025 Cape Ray Shipwreck: The Case for the Lotus (or possibly the Francis E. Moulton). Unpublished report on file at the Provincial Archaeology Office, Government of Newfoundland & Labrador, St. John's.

2023 Desktop Assessment Report: Shipwrecks on the Coast of Labrador.

Duggan, Ana T. et. al.

2017 Genetic Discontinuity between the Maritime Archaic and Beothuk Populations in Newfoundland, Canada. Current Biology. This is an open access article. Includes radiocarbon dates table.

Fitzhugh, William

1978 Winter Cove 4 and the Point Revenge Occupation of the Central Labrador Coast. Arctic Anthropology, XV-2: pp 146-174.

Fitzhugh, William & Jeff Martin

2021 The Martin North River Site and the Saunders Phase in Labrador. In Provincial Archaeology Office Review, 19:62-74.

Hill, Caitlyn

2009 "ChAe-13, The Bay Bulls Burial: An Osteological Analysis and Possible Historical Context of the Unidentified Remains." Unpublished B.A. Honoures deistrtation, Dept. of Archaeology, MUN, St. John's.

Holly, Donald H., Christopher B. Wolff, & Stephen Hull

2022 The Struggle Was Real On the End of the Archaic On the Island Of Newfoundland and Labrador in The Far Northeast 3000 BP to Contact, Edited by: Kenneth R. Holyoke, M. Gabriel Hrynick.

Lockyer, Hughes

1897 *Motion Hd. to Flat Rock Pt. Shewing the Approaches to St. John's.* Chart No. 2902. U.K. Admiralty, London.

Madden, Marcie

1976 A Late Archaic Sequence in Southern Labrador. MA, MUN.

Murray, Jean M. (Ed.)

1968 *The Newfoundland Journal of Aaron Thomas, Able Seaman in H.M.S. Boston: A Journal Written During a Voyage from England to Newfoundland and Newfoundland to England in the Years 1794 and 1795, Addressed to a Friend.* Longmans Canada, Don Mills.

O'Neill, Paul

1983 *The Seat Imperial: Bay Bulls Past and Present.* Harry Cuff Publications Ltd., St. John's.

Pastore, Ralph

1984 Excavations at Boyd's Cove, Notre Dame Bay-1983. Archaeology in Newfoundland and Labrador, 1983, Annual Report No. 4. Edited by Jane Sproull Thomson and Callum Thomson. Historic Resources Division, Government of Newfoundland and Labrador, pp 98-125.

Penney, Gerald

1985 The Prehistory of the Southwest Coast of Newfoundland. MA, MUN.

Poole, Cyril & Robert H. Cuff (editors)

1993 Encyclopedia of Newfoundland & Labrador. Volume 4, N-R. Harry Cuff Publications Limited, St. John's.

Skanes, Roy and Ken Reynolds

1996 "The Trinity Bight Archaeological Project: 1995 Interim Report." On file at the Provincial Archaeology Office, St. John's.

Tuck, James

1983 Excavations at Shamblers Cove - 1982: A Stage 3 Impact Report. Unpublished report submitted to the Department of Transportation. 82.07.

1976 Newfoundland and Labrador Prehistory. National Museum of Man, Ottawa.

2025 Connaigre Peninsula Survey

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From November 12-15, 2025, we conducted a survey of several communities located on the Connaigre Peninsula under PAO Permit 25.36, with primary aims of locating 17th-to -18th-century French occupations in the area, and identifying sites at risk due to coastal erosion. This report includes a brief historical overview of early European settlement on the Connaigre Peninsula, as well as a summary of our observations and relevant historical information for each location visited.

Background

French fishers had a presence on the coasts of southern Newfoundland beginning in the 16th century (Turgeon 1986:533). While Placentia Bay is often viewed as the centre of the French fishery in the area, permanent settlements in Fortune Bay and further west begin to appear during the 1670s (Crompton 2017:111). It can generally be assumed that fishers must have had some level of familiarity with these areas prior to settling them; therefore, it is likely that several harbours west of the Burin Peninsula were in regular use by migratory fishers by the early-to-mid 17th century. However, this cannot be confirmed solely through the historical record, and further archaeological research will be required to fully determine the nature of French presence west of Placentia Bay before the 1670s.

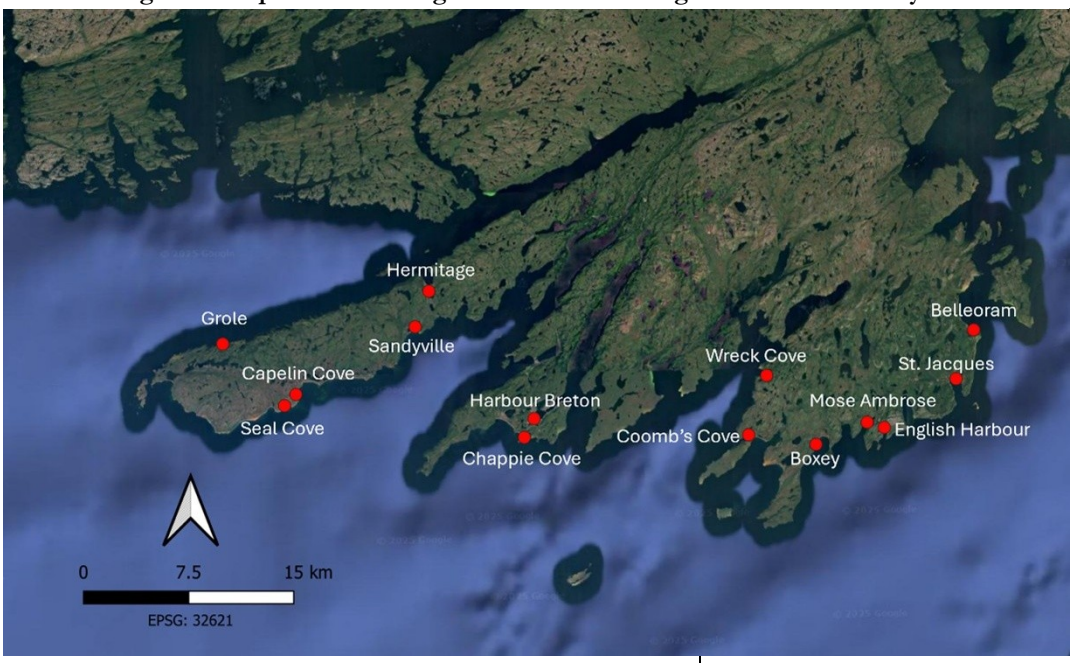
Fortunately, there is some documentary evidence concerning French settlement on the Connaigre Peninsula beginning in the early 1670s. In 1671, a census of *habitants* in Newfoundland places one *habitant* in each of *Havre Bertrand* (now Harbour Breton) and *Hermitage* (ANOM, 5DPPC, 20, G1, 467). Between 1673 and 1675, the merchant Henri Brunet funded an establishment run by Jean Bertrand at *Havre Bertrand* (Crompton 2017:121). Although Brunet only provided funds to Bertrand until 1675, the settlement seems to have persisted. In 1686, a priest was granted to serve three communities on the Connaigre Peninsula: *Havre Bertrand, Cap Naigre* (variably spelled *Cap Nègre* or *Connaigre*), and *Hermitage* (Parat 7 July 1686, 9 July 1686). Each of these communities also appears in a 1687 French census of Newfoundland; *Havre Bertrand* had a population of 36, *Cap Nègre* 72, and *Hermitage* 31, with each community also having its own church. These figures include *engagés*, fishing servants who worked seasonally for *habitants* (Statistics of Canada 1876:20; Landry 2007:1); this gives a relatively accurate picture of the actual number of people who would have inhabited these spaces during the fishing season. Unfortunately, later censuses do not include *engagés*, which makes all three of these harbours appear significantly less populated than they actually were.

In a 1691 census, only *Havre Bertrand* and *Hermitage* appear, with one *habitant* each: Pierre Germy at *Havre Bertrand* and Jullien Petit at *Hermitage* (Statistics of Canada 1876:26; ANOM, 5DPPC, 20, G1, 467). In 1693, a census of *Plaisance*, *Saint-Pierre* and associated locations places Pierre Germy at *Havre Bertrand* and Julien Petit, Noël Petit and Estache Petit at *l'Hermitage* (ANOM, 5DPPC, 20, G1, 467). Another census (perhaps a copy of the one made in 1693) of *Saint-Pierre* and associated locations made in 1694 also mentions Julien Petit, Noël Petit and Estache Petit at l'*Hermitage* (ANOM, 5DPPC, 20, G1, 467). *Hermitage* appears again in a 1711 census with a population of two (Thibodeau 1959-1960:85), and the same year another census names Julien Petit as the sole inhabitant of *Hermitage* (ANOM, 5DPPC, 20, G1, 467). No other harbour on the Connaigre Peninsula would appear again before France ceded its claim to Newfoundland in 1713 with the Treaty of Utrecht.

In the aftermath of the Treaty of Utrecht, the British Crown commissioned Captain William Taverner to survey the south coast of Newfoundland and administer an oath of allegiance to any remaining *habitants* (Janzen 2001:3-4). Taverner completed two voyages to this end, one in the summer of 1714 and the other from late 1714 to 1715 (Taverner 1714a, 1718). In 1714, he sailed as far west as Cape La Hune, describing the Connaigre Peninsula and its plantations on the way there. During this trip, he also took a nominal census of the *habitants* who lived in select harbours; on the Connaigre Peninsula this included John Mitchell at Hermitage, Giles Vincent, Noel Petit, and John Durant at Capnigro (Connaigre), and Pierre Carey at Grole (Taverner 1714b). In 1715,

while he does again describe the Connaigre Peninsula, it is not entirely clear whether he sailed so far west. Though the early parts of his voyage (within Placentia Bay) are dated as would be expected, this abruptly stops as he begins to describe Fortune Bay and the Connaigre Peninsula. From that point, Taverner provides descriptions of a number of harbours, but his contemporaries suggest that he had abandoned his survey then to instead fish and trade at Saint Pierre (Janzen 2001:4). It is therefore possible that his descriptions in this report are largely based on his past experiences, rather than actual visits to these areas in 1715. In any case, Taverner's reports provide more information on these sites than most other documentary sources. Where relevant, details will be mentioned below on a site-by-site basis.

Figure 1: Map of the Connaigre Peninsula showing communities surveyed.



Beginning in 1713, French *habitants* began to abandon, over time, their establishments in southern Newfoundland. This was not an immediate process. Many were still present during Taverner's surveys, and several swore an oath to the British Crown in order to remain (Taverner 1714a, 1714b, 1718). Even in the 1720s, French fishers seem to have had a presence in Fortune Bay, and Baie d'Espoir, though English planters would begin to move into these areas by the 1730s; by 1750, it is likely that the French no longer had any permanent presence in the region (Janzen 1987:189, 194). Once the French had left, English settlers began to make use of many of their now-abandoned harbours. Many of these are still inhabited today, and those that are not did maintain significant populations until the resettlement programs of the mid-20th century (e.g. Smallwood and Pitt 1981:504-505, Smallwood et al. 1984:750-751). As with all historical information, details will be elaborated on a case-by-case basis below.

Survey Overview

As this was a preliminary survey of the region, we aimed to cover as much ground as possible while ensuring that we dedicated ample time to each community visited. Therefore, we focused on carrying out a comprehensive pedestrian survey of each location visited, as well as site mapping and drone-based photogrammetry where applicable. No artifacts were collected, though some were photographed where relevant. In total, we surveyed 14 locations (Figure 1) spread across the Connaigre Peninsula, and identified three archaeological sites. Additionally, it must be noted that four areas that we identified as having significant potential were not visited, as they proved to be too inaccessible to fit within our limited time frame; these were Great Harbour/ Connaigre, Pass Island Tickle, Beck Bay, and St. John's Harbour.

Harbour Breton

Harbour Breton is the largest community on the Connaigre Peninsula, and has seen historic use at least since 1671, with French use continuing into the 1690s (ANOM, 5DPPC, 20, G1, 467; Crompton 2017:121; Statistics of Canada 1876:26). It is unclear whether this continued into the 18th century, as *Havre Bertrand* does not appear in any census after 1693. Taverner claimed in his second report that the French no longer used the harbour, and had not in the past 20 years. If true, this would suggest that it had been abandoned by the mid-1690s (Taverner 1718). By the late 18th

century, an English mercantile presence is recorded in Harbour Breton; a succession of groups would eventually give way to Newman and Company, who had established several stations around southern Newfoundland (including Turpin's Island, Little St. Lawrence) by the turn of the 19th century (Smallwood et al. 1984:801; Losier 2025: 194-197). The community would continue to grow as a fishing station throughout the 19th and 20th centuries. During the resettlement programs of the mid-20th century, Harbour Breton grew significantly as a number of resettled families from surrounding communities moved to the town (Smallwood et al. 1984:804). Harbour Breton is still the largest community on the Connaigre Peninsula, and has seen a significant amount of development in the 20th and 21st centuries. Geographically, Harbour Breton is incredibly advantageous for fishing establishments. Its entrance is a long, narrow inlet, which encircles a large rocky peninsula in the centre of the harbour, providing excellent shelter with ample space for shore premises.

Figure 2: Area surveyed (red) and approximate area affected by 1973 landslide (blue) in Harbour Breton

We conducted a pedestrian survey of Harbour Breton in the afternoon of November 12. This involved walking along the beaches on the east, south, and west of the harbour (Figure 2). Unfortunately, the tide was high during our survey, so only narrow portions of the beaches were surveyable. Additionally, we were unable to survey on the peninsula that reaches into the harbour due to the high tide.

One additional factor that may have had an impact on some archaeological remains is the occurrence of landslides in the community, particularly near the steep banks on the southern side of the Southeast Arm (the inlet leading into Harbour Breton). In the early 1950s, and in 1973, major landslides took place, with the latter having destroyed four homes, and killed four children (Liverman et al. 2001:942). Though these landslides occurred outside of the area that we surveyed, it will be useful to keep them in mind during future work.

Despite an abundance of documentary evidence demonstrating significant historical use of Harbour Breton since the 17th century, we encountered very little material associated with any historic occupations. The east and south beaches were covered by modern development, and litter. On a small point on the west side of the harbour (behind St. Joseph's Elementary School), we noted some grey ballast flint next to a potential historic stage. The nearby banks were eroding significantly, but as they were peat bogs, they are likely not conducive to bearing historic archaeological remains. Several stone stages were also present just to the south of this point.

Unfortunately, it seems that recent development in Harbour Breton has largely obscured any contexts dating before the mid-20th century. While it is plausible that more material may have been identified if our survey was conducted at low tide, this

Figure 3: (a) Oblique aerial of Belleoram Harbour at sunrise with the sector surveyed at the top center of the picture (b) Artifacts found on the beach at Belleoram (c) Drone photo showing three stage foundations near Belleoram Playground.

would not necessarily correlate with any significant presence of *in situ* archaeological remains. Though it is undeniable that Harbour Breton was an important centre for several centuries, there are no evident archaeological remains that clearly demonstrate this.

Belleoram

We visited the eastern portion of the Connaigre Peninsula on November 13, starting with Belleoram. The community is named after Jacques Simon de Bellorme, the first governor of Saint Pierre, who overwintered in the area beginning around 1695 (Livingston and Losier 2021:82; Taverner 1718). Taverner describes the harbour in his second report (known to him then as "Bandalore"), mentioning Bellorme's establishment, and explaining that he had been making use of the harbour for approximately 20 years (Taverner 1718). An English/Newfoundlander presence at Belleoram is evident by the mid-19th century (Smallwood and Pitt 1981:172). The community is surrounded by steep cliffs, leading to a restricted area suitable for habitation. However, a gravelly arm reaches into the cove, providing excellent shelter within the inner harbour. A local resident informed us that much of the western portion of the harbour had been filled, having previously consisted of a number of small coves.

Our survey focused on the area directly next to the sea arm, and below the Belleoram Playground. Though the arm itself is heavily developed, it appeared that the adjacent beach was somewhat unaffected. An assortment of 19th- and 20th-century material culture was present here (Figure 3b), as well as a number of stone stage foundations (Figure 3c). Unfortunately, this was the only part of the community where we encountered any historical material. The community is quite crowded around the harbour, and modern infrastructure likely overlies any archaeological remains that may be present. During initial planning, we had noticed another sheltered area (known as Belleoram Barasway) about 1.5km north of Belleoram. Though we had hoped to visit this area as well, a quarry operation was actively blasting near the road, resulting in restricted access that left us unable to assess that potentially promising location.

St. Jacques

All of the communities visited on November 13, except Belleoram, are a part of the St. Jacques-Coomb's Cove municipality, which amalgamated in 1971. St. Jacques itself is located 3.5km south of Belleoram. Taverner mentions in his second report that there is some fishing at St. Jacques in the autumn, but that catches are not substantial (Taverner 1718). Some stages were mapped by Captain James Cook at St. Jacques in 1763, but there is no indication that there was any year-round presence until the mid-19th century (Poole and Cuff 1994:23-24).

Prior to arriving in St. Jacques, we examined aerial coverage of the town, and identified an area of interest on the eastern side of the harbour adjacent to a gravel arm. Upon arriving, we found a sizable 19th-to-20th-century site on a cliff overlooking the arm, comprising four houses, a well, several retaining walls, a possible enclosed field or garden, and a potential cellar (Figures 4 & 5). One of the houses clearly had a brick chimney, and the presence of bricks at the others suggests a similar trend. All of the houses appear to have utilised both stone and concrete in their foundations. The well is lined in concrete, with four large stones encircling it at the top. The possible cellar is directly south of the well, and a stage on the beach appears to be associated with one of the two northmost houses. Within the arm, numerous 19th- and 20th-century artifacts were present (Figure 5b). On the rocky beach adjacent to the arm, a row of wooden posts was also noted. There are also several stone walls built into both the cliff below the houses, and an embankment behind

Figure 4: (a) Area surveyed (red) and location of CiAu-01 (blue) in St. Jacques (b) Drone imagery of CiAu-01 with features outlined

them; these may have been designed to control and stabilise these embankments. Based on the building techniques, and associated artifacts, this site appears to represent a 19th-to-20th-century Newfoundlander occupation; it has been assigned the Borden number CiAu-01.

Despite the significant Newfoundlander site present, we did not identify any material indicative of a pre-19th-century presence in St. Jacques. In addition to the area surrounding CiAu-01 we examined two rocky beaches at the inner, northern side of the harbour. Neither of these beaches, however, was particularly well-sheltered, and it is plausible that any ephemeral traces of the fishery at St. Jacques have been lost over the past several centuries.

English Harbour

English Harbour has no documentary evidence of European presence before it appears in a census in 1836 (Smallwood and Pitt 1981:779). Since the late 19th century, the Jerry Petite and Sons company has had a presence in English Harbour; at present, an old fish plant belonging to the firm has been converted into a small museum showcasing 20th-century life in the community. J. Petite and Sons is still a small grocery/hardware store, and some of the workers informed us that the company played a major role in the town's development during the 20th century.

Very little space in the town could be surveyed. A small beach and an adjacent machine-excavated trench near the centre of the harbour were briefly examined, but no pre-20th-century material was present.

Figure 5: CiAu-01; (a) Concrete house supports with stone retaining wall in the background (b) Artifacts recovered from the beach (c) Stone footing (d) Concrete-lined well with stones at its top

Mose Ambrose (Great Ma Jambe)

Similar to English Harbour, the first recorded instance of settlement at Mose Ambrose is in the mid-19th century (Smallwood et al. 1991:629). Despite this, there is some indication of French presence in the region's etymology, as the inlet in which the community lies is known as "Great Ma Jambe" ("my leg"). Of course, this does not necessarily indicate that the area saw any intensive use by the French.

Two registered archaeological sites exist within Mose Ambrose: CiAv-01 and CiAv-02. When recorded in 2004, CiAv-01 consisted primarily of 20th-century ceramics eroding out of a bank adjacent to the road, as well as a piece of ballast flint and a single patinated chert flake. CiAv-02 is approximately 850 metres south of the road on the eastern side of the inlet. This site was also identified in 2004 on the basis of 20th-century ceramics eroding out of a bank.

We briefly visited both registered sites in Mose Ambrose. The only evidence of CiAv-01 was a small sherd of 20th-century stoneware. At CiAv-02, several linear depressions potentially representing houses or gardens were noted on top of relatively steep banks. When we descended to the beach, we noted several instances of erosion, but no artifacts were present. It is possible that both of these sites have endured heavy erosion damage, and that the contexts noted in 2004 may no longer be present. As with the other communities visited to this point, we did not find any sign of a pre-19th-century occupation.

Boxey

Boxey was first settled in the 1830s (Smallwood and Pitt 1981:236). The community is nestled around a small harbour with a large reinforced breakwater at its entrance. A large sandy beach (Boxey Beach) is present to the northeast of the main habitation zone.

We briefly surveyed the area around the breakwater, followed by the inner harbour, where we noted two stone stages, as well as some 20th-century artifacts. Nearby, a stone wall was built into a bank, likely to provide stability and prevent erosion. We also visited Boxey Beach, but no artifacts were present there. Based on these observations, it does not appear that Boxey was visited with any regularity before the 19th century.

Coomb's Cove

Coomb's Cove had a permanent population by the mid-19th century, but has generally remained one of the smaller communities in the area since that point (Poole and Cuff 1994:23-24). There is no evidence that the cove was used prior to the 19th century. The community is quite small, with its most notable feature being a small sandy beach in the inner cove. Our survey here was brief, as there was very little suitable space along the sandy beach. We noted one sherd of Rockingham ware and a row of wooden posts. Otherwise, there was no indication of a historic occupation.

Wreck Cove

Like the other communities in the region, the first recorded instance of settlement at Wreck Cove dates to the mid-19th century (Poole and Cuff 1994:635). Once again, there is no indication that any fishers made use of Wreck Cove before that point. The community does, however, have a relatively large gravel beach that we viewed as holding some potential.

Unfortunately, our survey of the beach at Wreck Cove did not reveal any artifacts or features, except modern litter. The rest of the harbour is far too developed to have any significant archaeological potential, so it is unlikely that historic material is present in any meaningful way at Wreck Cove.

Seal Cove

We surveyed the western arm of the Connaigre Peninsula on November 14; Seal Cove was the first community we visited. Seal Cove was settled permanently by the mid-19th century (Poole and Cuff 1994:115-116). Though there was a French presence in nearby areas (e.g. Connaigre, Grole, Hermitage), there is no clear indication that French fishers ever made substantial use of Seal Cove. It did, however, have a French toponym prior to British settlement: *Basse Terre* (Poole and Cuff 1994:115). Additionally, we noticed when leaving Seal Cove that Miquelon and Langlade, as well as Brunette Island and the Burin Peninsula, were all clearly visible; seabound fishers would have had no issue travelling between these regions. This gave us a very interesting perspective and a new grasp on the area.

At Seal Cove, there is a small sandy beach protected by a large man-made breakwater. To the east, the sand transitions to a large cobble beach. We surveyed both the sand and cobble sections of the beach. At the western extremity of the sandy area, an

old concrete breakwater was eroding out of the bank. Near the transition to cobbles, there were some wooden planks, and further east within the cobbles were a set of wooden posts. All of these features are associated with relatively recent use of the area. No artifacts were found.

Figure 6: Aerial photo of Grole in 1936 (Maritime History Archive, Resettlement Photographs, PF-328.010)

Grole

Grole is a resettled community located on Hermitage Bay, 6km northwest of Seal Cove. The community is located in a small cove sandwiched between two large, steep hills. The terrain between the hills slopes gently towards the beach, with three small islands in the cove providing shelter. It was first described by Taverner in his first report as "the Plantation at Isle Grole", with "beech for 6 boats" (Taverner 1714a: fol. 260v.); he characterises it again similarly in his second report (Taverner 1718). Suggestions regarding the community's etymology are varied, ranging from bird names to descriptions of the landscape (*grêlé*) (Smallwood et al. 1984:750). As Taverner chose to describe the site as a "plantation", a year-round presence can be assumed (Janzen 1987:186). Further, Taverner records one "planter" at Isle Grole in his 1714 census of French inhabitants, named Pierre Carey, who is noted as having taken the oath to the British Crown in order to stay in Newfoundland (Taverner 1714b). It is not clear when this establishment at Grole began, or exactly when Carey abandoned it. By 1730, an English merchant had begun his own establishment at Grole, though it is possible that he employed French fishers familiar with the area (Janzen 1987:189-191). By the early 19th century, English/Newfoundlander settlers established themselves at Grole, which became an important economic centre in the region. By the time the first census of the area was taken in 1836, Grole already had a population of nearly 200 people (Smallwood et al. 1984:750). Grole also had significant ties to the New-

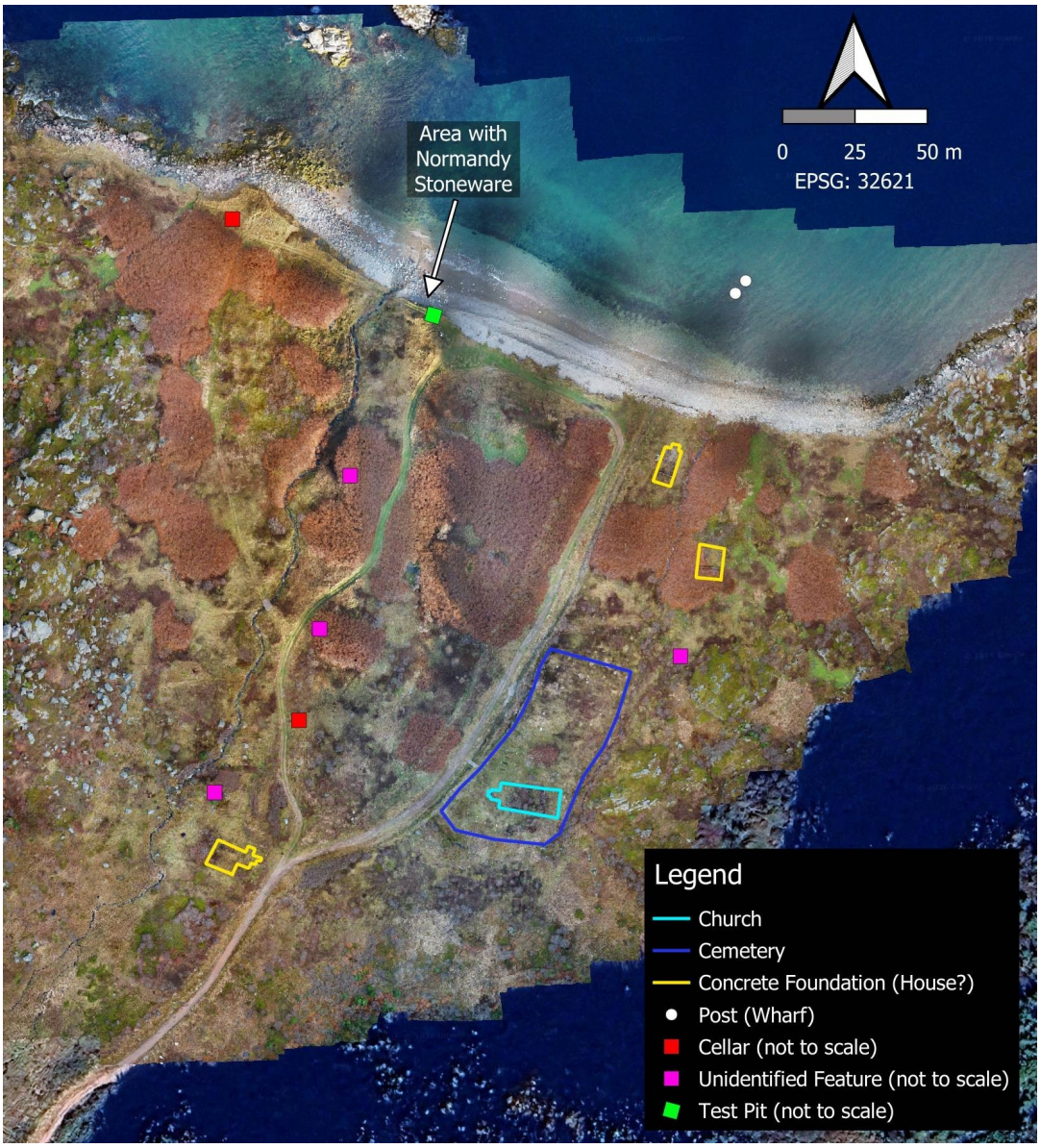


Figure 7: Drone imagery of Grole (CjBa-04) with visible features outlined. Additional features are present, but covered by September Mist

man and Company stations nearby at Hermitage and Gaultois; the firm also briefly became involved in Grole itself at the end of the 19th century. Despite the construction of a road linking Grole to the newly completed Highway 364 in the late 1960s ("highway" being perhaps a generous term…), the community was fully resettled by 1971.

In the early planning of this survey, we identified Grole as having perhaps the highest potential of any site we planned to visit, and we were not let down in that regard. Immediately on arrival, we noticed a substantial 19th-20th century site, with concrete foundations of numerous houses scattered around the cove. A relatively large graveyard was present surrounding the remains of the community's church; the earliest gravestone we observed dated from 1817 (Figure 8b), though not all gravestones were checked and an unengraved slate marker was also noted. Additionally, at least two root cellars are present, as are two posts in the water, likely part of an old wharf. Unfortunately, much of the site is completely covered in September Mist, and we therefore did not have time to fully map all of the structures at the site.

From the beach, we noticed that much of the coastline was eroding. In the eroding bank at the centre of the beach, a thick organic layer seemed to overlie the sterile subsoil. We found two sherds of Domfrontais Normandy Stoneware (Figure 8c) and two small potential Pre-Contact flakes within this eroding bank. As a result, we decided to assess the site's stratigraphy by excavating a 50 x 50cm test pit. We were able to confirm that the dark organic layer was substantial, underlying a thinner layer of 20th century material and overlying the subsoil. Unfortunately, no artifacts dating before the 19th century were encountered in this test pit. No artifacts were noted at either the eastern or western extremities of the site, but the entire coastline appears quite promising.

As the site was substantial, preliminary drone-based photogrammetry was conducted to provide high-resolution aerial imagery. Moving forward, this

Figure 8: CjBa-04; (a) View of Grole Harbour looking north, with the south coast of Newfoundland (especially Long Island) visible in the background (b) John Ridout's gravestone, the oldest noted in the Grole cemetery, dating to 1817 (c) Two sherds of Normandy stoneware (Domfrontais) found in an eroding bank

will be useful to monitor the impacts of erosion on the coastline at Grole.

Though this visit was only a first glance at Grole, it is abundantly clear that the community represents an important 19th-20th-century British/ Newfoundlander occupation, with an earlier French and potential Pre-Contact component. It has been assigned the Borden number CjBa-04. Based on this promising survey, we intend to carry out further work at Grole in the coming years.

Capelin Cove

Capelin Cove is a small cove located on the north-eastern side of the community of Seal Cove. We visited Capelin Cove because three rock formations on the eastern side of the cove resembled abandoned fishing stages on satellite imagery.

The cove is relatively exposed but is partially protected by a man-made breakwater. Two modern docks are located north of the breakwater, along with a parking lot. The rest of the cove is undeveloped and is covered with sand at its south and cobbles toward its north. The coastline adjacent to the beach is roughly eroded. The three rock formations visible on the satellite imagery do in fact seem to be old stages, potentially used in different periods. One of them in particular appeared to be older than the others, as it was much smaller and in far poorer shape. The two others were bigger and made up of larger boulders. The biggest "stage-like" shape had a boulder with a deep drilled hole through it, indicating relatively recent use. No artifacts were discovered in Capelin Cove.

Sandyville/Dawson's Cove

Sandyville (formerly Dawson's Cove) is a living community and was incorporated into the Town of Hermitage-Sandyville in 1969. The community is not mentioned in any historical sources as a French fishing settlement or year-round plantation. It is, however, in close proximity to Hermitage (less then 3 km by foot, allowing easy access between the north and south sides of the Hermitage Peninsula), and thus may have been regarded as a part of that community in the 17th and 18th centuries. The location is noted as *Dawsson's Cove* on a 1765 James Cook chart, which

shows a stage in the cove (Smallwood and Pitt 1981:600).

Though Sandyville was not originally viewed as having particularly high potential (in terms of French occupation), we learned of a local legend regarding a supposedly French headstone in the community during a chance meeting with a Hermitage resident a few days before our survey. We therefore decided to conduct a pedestrian survey on the eastern side of the harbour, which is fairly unbuilt and well-protected by two man-made breakwaters.

Upon arrival we did discover a standing headstone (Figure 9a) located in a grassy field on the southeastern side of the harbour. The headstone does not bear any clear writing, as its face is heavily eroded. A "bas relief" of two winged heads is visible on the top part of the headstone. These heads, notably, are not particularly similar to either the "death's head" or "cherub" motifs characteristic of Puritan headstones in 17th- to-18th-century New England (e.g. Lacy 2017:26; Dethlefsen and Deetz 1966; Deetz 1977). Of course, it is far less likely that the stone is French, considering the divergence from traditional Catholic iconography. Though a bizarre set of cherubs or death's heads is perhaps possible, it is most likely that the headstone dates from the English/Newfoundlander settlement of the late 18th or 19th century.

We began a brief pedestrian survey on the southmost beach, which was quite unsheltered and rocky. No artifacts were present, though some wooden posts were standing in the water. We moved on to the gravelly inner beach, and were rather surprised when we began discovering 17th-to-18th-century French material culture. These artifacts included three sherds of Normandy Stoneware (two Bessin-

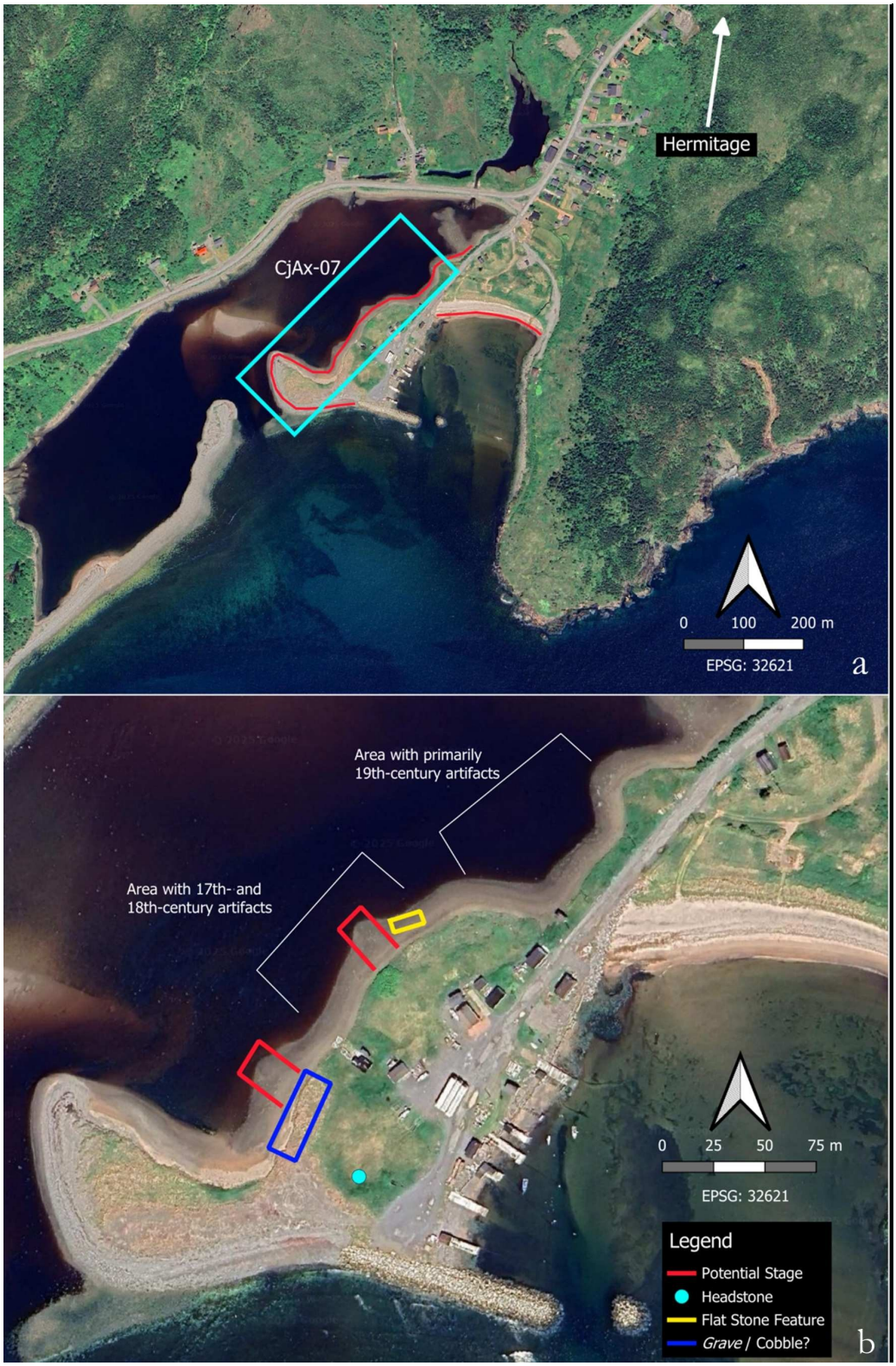
Figure 9: CjAx-07; (a) Headstone with winged heads motif (b) Seventeenth-to-eighteenth-century artifacts found on the beach (c) Potential eroded *grave* / cobble

Cotentin, one Domfrontais), two fragments of thick green glass (likely wine bottle glass), two pipe stems with relatively large bore holes, and two pieces of ballast flint (Figure 9b). These were all clustered around the apparent remains of a stone stage, about 125m north of the transition between the outer rocky beach and the gravelly inner section. Numerous other artifacts from the 18th century onward (Creamware, Jackfield, Rockingham) were also present throughout much of the beach, particularly toward its northeastern extremity.

North of the stage remains, we found an alignment of relatively large (15-20cm) flat stones that may represent another either stage, a slipway, or possibly a *grave* used to dry fish. In the southeastern corner of the harbour, a set of larger (20-30 cm) round stones (Figure 9c) was eroding out of the grassy meadow; this was particularly reminiscent of the stone *graves* commonplace in Saint Pierre (Livingston and Losier 2021:81). When examining satellite imagery, we noticed that a second formation possibly representative of a stage was present near this set of larger stones as well; it likely went unnoticed during our survey due to the high tide.

Our discoveries at Dawson's Cove led us to conclude that there is an archaeological site present, with a 17th-to-18th-century French component. The presence of 18th- and 19th-century material culture, coupled with historical records, suggest continued use throughout much of the

Figure 10: (a) Area surveyed (red) and location of CjAx-07 in Sandyville (b) Satellite imagery of CjAx-07 with features outlined



past three centuries. The site has been assigned the Borden number CjAx-07. The relatively unbuilt aspect of the beach at Dawson's Cove implies that archaeological contexts may be relatively undisturbed. It is also worth noting that coastal erosion, though active, seems relatively low at the site, which would indicate a good preservation of archaeological remains.

Hermitage

Since 1969, the community of Hermitage has been part of the amalgamated Town of Hermitage-Sandyville. Hermitage was used as a fishing station by the French during the 17th century. A year-round plantation was established at the site toward the end of the century, as indicated by a census in 1687, and was still inhabited in 1711 (Statistics of Canada 1876:20; Thibodeau 1959-1960:85). Hermitage is mentioned in both of Taverner's reports as a good fishing plantation, but that English privateers had burned down several of the houses during the War of the Spanish Succession (Taverner 1714a, 1718). In his census, Taverner lists a John Mitchell (likely an anglicized version of a French name) at Hermitage, who took the oath to the British Crown; it is unclear how long he remained at the site (Taverner 1714b). By the end of the 18th century, Newman and Company had established itself at Hermitage, and was a major driver in the town's growth throughout the 19th century (Smallwood et al. 1984:919).

The community of Hermitage is currently a relatively active town with a very developed harbour. We mainly wanted to visit the town to assess the impact of this development on potential archaeological contexts. Satellite imagery does show shapes resembling potential stages in the inner harbour, which is the least built-up section of the community. We did observe a formation that may have been the remains of an old stage, but this was not entirely clear. The rest of the harbour was far too developed for further survey to be productive.

Even though Hermitage was an important fishing site and permanent plantation, we encountered the same issues as in Harbour Breton. Development in the 20th and 21st centuries has obscured any indication of earlier use. The only sections of the community conducive to any survey were the inner reaches of the harbour, and the only potential feature observed was difficult to confirm. While it is possible that archaeological remains do exist beneath modern infrastructure, it seems unlikely that any are present in accessible areas.

Chappie Cove/Red Head

We surveyed Chappie Cove on our last day, early in the morning of November 15th. The cove is located approximately 2km south of the town of Harbour Breton next to a small peninsula called Red Head. The area is home to three known archaeological sites: CiAx-01, CiAx-02, and CiAx-03. CiAx-01 is a Dorset site located on a small island connected to the mainland by a sandbar at the western side of the cove. CiAx-02 and CiAx-03 are both located on the Red Head peninsula at the eastern side of the cove. CiAx-02 is an unidentified pre-contact site, where a scatter of flakes was discovered in a test pit. CiAx-03 is a 20th-century site consisting of the foundations of a large building thought to have been a fish processing plant.

We surveyed the beach between Red Head and the island where CiAx-01 is located. The island itself could not be surveyed as the high tide rendered it inaccessible. Despite heavy erosion around the cove (especially near CiAx-02), no archaeological discoveries were made. It is important to note that this appeared to be (by far) the most heavily eroded site we came across (Figure 10). While we did observe some remains of CiAx-03, we did not notice any trace of CiAx-02. As the site was identified in 2002, it is possible that the archaeological contexts have been damaged or destroyed by erosion at some point over the past two decades. However, more research would be necessary to fully assess any potential damage.

Besides the known sites at Chappie Cove, we had hoped that its proximity to Harbour Breton may have led to some historic use. An information board at the site did give a small amount of information on a 19th-to-20th-century community resettled in the mid-20th century. Follow-up research, unfortunately, was unable to provide any further context. As mentioned above, no artifacts whatsoever were found, and there is very little clear evidence of historic use of the area.

Conclusion

Although this survey was limited, it was an important first step in establishing areas worth investigating further on the Connaigre Peninsula. It is clear that archaeological contexts associated with the French oc-

cupation of the area remain intact on the western arm of the peninsula, particularly at Grole and Dawson's Cove. In the coming field seasons, we will aim to return to these sites and carry out further testing to better determine the nature and length of these occupations, as well as the potential Pre-Contact component at Grole. It was unfortunate that we were unable to identify any similar contexts near Harbour Breton, or on the eastern arm of the peninsula; however, there were several sites (Connaigre, Pass Island, Jersey Harbour, Blanchette, Brunette Island) that we expect to have some potential that were too inaccessible to visit during this short survey. When we return, we hope to access some of these areas by boat.

Figure 11: (a) Eroding bank near CiAx-02 (b) Eroding banks throughout Chappie Cove

One trend that we noticed (which we hope does not necessarily hold true) was that a pre-20th-century presence was essentially invisible in all communities that have seen substantial development since the 1970s. Even in cases where some earlier material culture was present (i.e. Belleoram) it seems that modern infrastructure either directly overlies or has significantly disturbed any archaeological contexts. However, there are several communities throughout the Connaigre Peninsula that were abandoned or resettled in the mid-20th century. Further efforts should likely be concentrated on these areas, as they would not have seen the industrial-scale developments that have impacted the more intensively occupied communities in the region.

In any case, this survey was a successful operation in its aim to identify French sites in the area. Both of the French sites we encountered also served to

contextualize the historical record to a degree; as neither appears on any official census and only Grole is mentioned by Taverner, it can likely be assumed that other undocumented (or poorly documented) sites exist in the area. We hope that further research will be able to better outline the extent of the French fishery on the Connaigre Peninsula, and the lives of the fishers involved in it.

Bibliography

Anonymous
1671-1713 Recensements de Terre-Neuve. Archives nationales d'outre-mer (ANOM, 5DPPC, 20, G1, 467).

Crompton, Amanda
2017 The Atlantic Travels of Henri Brunet, a Migrant Merchant in Seventeenth-Century French Newfoundland. In *Tu sais, mon vieux Jean-Pierre*, p. 109-130. University of Ottawa Press, Gatineau, QC.

Deetz, James F.
1977 In Small Things Forgotten: The Archaeology of Early American Life. Doubleday, New York, NY.

Dethlefsen, Edwin S., and James Deetz
1966 Death's Heads, Cherubs, and Willow Trees: Experimental Archaeology in Colonial Cemeteries. American Antiquity 31(4):502-510.

Janzen, Olaf Uwe
1987 "Une Grande Liaison" : French Fishermen from Île Royale on the Coast of Southwestern Newfoundland, 1714-1766 — A Preliminary Survey. *Newfoundland Studies* 3(2):183-200.
2001 "Of Consequence to the Service:" The Rationale Behind Cartographic Surveys in Early Eighteenth-Century Newfoundland. *The Northern Mariner* 11(1):1-10.

Lacy, Robyn S.
2017 'Here Lieth Interr'd': An Examination of 17th-Century Burial Landscapes in Eastern North America. Master's Thesis, Memorial University of Newfoundland, St. John's, NL.

Landry, Nicolas.
2007 Pêcheurs-engagés à Terre-Neuve sous le régime français, 1688-1713. *French Colonial History* 8:1-21.

Liverman, David, Martin Batterson, David Taylor, and Janice Ryan
2001 Geological Hazards and Disasters in Newfoundland and Labrador. *Canadian Geotechnical Journal* 38 (5):936-956.

Livingston, Meghann, and Catherine Losier
2021 "From the Sea, Work": Investigating Historical French Landscapes and Lifeways at Anse à Bertrand, Saint-Pierre et Miquelon. *Northeast Historical Archaeology* 50:75-93.

Losier, Catherine
2025 Turpin's Island, Little St. Lawrence CfAu-05 Survey and Identification of Features - Memorial University Field School 2024. *Provincial Archaeology Office 2024 Archaeology Review* 23:188–201.

Parat, Antoine
1686, July 7 Procès verbal du Sr Parat. Archives nationales, colonies (Series F3, vol. 54, fol. 273-274v.).
1686, July 9 Procès verbal du Sr Parat. Archives nationales, colonies (Series F3, vol. 54, fol. 275-276v.).

Poole, Cyril F., and Robert Cuff (editors)
1994 *Encyclopedia of Newfoundland and Labrador, Volume 5*. Harry Cuff Publications, St. John's, NL.
Smallwood, Joseph R., Catherine Horan, Robert D. W. Pitt, and Bertram G. Riggs (editors)
1984 *Encyclopedia of Newfoundland and Labrador, Volume 2*. Newfoundland Book Publishers, St. John's, NL.
Smallwood, Joseph R., and Robert D. W. Pitt (editors)
1981 *Encyclopedia of Newfoundland and Labrador, Volume 1*. Newfoundland Book Publishers, St. John's, NL.
Smallwood, Joseph R., Cyril F. Poole, and Robert Cuff (editors)
1991 *Encyclopedia of Newfoundland and Labrador, Volume 3*. Harry Cuff Publications, St. John's.
Statistics of Canada
1876 *Censuses of Canada, 1665-1871*, Vol. 4. I. B. Taylor, Ottawa, ON.
Taverner, William
1714a Captain Taverner's First Report Relating to Newfoundland. The National Archives (PRO) (Colonial Office 194/5, fol. 260-262).
1714b Account of French Ships and Inhabitants at St. Peters. The National Archives (PRO) (Colonial Office 194/6, fol. 243-243v.).
1718 Captain Taverner's Second Report Relating to Newfoundland. The National Archives (PRO) (Colonial Office 194/6, fol. 226-241v).
Thibodeau, Fernand-D.
1959-1960 Recensements de Terreneuve et Plaisance. *Mémoires de la société généalogique* 10 (3-4) and 11(1-2):179-188 and 69-85.
Turgeon, Laurier
1986 Pour redécouvrir notre 16e siècle : les pêches à Terre-Neuve d'après les archives notariales de Bordeaux. *Revue d'histoire de l'Amérique française* 39(4):523-549.

Sidescan Sonar Surveys of Newfoundland Shipwrecks

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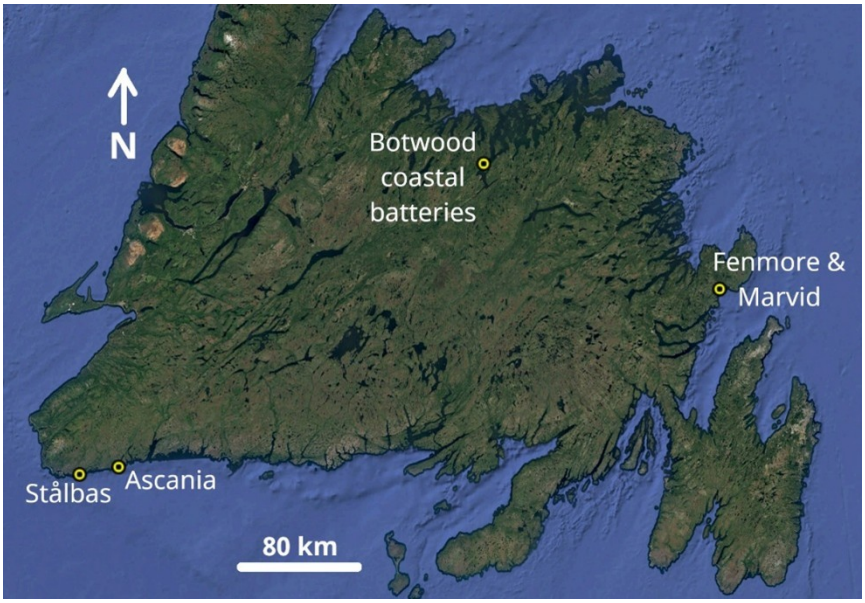


Figure1: Map of shipwreck sites where sidescan sonar surveys were carried out in 2025.

In 2025, the Shipwreck Preservation Society of Newfoundland & Labrador (SPSNL) tested out a consumer-grade fishfinder (Humminbird Solix 10) for conducting sidescan sonar surveys of shipwrecks around the province. We chose six underwater sites across the province for this study (Figure 1). This report will summarize the results of these surveys and assess the usefulness and limitations of this fishfinder for nautical archaeology projects.

SS *Ascania* (CjBp-02)

SS *Ascania* was a steel ocean liner built by Swan, Hunter & Wigham Richardson Ltd. in Newcastle, England in 1911 for the Cunard Steamship Line (Lloyd's 1918). The ship was 142 m long, 17 m wide and was 9121 gross registered tons (Figure 2). During the First World War, the ship was requisitioned by the Royal Fleet Auxiliary and used as a troopship. On 13 Jun 1918, *Ascania* ran aground in the fog near Petites, NL on a voyage from Liverpool to Montreal (Anon. 1918a; Warwick & Roussel 2018). All crew and passengers got off the shipwreck safely. However, despite initial salvage efforts, the ship was a total loss (Anon. 1918b).

On 1 & 2 September 2025, SPSNL members conducted a sidescan sonar and diving survey of the wreck of SS *Ascania*. The ocean liner is completely broken up and scattered from wave action and past salvage efforts. The wreck lies in 5 – 12 m of water near Gull Island, NL. The main features are two Scotch boilers, two propeller shafts, two steering quadrants, one steam engine, and sections of the double bottom of the hull (Figs. 3 & 4). The extensive debris field

Figure 2: SS *Ascania* before the First World War.
photo: https://www.tynebuiltships.co.uk/A-Ships/ascania1911.html

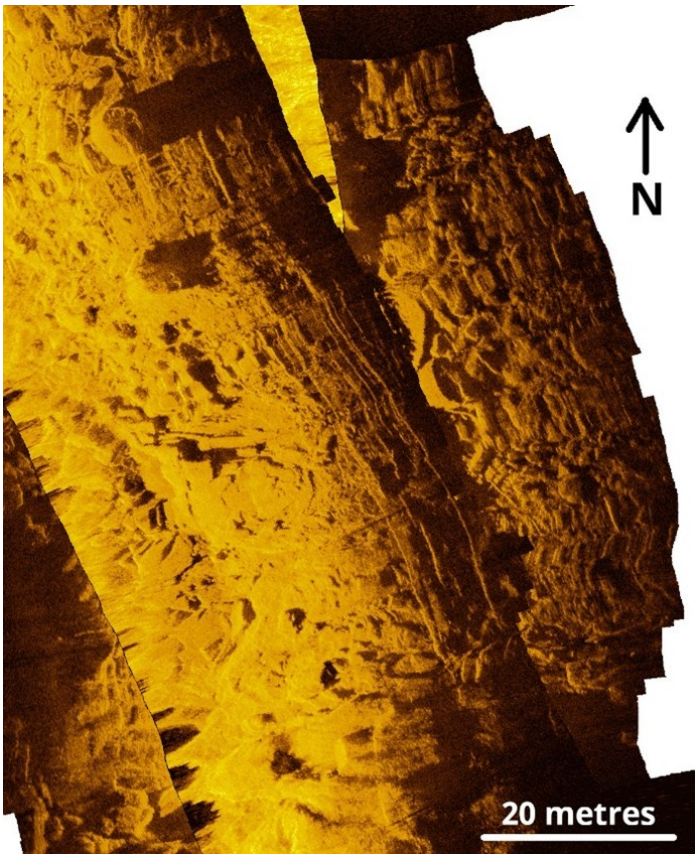


Figure 3: Sidescan sonar survey of the wreck of SS *Ascania* just off Petites, NL. The stern of the ship and two propeller shafts are at the lower right, a section of double-bottomed hull in the middle and the two round boilers are at the upper left. photo: Neil Burgess SPSNL

includes disarticulated hull and deck plating, piping, machinery and about a dozen explosive projectiles, presumably for the ship's deck gun. The overall wreck site is about 150 m from bow to stern (north to south).

MFV *Stålbas* (ClBu-10)

MFV *Stålbas* was originally built as the steel-hulled whaling steamship *Gos 1* in Tønsberg, Norway in 1927 (skipshistorie.net 2025). In World War II, it served in the Norwegian Royal Navy as the patrol ship KNM *Moss* and was used for training sailors at Camp Norway in Lunenburg, Nova Scotia. In 1945, it reverted to its role as a Norwegian whaler named *Gos 1*. In 1955, it was sold, refitted with diesel engines and converted to a Norwegian purse seiner, renamed MFV *Eldjarn* (Figure 5). In 1970, *Eldjarn* was sold again, lengthened to 46 m and fitted with a new wheelhouse. In 1974, the Norwegian trawler was sold once again and renamed MFV *Stålbas* (Skipshistorie.net 2025).

On 3 July 1974, *Stålbas* was sailing from the Grand Banks to the fish plant in Isle aux Morts, NL with a cargo of capelin (Dept. of Transport 1974). It arrived off Isle aux Morts in the evening and found the harbour approaches blanketed in thick fog. With a pilot unavailable, the captain proceeded north into the Eastern Passage of Isle aux Morts. Unfortunately, the ship ran aground on the White Sunkers and start-

Figure 4: SPSNL diver Ysabelle Hubert on the SS *Ascania* wreck. In the lower right of the photo is a propeller shaft and in the lower left is a section of the double-bottomed hull.

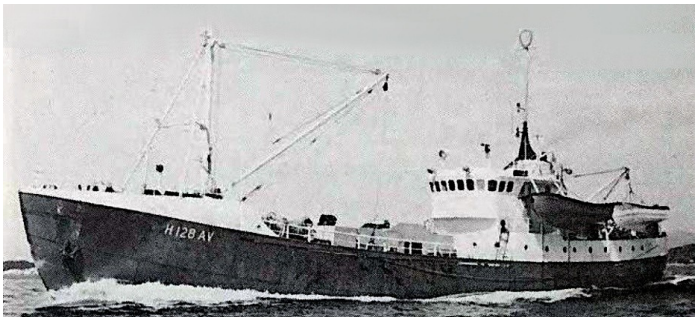


Figure 5: MFV *Eldjarn*, which was later renamed MFV *Stålbas* (photo: Wrecksite.eu 2025).

ed taking in water. The crew abandoned ship in a lifeboat. As the tide rose overnight, the ship was carried over the rocks by the swell and sank 0.5 km north of the shoal (Dept. of Transport 1974).

On 1 Sep 2025, SPSNL members conducted a sidescan sonar and diving survey of the wreck of MFV *Stålbas*. The fishing vessel was lying on its port side on a sandy bottom next to a rocky ridge (Figure 6). The boom of the forward mast extended off the port side of the vessel and the end rested on the seafloor. Depth to the top of the ship's mast was approximately 6 m, to the deck of the ship was 10 - 14 m, and to the seafloor was 17.5 m. The hull, main deck and mast of the ship appeared largely intact. However, the forecastle and wheelhouse have sustained significant damage and are slowly collapsing.

MV *Fenmore* (DcAi-07)

The wooden cargo ship MV *Fenmore* was originally built in Totnes, England in 1944 and served in the Royal Navy as minesweeper HMS *MMS-1076* (Figure 7). After being sold 1947 and converted to a fishing trawler, the ship was purchased in 1956 by John Blackwood of St. John's, Nfld (Anon. 1960; Dept. of Transport 1956). *Fenmore* was 39 m long, 8 m wide, 277 gross registered tons and powered by a diesel engine.

In the evening of 15 October 1960, *Fenmore*

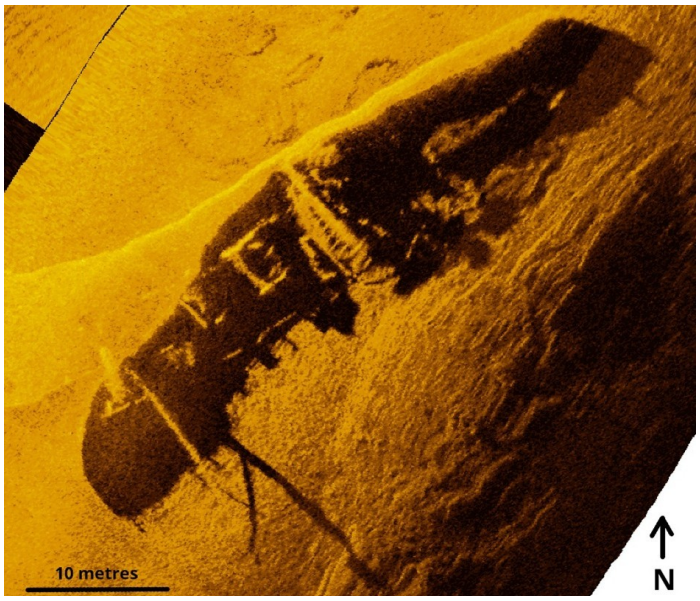


Figure 6: Sidescan sonar survey of the wreck of MFV *Stålbas* in the Eastern Passage of Isle aux Morts, NL. The bow of the ship is at the lower left and the stern is at the upper right. photo: Neil Burgess SPSNL

Figure 7: A sister ship of Royal Navy minesweeper HMS *MMS-1076*. That minesweeper was later converted to the wooden cargo ship MV *Fenmore*, which sank in Trinity Harbour. photo: wrecksite.eu

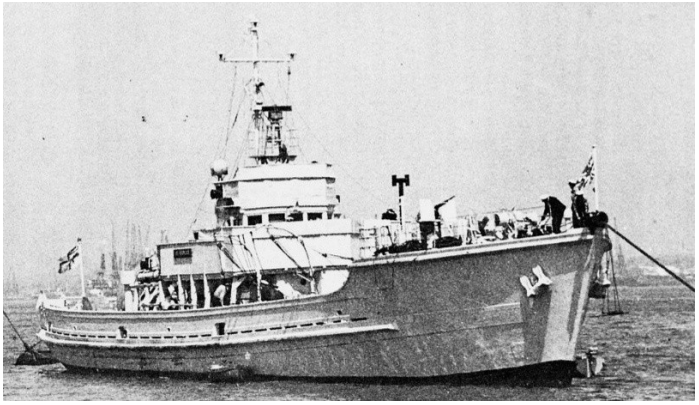


Figure 8: Sidescan sonar survey of the wreck of MV *Fenmore* in Trinity Harbour, NL. Bow is on the left and stern on the right. photo: Neil Burgess SPSNL

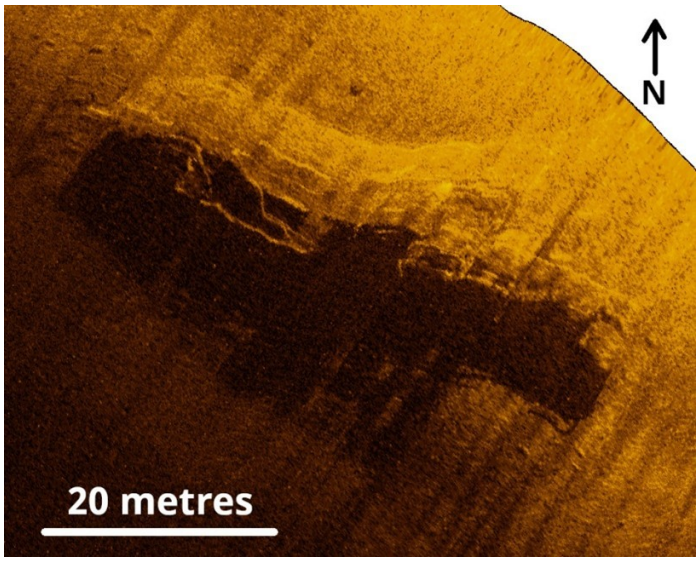


Figure 9: The wreck of MV *Fenmore*, showing the growth of seaweed and anemones covering the shipwreck. photo: Neil Burgess SPSNL

arrived off Trinity after sailing from North Sydney, Nova Scotia with a load of coal (Anon. 1960). Soon after the ship passed the Fort Point lighthouse, it stuck a rock and began taking in water. The crew abandoned ship in a lifeboat, and the ship quickly sank to the bottom of Trinity Harbour.

On 7 September 2025, SPSNL members conducted a sidescan sonar and diving survey of the wreck of MV *Fenmore*. Sonar indicated the wreck was largely intact and lying on its port side (Figure 8). The top of the wreck is at a depth of 16 m, the deck of the ship is at 21 m and the seafloor is at 24 m. Diving revealed the entire wreck was covered in seaweed and anemones (Figure 9).

MV *Marvid* (DcAi-06)

The wooden ship MV *Marvid* was built as the MV *Grotta* in Fecamp, France in 1920 for Icelandic owners (Dept. of Transport 1950). In 1952, the ship was sold to Alexander Duffett of Clarenville and a year later he renamed it MV *Marvid*. The ship was 32 m long, 8 m wide, 248 gross registered tons, and had a diesel engine.

In early February 1957, the cargo ship MV *Marvid* was carrying a load of coal from Sydney, Nova Scotia to Trinity (Anon. 1957a). However, Trinity Harbour was blocked with ice and the crew spent two days trying to cut a path through the ice (Anon. 1957b). Unfortunately, on 8 February the ice caused a leak in *Marvid's* hull and the ship sank just off the government wharf. The crew were able to walk across the ice to safety.

On 7 September 2025, SPSNL members conducted a sidescan sonar survey of the MV Marvid shipwreck in Trinity Harbour. The sonar images showed that the hull was fairly intact and lying on its starboard side (Figure 10). The top of the wreck was at a depth of 6 m and the seafloor was at 12 m.

Botwood coastal batteries (DhAt-10 & DhAt-14)

In discussions with staff at the Botwood Flying Boat Museum and local informants, SPSNL members heard accounts of the removal of cannons at the end of World War II from the coastal defence batteries at Phillips Head and Wiseman Cove, on either side of the ocean approaches to Botwood Harbour. These accounts suggested that some or all of the cannons

Figure 10: Sidescan sonar survey of the wreck of MV *Marvid* in Trinity Harbour, NL. photo: Neil Burgess SPSNL

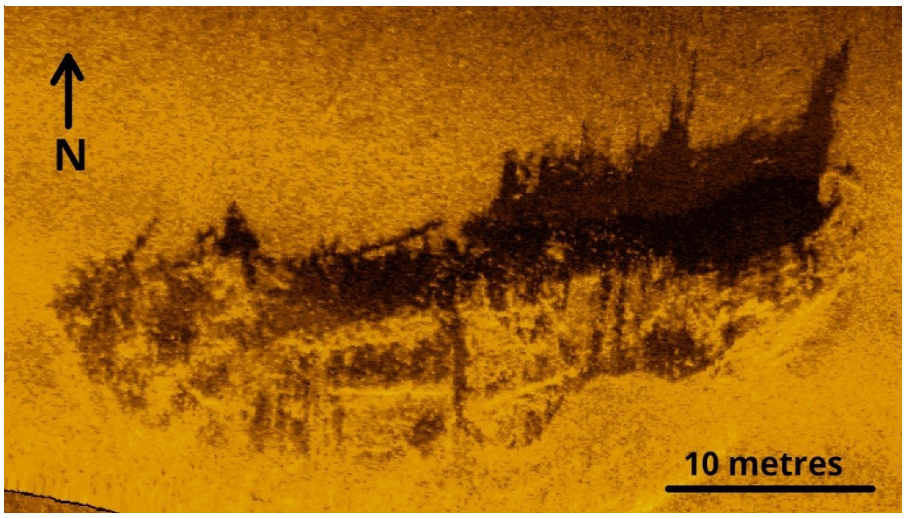


Figure 11: Aerial photo of Phillips Head coastal defence battery during World War II. Two bunkers at the top of the cliff house the guns. aerial photo: Dept. of National Defence, Library & Archives Canada, R112, vol. 37427, file 112.3A4 (D6), no. 341

had been disposed of by dumping them in the ocean in front of the battery emplacements. These coastal batteries were built by the Canadian Dept. of National Defence early in the Second World War to protect both the Royal Canadian Air Force seaplane base and the shipping wharves in Botwood Harbour (Botwood 2020). The wharves were used for loading ore from the Buchans mines and newsprint from the Grand Falls paper mill onto ships destined for Great Britain. The battery at Phillips Head housed two 4.7-inch guns and the battery at Wiseman Cove housed two 10-inch guns (Ozorak 2001).

On 29 August 2025, members of SPSNL proceeded by boat from Botwood to the sites of these former coastal batteries. The two concrete gun emplacements at Phillips Head (DhAt-10) were clearly visible from the water, on Google Earth and in aerial photos from World War II (Figure 11). The gun emplacements at Wiseman Cove (DhAt-14) were not as obvious and their location was established using aerial photos from World War II (Figure 12).

We conducted sidescan sonar surveys along the shoreline adjacent to the former gun emplacements at Phillips Head and Wiseman Cove (Figure 13 & 14). No obvious wreckage or cannons from World War II were visible in the sonar surveys. However, the survey areas were limited to a roughly 60 m wide swath out from the shoreline. Any debris in deeper waters was not surveyed.

Limitations

Our time on each of these sites was limited to one or two days, so surveys had to be done in ambient weather and sea conditions. Since the transducer for the sidescan sonar is mounted to the hull of the boat, any wave action which rocks the boat tends to result in "wavy" sonar images, which are inaccurate (i.e., Figure 8). Thus, more accurate sonar images will be

Figure 12: Aerial photo of Wiseman Cove coastal defence battery during World War II. aerial photo: Dept. of National Defence, Library & Archives Canada, PA-20966

achieved under calm sea conditions.

Interpretation and Discussion

We conducted these sidescan sonar surveys to assess the usefulness and limitations of the Humminbird Solix 10 fishfinder for our nautical archaeology projects. We selected the frequency of 1100 kHz for the sidescan sonar to obtain the highest resolution images possible. The sidescan sonar on this fishfinder can also be set at 455 or 800 kHz. The tradeoff being that the lower the frequency, the poorer the image resolution. However, the lower the frequency, the deeper the sonar will collect data and the wider the swath it will cover. By using the highest frequency, we got the highest resolution image but the sonar was limited to shallower depths and it only covered a narrow swath.

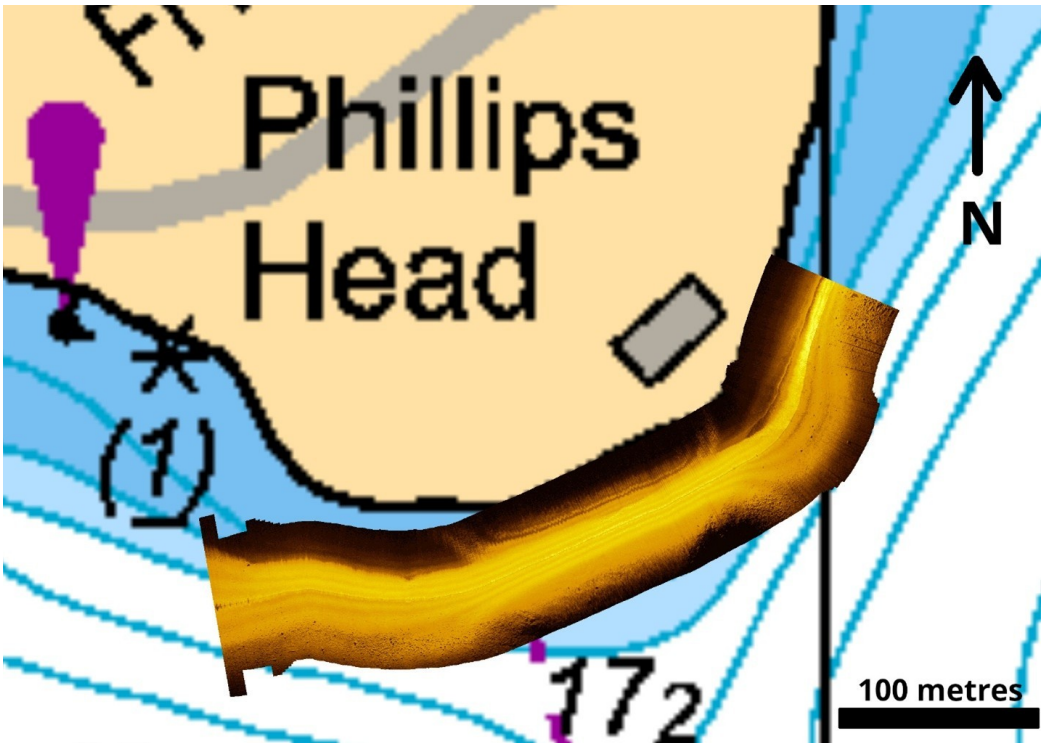
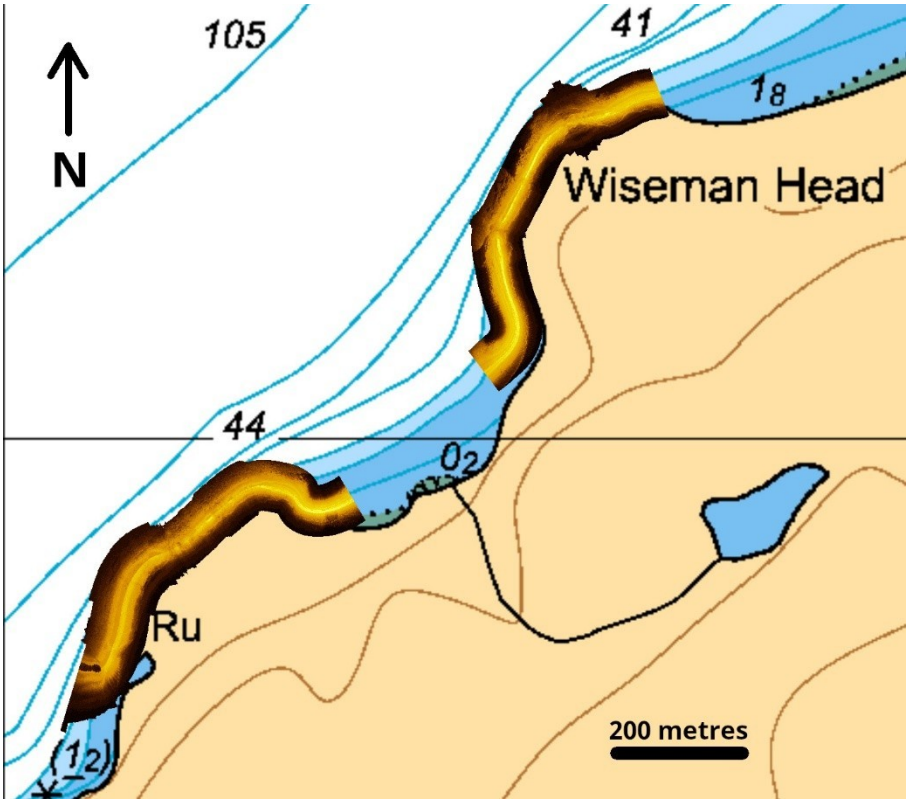


Figure 13: Sidescan sonar survey of the nearshore waters off Phillips Head, north of Botwood, NL. photo: Neil Burgess SPSNL

Figure 14: Sidescan sonar survey of the nearshore waters off Wiseman Cove, north of Botwood, NL. photo: Neil Burgess SPSNL



A summary of the results from the shipwreck sites we surveyed is shown in Table 1. It was clear that under fairly calm sea conditions, the fishfinder set at 1100 kHz could produce acceptable sidescan sonar images of an intact shipwreck down to a depth of 24 m such as on the *Fenmore* wreck. The resolution of the sonar images at 24 m depth was not as good as those collected at 12 m on the *Ascania* wreck. We found the fishfinder set at 1100 kHz did not produce useful sonar images of an intact shipwreck at a depth of 30 m, in the case of the *Hazel Pearl* wreck (see Burgess, Stanley, Marquez & Mandziuk elsewhere in this issue). We had to switch the sonar frequency to 800 kHz to obtain acceptable sonar images at this depth. However, the sonar images at

Table 1: Summary of sidescan sonar survey results on Newfoundland shipwrecks using a Humminbird Solix 10 fishfinder.

Site	Sonar Frequency (kHz)	Max. Depth (m)	Wave Heights (m)	Sonar Survey Results
SS *Ascania*	1100	12	0.2	good
MFV *Stålbas*	1100	17.5	0.1	very good
MV *Fenmore*	1100	24	0.3	good
MV *Marvid*	1100	12	0.3	good
*Hazel Pearl**	800	30	0.7	poor

* See Burgess, Stanley, Marquez & Mandziuk elsewhere in this issue for the sidescan sonar survey of the schooner *Hazel Pearl*.

this lower frequency had noticeably lower resolution (although this may in part be due to the rough sea conditions during the *Hazel Pearl* survey).

We conclude that obtaining high-resolution sidescan sonar images (using 1100 kHz) of intact shipwrecks in depths deeper than 25 m will be difficult with this fishfinder system with a boat-mounted transducer. Furthermore, locating small debris or timbers scattered from a broken-up shipwreck will be difficult at depths greater than 15 m. Clearly, calm sea conditions are required for optimal sonar performance. We will need to further assess this system using the 455 and 800 kHz frequencies to learn their depth limitations for detecting intact shipwrecks under calm sea conditions. We also need to assess the need for a sidescan sonar system with the transducer mounted on a submerged towfish and cable. This setup would eliminate the problems associated with wave action and would also get the transducer down closer to deeper shipwrecks. Both improvements would yield much higher resolution images of deeper shipwrecks.

Acknowledgements

We greatly appreciate the support of our informants and local partners such as Ocean Quest Adventures and the Botwood Flying Boat Museum in conducting these surveys. Thanks to SPSNL diver Ysabelle Hubert for volunteering her time to assist in these surveys. These archaeological surveys were conducted under permit 25.19 issued by the PAO.

References

Anonymous. 1918a Jun 17. Expect Ascania to be Total Loss. St. John's Daily Star, St. John's, Nfld. https://collections.mun.ca/digital/collection/daily_star/id/1070/rec/2

Anonymous. 1918b Nov 21. Storm Ravages. Evening Telegram, St. John's, Nfld. https://collections.mun.ca/digital/collection/telegram19/id/15798/rec/4

Anonymous. 1957a Feb 14. M.V. Marvid Sinks, Crew Escape. Observer's Weekly, St. John's, Nfld. https://collections.mun.ca/digital/collection/observersweek/id/24755/rec/4

Anonymous. 1957b Feb 9. Coal Cargo Gone as Marvid Sinks. Evening Telegram, St. John's, Nfld. https://collections.mun.ca/digital/collection/telegram21/id/133312/rec/1

Anonymous. 1960 Oct 17. Ship Sinks Fast … All Hands Safe. Evening Telegram, St. John's, Nfld. https://collections.mun.ca/digital/collection/telegram21/id/148825/rec/1

Botwood Heritage Society. 2020. Botwood: History of a Seaport, 2nd ed. Botwood Heritage Society, Botwood, NL.

Burgess, N.M., R. Stanley, G. Marquez and M. Mandziuk. 2026. Preliminary Sonar and Diver Survey of the Champney's West Shipwreck (DcAh-04). *this issue.*

Dept. of Transport. 1950. MARVID, Port Registry: St. John's, NL, 52/1950. Library & Archives Canada, R184, RG12-B-15-A-i, vol. 3071. https://recherche-collection-search.bac-lac.gc.ca/eng/home/record?idnumber=5538634&app=FonAndCol&resource=folderlist&ecopy=e011446365_074

Dept. of Transport. 1956. FENMORE, Port Registry: St. John's, NL, 11/1956. Library & Archives Canada, R184, RG12-B-15-A-i, vol. 3076. https://recherche-collection-search.bac-lac.gc.ca/eng/Home/Record?app=fonandcol&IdNumber=5590557&q_type_1=q&q_1=Fenmore%20port%20registry&ecopy=e011446370_199

Dept. of Transport. 1974. Report on the Preliminary Inquiry into the Circumstances Surrounding the Grounding and Loss of the Norwegian Motor Fishing Vessel "Stalbas" at Isle aux Morts, Nfld. on July 3, 1974. Library & Archives Canada, RG12 1984-85/202 GAD, Box 14, File 9704-903, Part 1.

Lloyd's Register of Shipping. 1918. Steamers, vol. 2: *Ascania*. Lloyd's Register of Shipping, London, UK. https://archive.org/details/HECROS1918ST/page/n83/mode/2up

Ozorak, P. 2001. Abandoned Military Installations of Canada. vol. 3: Atlantic. P. Ozorak, Ottawa, ON.

Skipshistorie.net (2025). 1945 DS GOS I (TBG101194503). https://skipshistorie.net/Tonsberg/TBG101SvendFoynBruun/Tekster/TBG101194503000000%20GOS%20I.htm

Warwick, S. and M. Roussel. 2018. Shipwrecks of the Cunard Line. History Press, Cheltenham, UK.

Preliminary Survey of the Shoal Point Shipwreck (DdBr-02)

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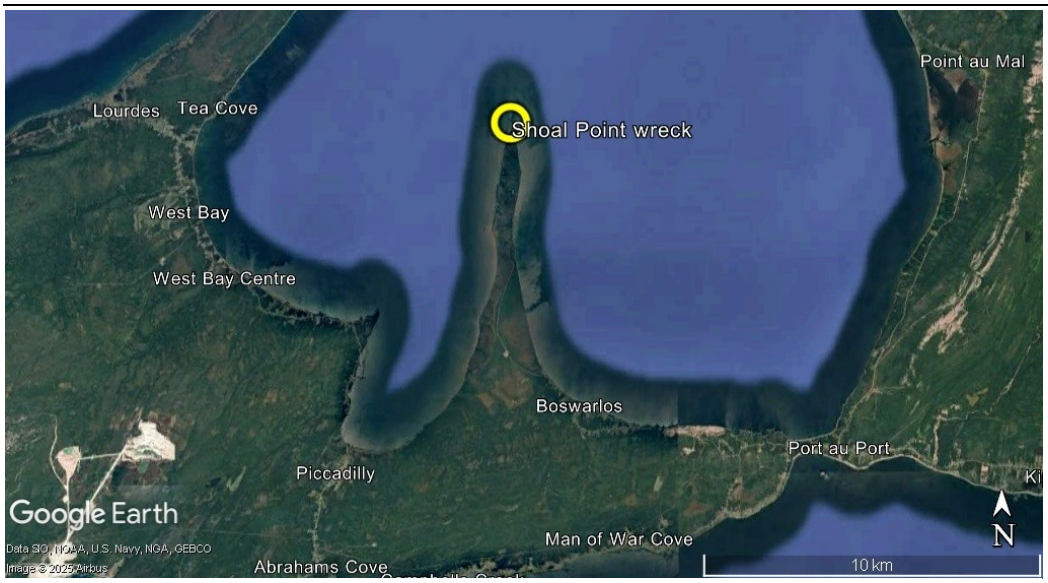

Figure 1: Location map for the Shoal Point shipwreck (DdBr-02) in the middle of Port au Port Bay.

In April 2025, a local informant shared photos of a shipwreck he found on the shoreline of Shoal Point in Port au Port Bay with the Shipwreck Preservation Society of Newfoundland & Labrador (SPSNL). The photos showed the lower part of the hull of a wooden shipwreck. Several types of fasteners were visible, including treenails, iron spikes and bolts. The informant suggested the wooden hull may have been moved to its present location to help prevent coastal erosion adjacent to two shoreline cabins. SPSNL forwarded the photos to the Provincial Archaeology Office (PAO).

On 26 April 2025, nautical archaeologists from SPSNL and the Conservation of Archaeological Materials Lab in Saskatoon, SK conducted a preliminary tape-measure and photo survey of the wooden hull fragment. It lay in the intertidal zone immediately below a two-metre shoreline embankment at the northern tip of Shoal Point (Figure 1). The embankment was reinforced with riprap (half-metre armour stone), which partially buried the inshore (southern) end of the shipwreck. The length of the visible hull fragment was 12 m and the flattened half-width from the keel to the turn of the bilge was 3.5 m (Figure 2). The maximum half-width of the flattened wreck was 4.7 m. The wreck had paired timber frames (floors and futtocks), external hull planking and internal ceiling planking (Figure 3). The floor and futtock timbers measured 10.35 cm height and 10.4

Figure 2: Wooden hull fragment of Shoal Point shipwreck (DdBr-02). photo: Neil Burgess SPSNL

Figure 3: Shoal Point shipwreck showing the external hull planking underneath, paired framing timbers in the middle, and a few internal ceiling planks on top (most are missing). Note the spaces between the paired frames. The bottom of the photo is close to the keel and the turn of the bilge is at the top. photo: Neil Burgess SPSNL

cm width in cross-section. The spacing between paired frames was 10.9 cm. The hull and ceiling planks were 7.6 cm thick. The wreck was intact from the keel to the turn of the bilge on one side only. The stem, stern, deck, mast(s) and rigging of the shipwreck were missing, as were the hull and knees above the turn of the bilge. The fasteners used in the ship included treenails (2.5 cm diameter), square-sectioned iron spikes, wrought-iron through bolts (2.5 cm diameter) with clinch rings, and fewer steel bolts (1.9 cm diameter) (Figure 4) (fastener terminology following McCarthy 2023).

Limitations

Our time on this site was limited, so only a preliminary survey was possible. The shipwreck was partially submerged during our visit, which hampered our ability to closely examine and measure some of the lower hull structure. A visit during low spring tide would provide dry access to the entire wreck. The partial burial of the southern end of the wreck prevented us from getting a true measure of its length. We had no time to learn more about local knowledge of the circumstances or identity of this shipwreck.

Interpretation and Discussion

The hull fragment appeared to be part of a small sailing ship, perhaps a schooner, based on the size of the timbers. The ship would have been considerably longer than 12 m, since the stem and stern were missing and the wreck was partially buried by riprap.

The mix of wooden and metal fasteners observed is typical for sailing vessels below the waterline (McCarthy 2023). The use of treenails can reduce construction costs, resist corrosion, and improve water-tightness, while iron and steel fasteners add greater strength.

The local informant suggested the shipwreck might be the remains of either the *Susan Joan* or *Alice & Adelaide*. The wooden ferry *Susan Joan* was wrecked on Shoal Point on 17 Dec 1955 (Dept. of Transport 1951). However, it was only 13.1 m long and 3.0 m

Figure 4: Fasteners in the Shoal Point shipwreck. A wooden treenail on the left, treenails and square-sectioned iron spikes in the centre, and wrought-iron through bolts with hammered heads securing clinch rings on the right. photos: Patrick Ballett

wide, so too small to be the shipwreck we surveyed. The two-masted motor schooner *Alice & Adelaide* was wrecked on Shoal Point on 30 Nov 1958 (Dept. of Transport 1944). It was 22.6 m long and 7.2 m wide, which makes it a possible candidate for the current shipwreck. The wooden schooner *Alice & Adelaide* was built by Thomas Palrey of Placentia, Newfoundland in 1935 and a diesel engine was added later in the 1940s. The *Alice & Adelaide* ran aground on Shoal Point in a blizzard while attempting to rescue another ship: the *Phillip E. Lake* (Anon. 1958). Both ships were owned by Lake & Lake Ltd. of Fortune, NL. These are the only two shipwrecks our research identified as occurring on Shoal Point. Although unlikely, there are roughly 10 other wooden shipwrecks scattered around Port au Port Bay and Long Point, which might possibly have been moved to Shoal Point to reduce shoreline erosion.

An effort to tap into local knowledge of this shipwreck would be a worthwhile next step towards confirming its identity.

Potential Risks to the Site

The shipwreck is easily accessible to the public and adjacent to two cabins. Looting of timbers and fasteners for souvenirs is a real possibility. However, no other artifacts were observed on the site, so there is little economic incentive for looting. The intertidal position of the wreck makes it susceptible to wave action, which appeared to be working timbers loose from the hull. However, greater risks to the integrity of the wreck come from winter sea ice (which is not unusual in Port au Port Bay) and human efforts to control shoreline erosion. Any future dumping of large armour stone on top of the shipwreck may break and disarticulate the hull timbers.

Acknowledgements

We greatly appreciate the efforts of Patrick Ballett to photograph the shipwreck and bring it to the attention of SPSNL. This archaeological survey was conducted under permit 25.19 issued by the PAO.

References

Anonymous. 1958 Dec 2. Aground, Total Loss, Vessel is Abandoned. Evening Telegram, St. John's, Nfld. https://collections.mun.ca/digital/collection/telegram21/id/139449/rec/2

Dept. of Transport. 1944. *Alice and Adelaide*: Port Registry, St. John's, Nfld. Ship Registration Division, Ottawa, ON. https://recherche-collection-search.bac-lac.gc.ca/eng/home/record?idnumber=5590042&app=FonAndCol&resource=folderlist&ecopy=e011446366_019

Dept. of Transport. 1951. *Susan Joan*: Port Registry, St. John's, Nfld. Ship Registration Division, Ottawa, ON. https://recherche-collection-search.bac-lac.gc.ca/eng/home/record?idnumber=5538491&app=FonAndCol&resource=folderlist&ecopy=e011446363_305

McCarthy, M. 2023. Ships' Fastenings: From Sewn Boat to Steamship, 2nd ed. Texas A&M University Press, College Station, TX, USA.

Preliminary Sonar and Diver Survey of the Champney's West Shipwreck (DcAh-04)

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Rick Stanley, Ocean Quest Adventures, St. John's, NL
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Matthew Mandziuk, Dan's Dive Shop, St. Catharines, ON
email: neil@shipwrecksnl.ca

Figure 1: Map of the location of the Champney's West shipwreck (DcAh-04).

In early September 2025, Ocean Quest Adventures (OQ) was leading a shipwreck diving expedition across Newfoundland. On 7 September, a local informant in Trinity, NL informed Rick Stanley of OQ that there was a schooner shipwreck in Champney's Cove just east of the community of Champney's West (Figure 1).

The following day, divers with the OQ expedition, as well as divers from the Shipwreck Preservation Society of Newfoundland & Labrador (SPSNL), conducted a search for the shipwreck with sonar and divers. The SPSNL boat with sidescan sonar (Humminbird Solix 10 fishfinder, set at 800 kHz) located a potential sonar target at a depth of 30 m (Figure 2). Several dives were made but rough conditions and limited visibility in the water hampered search efforts. Eventually, two divers with the OQ expedition located the shipwreck and marked it with inflatable surface marker buoys (SMBs). GPS coordinates were taken at the SMB locations.

The divers investigated the shipwreck and found its hull was buried in the soft mud of the seafloor. The wooden deck was flush with the mud bottom and at least one mast extended up from the bottom to 14 m depth. The divers collected some video of the mast, which was covered in seaweed and anemones (Figure 3).

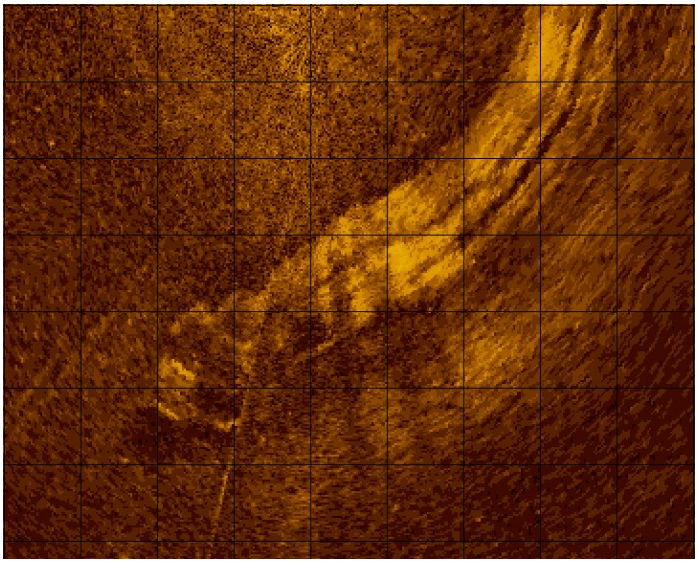
Limitations

Sea conditions were rough during this survey. This impacted the water visibility in Champney's Cove by stirring up the soft mud sediment. The wave action also impacted our ability to collect clear sonar images of the wreck. Our time on this site was limited, so only a preliminary search was possible. The limited visibility reduced the ability of divers to locate and examine the shipwreck. The depth of the wreck (30 m) also limited the bottom time of divers.

Interpretation and Discussion

The local informant suggested the shipwreck might be the remains of the *Hazel Pearl*. The two-masted schooner *Hazel Pearl* was built as the *Coronet* in

Figure 2: Sidescan sonar image of the Champney's West shipwreck (DcAh-04) in Champney's Cove, NL. Rough seas impaired the quality of the sonar image. photo: Neil Burgess SPSNL



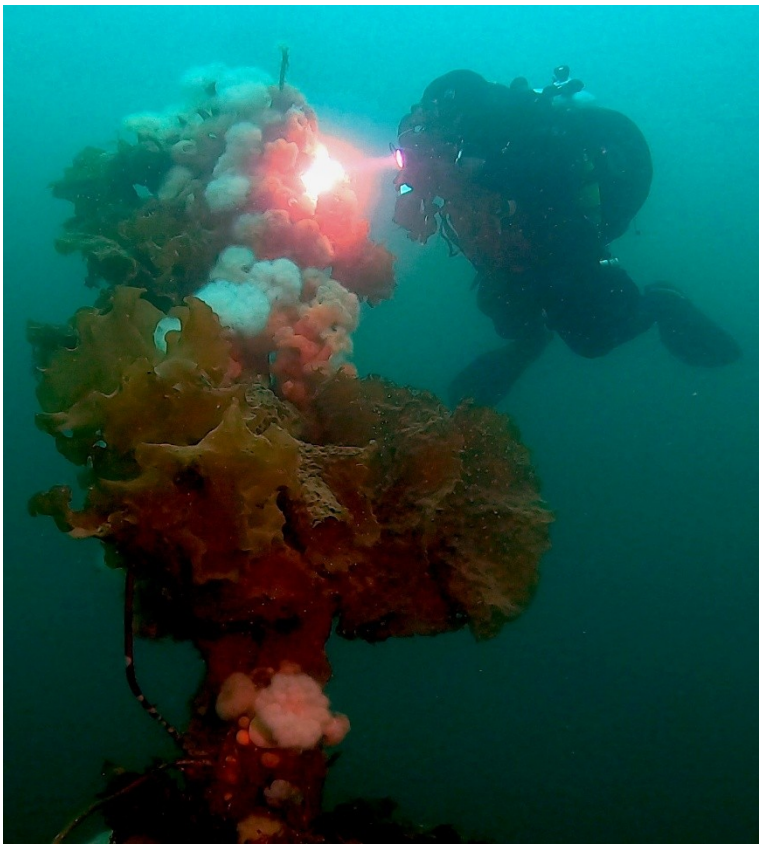


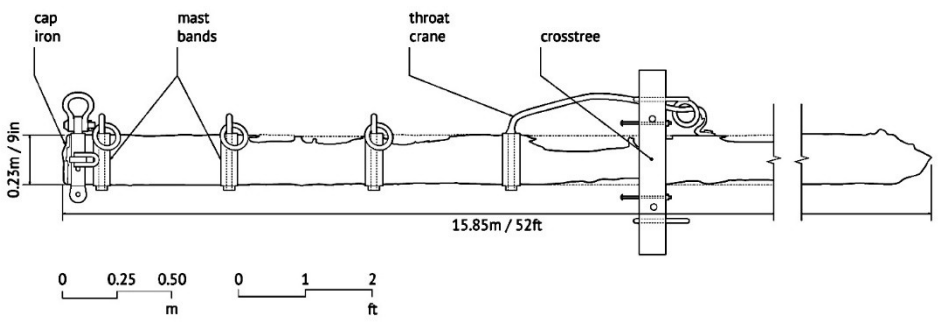
Figure 3: A diver observing the seaweed and anemones growing on the top of a mast of the Champney's West shipwreck in Champney's Cove, NL. frame from video: Grace Marquez

Galmpton, England in 1887 (Lloyd's Register 1889). The ship's official number was 94064, it was 90 gross registered tons with a length of 23.4 m, width of 6.2 m and was fitted with an auxiliary motor (Mercantile Navy List 1940). The ship was owned by S.W. Mifflin Ltd. of Catalina (Mifflin 1945). The schooner sank on 27 Feb 1945 in Champney's Cove, Trinity Bay (Anon. 1945, Mifflin 1945). The *Hazel Pearl* was sailing from Catalina to St. John's but sought shelter from an impending storm in Champney's Cove (Anon. 1945). Oral histories collected by the Heritage Foundation of Newfoundland & Labrador (HFNL) in Champney's West provide more detail about the sinking (Elliott 2016). As the ship sailed into Champney's Cove under a full rig of sails, it struck landfast ice, which put a hole in the bow just below the waterline (Anon. 1945; Elliott 2016). The schooner had barrels of cod liver oil and a new diesel engine stored on deck. Local fishermen managed to salvage 113 barrels of oil and the diesel engine from the sinking ship (Mifflin 1945; Elliott 2016). The tops of the two masts of the schooner were painted white and were visible from the surface of the water for years afterwards.

Decades after the sinking, local fisherman Wayne Freeman hauled up a masthead from the shipwreck in his seine net (Figure 4) (Elliott 2016). The masthead was moved to the lawn of the Ella Freeman Heritage House in Champney's West for display.

We are not yet able to confirm the identity of the shipwreck as the *Hazel Pearl*. There are at least two other wooden ships that were lost in Champney's Cove in the 20th century (Elliott 2016). The schooner *May Flower* (or *Mayflower*) was lost ca. 1928 and the schooner *Saladin* was wrecked in late December 1944 (Northern Shipwreck Database 2002). We plan to collect measurements of the Champney's West shipwreck (DcAh-04) that may help with a tentative identification.

Figure 4: Drawing of the masthead recovered from the Champney's West shipwreck in the seine net of fisherman Wayne Freeman (from Elliott 2016). drawing: Michael Philpott



Drawing of the masthead, by Michael Philpott, 2016.

Potential Risks to the Site

The shipwreck is not easily accessible to the public. However, it is within the range of recreational scuba divers. A more complete survey of the wreck will be necessary before the potential for looting of artifacts can be assessed. The shipwreck does not appear to be at any risk from wave or ice action but may be further buried by sedimentation.

Acknowledgements

We greatly appreciate the efforts of Josh Cole to share his

knowledge of the shipwreck location with OQ and SPSNL. We thank the staff of the HFNL for their collection and publication of oral histories on shipwrecks in Champney's West. This archaeological survey was conducted under permit 25.19 issued by the PAO.

References

Anonymous. 1945 Mar 2. Loss of the "Hazel Pearl". Fishermen's Advocate, Port Union, Nfld. https://collections.mun.ca/digital/collection/fishadvocate/id/8932/rec/7

Elliott, H. 2016. The Story of the Spar: An Oral History of the Hazel Pearl. Heritage Foundation of Newfoundland & Labrador, St. John's, NL. https://collections.mun.ca/digital/collection/ich_en/id/990/rec/1

Mercantile Navy List. 1940. Part II. Alphabetical List of British Registered Motor Vessels: *Hazel Pearl*. p. 594. Registrar General of Shipping and Seamen, London, UK. https://collections.mun.ca/digital/collection/mha_mercant/id/40217/rec/1

Mifflin, S.W. Ltd. 1945. Business diary, vol. 5.08. S.W. Mifflin Ltd. (Catalina) fonds, Maritime History Archives, Memorial University of Newfoundland, St. John's, NL.

Northern Shipwreck Database. 2002. Northern Shipwreck Database CD. Northern Maritime Research, Victoria, BC.

Saint-Pierre and Miquelon archeological project 2025: Excavations at l'Anse-à-Henry site and discovery of the Îlot quarry site

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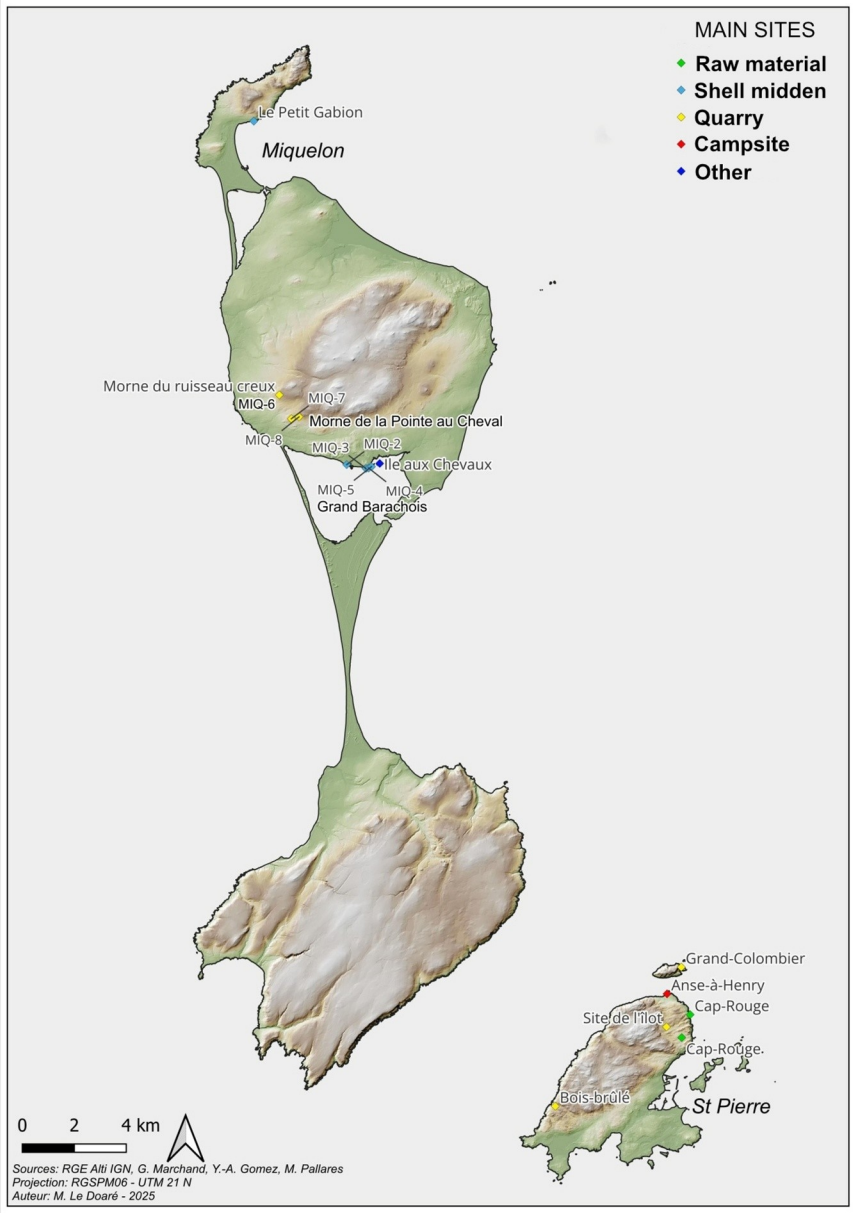


Figure 1: Pre-contact sites from the Saint-Pierre and Miquelon archipelago.

The SPM project

Since 2019, new archeological projects are underway in the Saint-Pierre and Miquelon (SPM) archipelago, led by Grégor Marchand and Reginald Auger from 2019 to 2022, and by Yan Axel Gómez Coutouly since 2024. This project is mainly supported by the SPM Mission aux Affaires Culturelles (MAC), as well as by the French Polar Institute (IPEV). The Anse à Henry site was once the only prehistoric site known in the Saint-Pierre and Miquelon archipelago. But thanks to the research carried out in the last few years, it is now inserted in a broader archeological context within the different islands: prehistoric campsites, shell midden, and quarry activity areas have been found in both main islands (Figure 1). Further research around the archipelago is providing a better understanding of how this network of archaeological sites was connected and how the territory was exploited. We are also gathering information on how it was culturally connected to the Newfoundland territory, by determining which groups where in the archipelago and when, but also by looking in Newfoundland for raw materials found in the SPM archipelago and vice versa. In the summer of 2025, our work mainly focused on two sites from the Saint-Pierre island: the Anse à Henry and the Îlot quarry site.

The Anse à Henry 2025 excavations: a Groswater component

The Anse-à-Henry site is located at the

northern end of the island of Saint-Pierre, right in front of the small rocky island of Grand Colombier about 500 m away, a seabird sanctuary (Figure 1). The site was first excavated by Sylvie LeBlanc and Jean-Louis Rabottin in the late 90s and early 2000s (LeBlanc et al. 2001; LeBlanc and Rabottin 2000, 2003, 2005). A couple of decades later, a new project led by Grégor Marchand and Reginald Auger continued excavating the site in 2019, 2020 and 2022, mainly working in the northern tip of the site, an area that had not been explored by Leblanc and Rabottin (Auger et al. 2019, 2020, 2021; Auger and Marchand 2022; Marchand et al. 2024). Following the passing away of our colleague Grégor Marchand, a new team led by Yan Axel Gómez Coutouly took over the project and resumed excavations at the site in 2025. The Anse à Henry site is a huge multi-component site over 3 hectares (Figure 2), with various occupations from pre-Inuit and Amerindians groups (Maritime Archaic, Dorset, Groswater, Beaches phase and European presence).

Our 2025 field campaign focused on the lower part of the Anse à Henry site, where a four-meter area was excavated adjacent to the 2022 excavation (Figure 3). This area is bound to disappear the near future due to the marine erosion processes such as storms and waves. The general stratigraphy is the same as for previous excavation campaigns: the archeological layers are found beneath a dense pebble layer within a 15 cm thick decomposed peat layer (Figure 4). Previous excavations at the site suggested the presence of a possible habitation based on a wall effect of stone and lithics (Auger et al. 2022). The main goal of this year's fieldwork was to pursue the excavation in this area and identify potential structures confirming the presence or not of a habitation. We also wanted to verify the extent of the lithic material density area. No clear boundaries were found as of yet, and the density of

Figure 2: View of the Anse à Henry site and the location of the 2025 excavation.

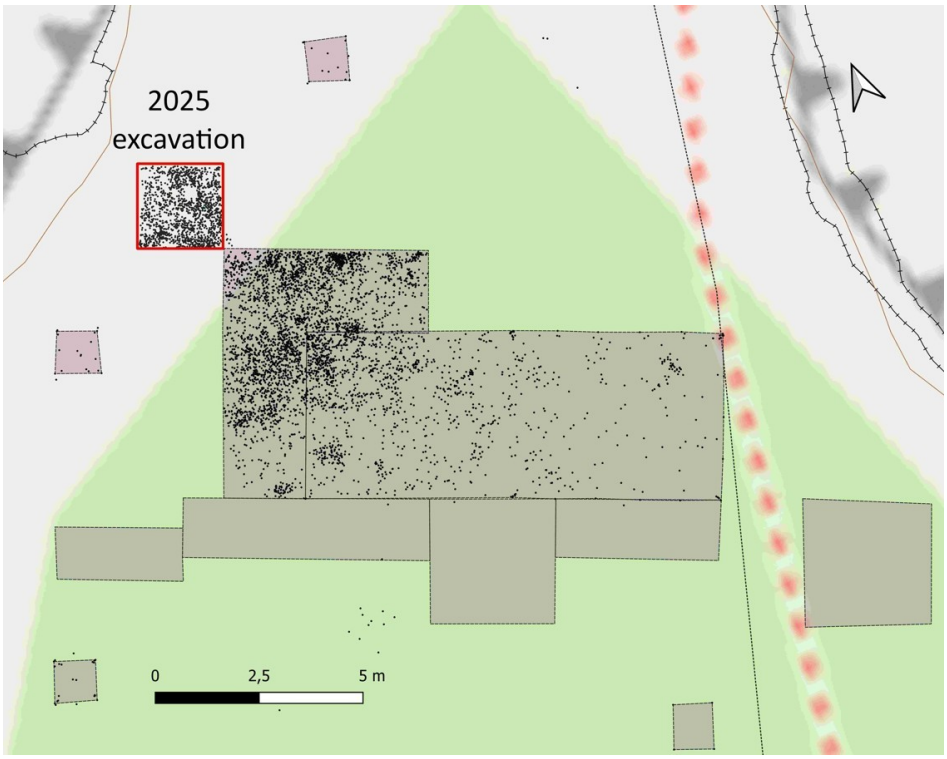


Figure 3: Map of the Anse à Henry excavation showing the spatial distribution of lithic artifacts.

lithic materials remains very high in these 4-meters squares. It is possible that the excavated squares are inside a larger habitation and that we have yet to find the opposite wall effect. During the excavation we found areas with a high density of charcoal, although no clear hearths were found. Our intent is to continue excavations in the same area in the near future to determine if there is a habitation (tent, house, etc.).

The meticulous manual excavation of the archaeological layer allowed 3-d mapping of every artifact whose dimensions exceeded 1 cm. As a result, nearly 1500 artifacts were mapped while systematic screening of the excavated sediments permitted the gathering of over 7500 smaller artifacts and lithic waste. Such a quantity of archeological remains reflects the intense activity that took place at the site and more specifically in this area, delimited by the wall effect discovered during previous excavations. Artifacts in this area were mainly flakes from various knapping activities, but also a relatively important number of tools for such as restricted area: 13 projectile points (Figure 5), 18 bifaces (Figure 6), over 10 endscrapers, close to 30 microblades (Figure 7), 6 cores, various tools (retouched flakes, notches, etc.) and 3 hammerstones. The analysis of the artifacts is still ongoing but our first observations show that the main component of the occupation excavated this year can be linked with Groswater pre-Inuit culture (box-based endblade, asymmetric projectile points, very small sized end-scrapers) (Figure 5), with only a few tools proving to belonging to the

Figure 4: Profile of the Anse à Henry excavation.

Figure 5: Typical Groswater box-based small projectile point, Anse à Henry.

Figure 6: Knife, Anse à Henry.

Figure 7: Microblade, Anse à Henry.

Figure 8. The site of l'Îlot is located in the hills of Saint-Pierre.
During the summer, it is possible to walk from the shore to the islet when the water level of the pond is lower.

following Dorset culture. Most of the raw materials used here seem to come from local sources such as the Bois Brûlé quarry located a few kilometers away or the geological formation of the Grand Colombier island, located a few hundred meters in front of the site (Figure 1). One of the recurring exceptions are various very small end-scrapers in a chert-looking raw material not yet known from the Saint-Pierre and Miquelon archipelago. It is quite possible that these end-scrapers are made on Newfoundland chert and future raw material analysis will have to confirm this hypothesis.

The discovery of a new quarry site

The second phase of our 2025 fieldwork focused on a new site located approximately 1.5 km south from the Anse à Henry site (Figure 1). It lies within a peatland area composed of a network of ponds in the hills of Saint-Pierre called les Marais de l'Anse à Henry ("Anse à Henry swamps"). One of those ponds has a small rocky islet, with an area of approximately fifteen square meters, covered with peat. The site is therefore called the Îlot site ("the islet site") (Figure 8). The site was first discovered in 2017 by Catherine Losier's team during prospections. Only a few flakes were initially found at the base of the vegetation on the small islet. During subsequent visits, other artifacts were found, especially in September 2024 when a quick survey around the pond led to the discovery of additional flakes and a flake core. In the summer of 2025, a 1 m × 0.5 m test pit was opened on the islet near the area where lithic pieces had been identified during surveys. Beneath a peat layer of about 40 cm, numerous flakes were found lying directly on the rock surface. This was followed by two weeks of excavation during which almost the entire peat layer of the islet was removed, except for a preserved section left at the eastern end of the islet in an area where no flakes had been found.

The site of l'Îlot (Ia) consists of a single archaeological layer located at the base of the peat, with

only lithic artifacts. No other archaeological remains were identified within the peat in the upper section. During the excavation, the islet was treated as a single unit, without a grid that subdivides it. Under the peat, a high concentration of flakes was observed, particularly in the western part of the islet (Figure 9). All lithic pieces larger than 1 cm were recorded with a total station, representing more than 2,500 artifacts. A few rhyolite veins showing extraction marks were identified on the rock surface of the islet.

Four test pits ranging from 1 m² to 4 m² (Ib, Ic, Id, and Ie) were conducted around the pond (Figure 10), in areas where rhyolite veins appeared to have been exploited or where flakes had been found on the surface. All of these test pits also yielded some flakes, suggesting that large portions of the area around the pond have rhyolite veins below the peat that have been used and extracted by prehistoric groups.

During the excavation, two peat monoliths were collected. Organic material from the peat layer at the base of the rock (where the flakes were found) will be radiocarbon dated. We do not yet know whether the peat began forming contemporaneously with or after the quarrying of the raw material, but this will provide a *terminus ante quem*. Plant remains and insect assemblages present in the peat will also be analyzed to understand landscape evolution and to identify the signature of human activities. During the excavation campaign, insect traps were set up to form a reference entomological collection for the archipelago and to identify the insects present in the peat (Figure 11). Micromorphological analyses will be carried out to better understand peat formation, and in summer 2026, a coring of the pond is planned to

Figure 9: Exposure of a high concentration of flakes during the excavation of the islet

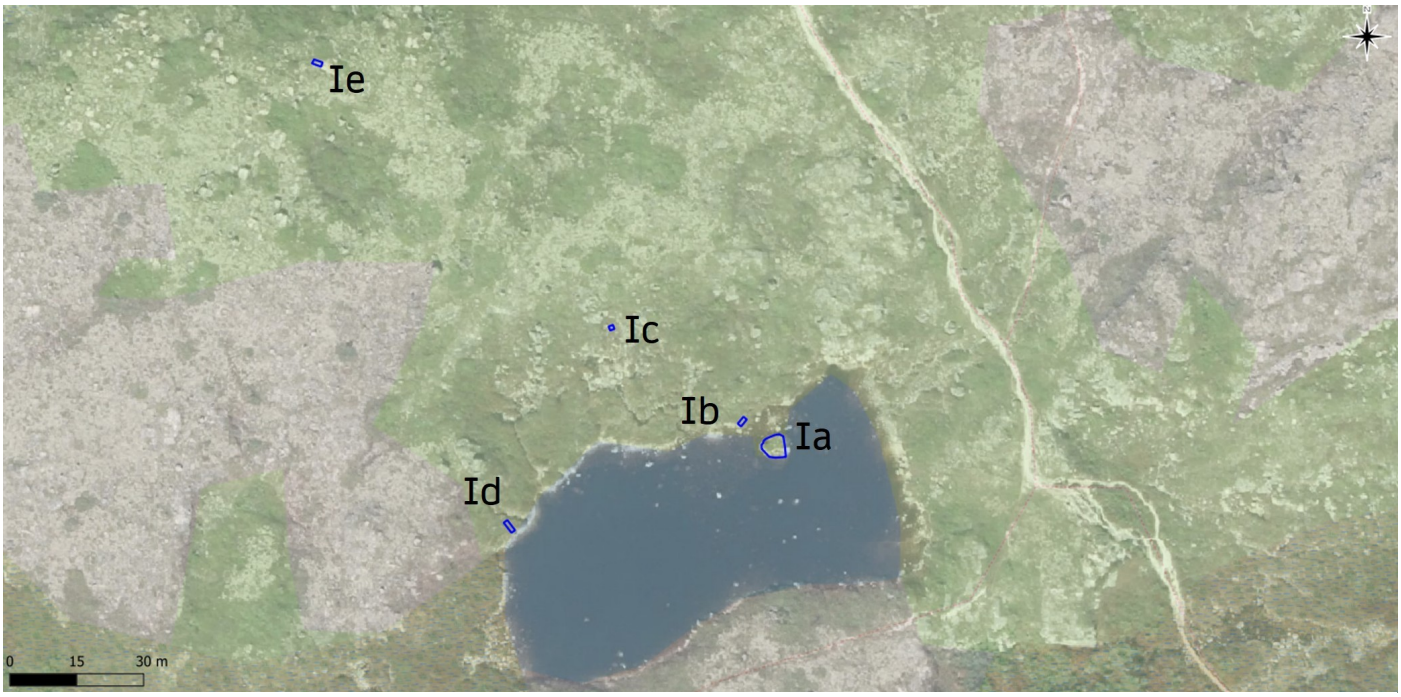


Figure 10: Test pit locations around the Îlot pond.

study its formation. We hope to gain a better understanding of the landscape: was there already a pond and peat at the time this area was exploited?

The rhyolite from the Îlot quarry site

The raw material extracted from the Îlot quarry is a rhyolite with an aphanitic to glassy texture, occurring as an anastomosing network of veins with irregular outlines. These veins may extend over several meters in length but rarely exceed 10 centimetres in thickness, which constitutes a major constraint for stone knappers. This rhyolite is predominantly light grey to dark grey in colour, locally light brown, and more rarely reddish. When affected by weathering and displaying a whitish patina, this vein of rhyolite may have the appearance of patinated chert.

The host rock of these veins is a pink, fluidal ignimbritic rhyolite belonging to the Cap Rouge geological formation, dated to the Ediacaran (581 ± 12 Ma). The substratum is fractured along subvertical and horizontal joint planes of tectonic or decompression origin. This fracturing has strongly controlled the morphology of the outcrops. Periglacial processes subsequently contributed to the partial dismantling

Figure 11: Interceptor trap set up to catch flying insects.

of the rock, leading to the formation of chaotic accumulations of angular blocks. Joint networks also affect the rhyolite veins, pre-segmenting them into numerous parallelepipedal volumes with an average size of approximately 5 cm per side. Depending on the orientation of the fractures affecting the host rock, the vein rhyolite occurs in outcrops and in erratic blocks either as narrow sections corresponding to the thickness of the veins, or as surface placings offering larger and more easily exploitable volumes of raw material.

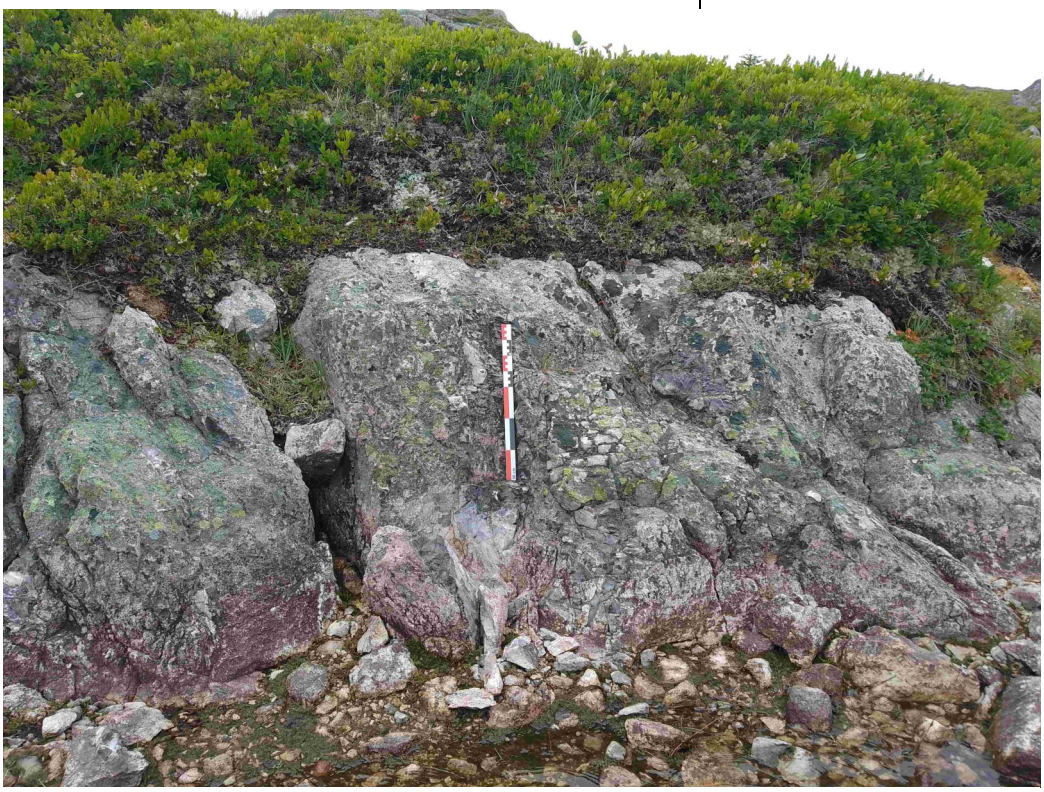


Figure 12: Small steep rock wall along the edge of the pond with rhyolite veins showing signs of extraction.

Stone knappers were able to adapt to these geological and structural constraints in order to extract and subsequently knap rhyolite nodules. Several types of traces provide evidence for the variability of the extraction techniques employed. Along a small steep rock wall bordering the pond (Figure 12), the presence of numerous thermal depressions observed on the surface of the rhyolite wall indicate the use of fire to facilitate extraction (Figure 13). This preliminary step made it possible to remove weathering crusts and to open joints, thereby facilitating the detachment of rhyolite fragments or access to exploitable volumes.

Repeated percussive actions were employed to extract raw material modules from the veins, using macro-tools that have yet to be identified. The location of percussion and/or crushing negatives suggests that stone knappers used pointed hammerstones or intermediate tools to work along the joints in order to gradually detach blocks. In order to limit the fracturing of raw material modules, percussive operations were also carried out on the host rock at the margins of the veins. In addition, flakes were occasionally detached directly from the outcrop, with knappers taking advantage of the angular ridges created during earlier extraction phases in an opportunistic management of natural potentials.

All the veins exposed in outcrops as well as in erratic blocks that we were able to observe at the Îlot quarry site showed signs of use and extraction, including veins as thin as one centimetre. Moreover, excavation of the islet rock has shown that the exploitation of vein rhyolite required extensive quarrying activities. Using existing joint planes, the top of the islet was dismantled piece by piece in order to reach the rhyolite veins. Fragments of the host rock weighing more than 100 kg were detached and moved several meters beyond the limits of the islet. These observations lead us to question whether the traces currently visible are the result from a final phase of quarrying.

Preliminary analysis of the Îlot site artifacts

The analysis of the lithic material is ongoing, and 791 pieces out of 2,688, or 29.4% of the assemblage, have been studied. Although the proportions are likely to change during the course of the study, we can provide an overview. Of the 791 lithic artifacts studied, it

Figure 13: Presence of thermal depressions on the surface of the rhyolite indicating the use of fire to facilitate extraction.

was possible to identify 76 cores or core fragments and 314 flakes, representing 9.6% and 39.7% of the analyzed collection, respectively. The rest are divided into two categories, the first comprising flake shatter and small flakes (excluding artifacts from screen bags) with a total of 393 pieces (49.7% of the analyzed corpus).

Although no finished tools were collected, the material from the Îlot tends to indicate that several distinct episodes of exploitation of the siliceous veins and nodules took place. Indeed, relatively significant differences in patina can be observed within the artifacts, as well as potential reuse identifiable on pieces bearing at least two distinct patinas. These activities characterize the beginning of the *chaîne opératoire*, as evidenced by the presence of large cortical flakes and numerous broken pieces, mostly distributed on the north and east shores of the pond. Many flakes show certain characteristic accidental breaks, and there are plunging flakes, hinged flakes, and some with transverse fractures. Under the peat layer of the islet, smaller flakes (<2 cm) have been identified, including some shaping flakes. These remains indicate that a knapping episode, potentially linked to a shaping stage, took place there. The cores from the Îlot do not currently show any particular preparation and it seems that they were quickly abandoned after the detachment of a few blanks approximately 2 cm long and 1 cm wide on average (Figure 14). There are generally expedient cores with multiple striking platforms and the technological attributes on both cores and flakes tend to indicate the use of hard hammers in most cases (stacked battering, prominent bulbs, bulb scars, butt fracturing, marked hackles, etc.). Once the technological analysis will be complete, the data will be combined within a GIS with the macroscopic observations made on the various veins, nodules, and outcrops in order to spatially discriminate potential episodes of exploitation.

Still many questions

So far, no structures (hearth, house, etc.) have been identified around the pond. The exploited raw material outcrops, the concentration of artifacts near them and the artifacts made up essentially of flakes and cores suggests that the pond area has been used

Figure 14: Flake cores from the Îlot quarry site.

as a quarry site by past populations in order to extract the rhyolite. However, we still do not know whether a campsite is present around the pond. Also, at this stage, we have no information about the groups who exploited this area or the timing of the use. So far, lithic and raw material analyses of the Anse à Henry and the Îlot site indicate that the raw material from the Îlot has not been found at the Anse à Henry site. And the latter is so far the only known campsite of the island, mainly used by Dorset and Groswater populations. Was the quarry exploited over a long period of time or only an episodic event? By one group or several groups? The Îlot quarry provides much smaller raw materials (mainly veins), rather than the larger outcrops seen in other quarries of the island such as Bois Brûlé or Grand Colombier. So, it is not impossible that this quarry site was less utilized by prehistoric groups, although it is puzzling to have (so far) no Îlot quarry raw materials in the nearby Anse à Henry site.

The general objective of our work is to understand the networks and operating chains in use during the prehistorical occupation of the archipelago, such as circulation and use of raw materials, presence of specific prehistoric groups, modalities of occupancy of the sites. Future excavations in the SPM archipelago (in all islands) and analysis of the collections will provide new evidence of how these sites interact with each other.

References

Auger R., Marchand G., Rousseau L. (2019) –Rapport final d'opération de fouille programmée. Le site de l'Anse-à-Henry, Saint-Pierre, Saint-Pierre et Miquelon, Rennes, DRAC/SRA de Bretagne.

Auger R., Marchand G., Le Doaré M. (2020) –Prospection inventaire de l'archipel Saint-Pierre et Miquelon 2019, Rennes, DRAC/SRA de Bretagne.

Auger R., Bitrian A., Marchand G., Roger C. (2021) –Rapport final d'opération de fouille programmée. Le site de l'Anse-à-Henry, Saint-Pierre, Saint-Pierre et Miquelon, Rennes, DRAC/SRA de Bretagne.

Auger R., Marchand G. (2022) –Rapport final d'opération de fouille programmée. L'Anse à Henry (Saint-Pierre et Miquelon). Archéologie d'un habitat littoral de la préhistoire à la période historique. Année 2022, Rennes, DRAC/SRA de Bretagne.

LeBlanc S., De Lizaraga R., Rabottin J.-L. (2001) –Archéologie, Anse à Henry, 5000 ans d'histoire. L'Arche - Musée Archives de Saint-Pierre et Miquelon, Saint-Pierre et Miquelon, L'Arche Musée - Archives de Saint Pierre et Miquelon.

LeBlanc S., Rabottin J.-L. (2000) –Cinq mille ans d'occupation à l'Anse à Henry. Rapport d'étape. Phase 1. Mission de reconnaissance, Saint-Pierre et Miquelon, Saint-Pierre et Miquelon, L'Arche Musée - Archives de Saint Pierre et Miquelon

LeBlanc S., Rabottin J.-L. (2003) –Un campement indien récent à l'Anse à Henry. Rapport d'activités. Mission archéologique 2002, Saint-Pierre et Miquelon, Saint-Pierre et Miquelon, L'Arche Musée - Archives de Saint Pierre et Miquelon

LeBlanc S., Rabottin J.-L. (2005) –Anse à Henry, aire de fouille 2003-2004. Rapport d'activités, mission d'archéologie 2004, Saint-Pierre et Miquelon, Saint-Pierre et Miquelon, L'Arche Musée - Archives de Saint Pierre et Miquelon

Marchand G., Auger R., Gomez Coutouly Y. A. (2024) –Rapport final d'opération de fouille programmée. L'Anse à Henry (Saint-Pierre et Miquelon). L'Anse-à-Henry (Saint-Pierre et Miquelon) Archéologie d'un habitat littoral de la préhistoire à la période historique. Année 2024, Paris, DRAC/SRA de Bretagne.

Approach Archaeological Services 2025 Field Season

Deirdre Elliott & Corey Hutchings
Approach Archaeological Services Inc.

2025 was the first full year of operations for Approach Archaeological Services, which counts Deirdre Elliott and Corey Hutchings as its founders, co-owners, and (currently) only employees. Our fieldwork in 2025 took us all over the province (Figure 1), to some spectacular places, and to many, many bogs.

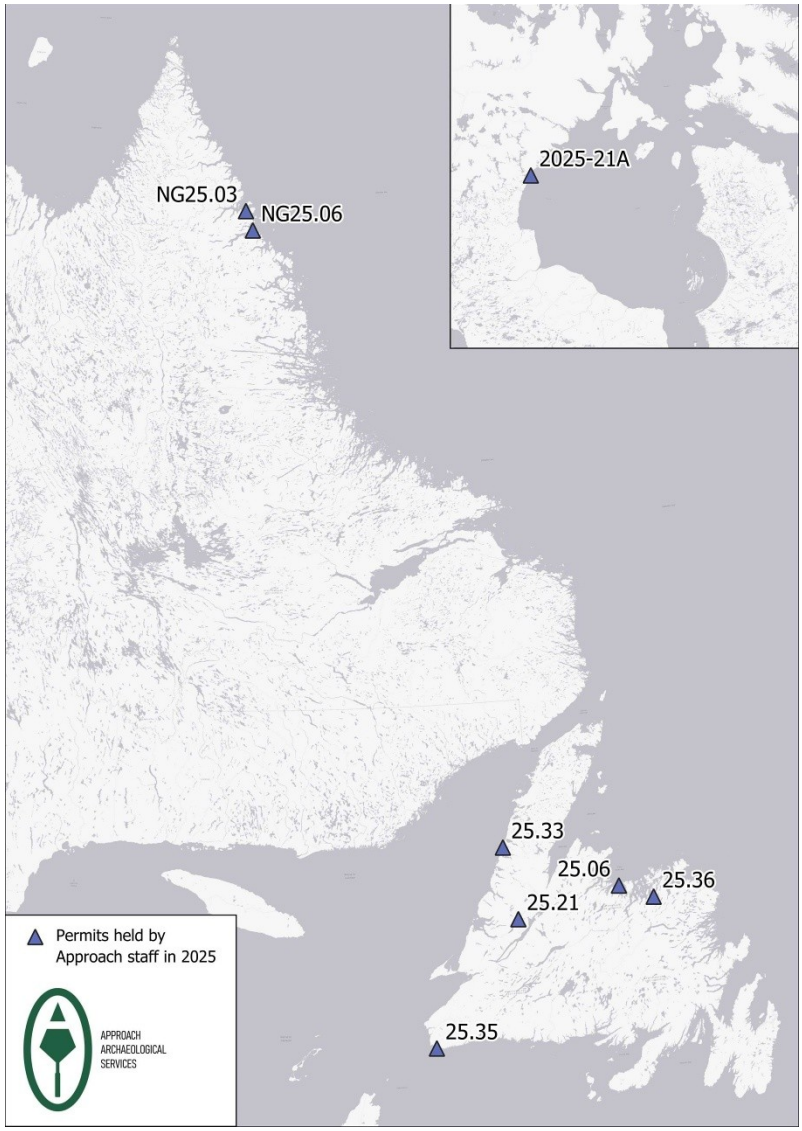
Fieldwork

PAO Permit 25.06 – Botwood Wind Farms

In May, we conducted an impact assessment for a proposed hydrogen-ammonia plant and solar farm near Botwood, and a preliminary field assessment for a broader green energy project consisting of wind farms and associated infrastructure (roads, transmission lines, quarries, etc.) in north-central Newfoundland. Over three weeks of field work, we recorded 11 Ethnographic sites (mostly late 20th century cabin ruins and land use, e.g. Figure 2) and one archaeological site (Figures 3 and 4). Butler Cove 1 (DiAu-10) was initially tentatively identified by Steve Mills and Strum (Mills 2025) using Lidar imagery, in which structures resembling root cellars and a cemetery were visible. These were confirmed in the field, and pedestrian and test pit survey identified a late 19th-early 20th century homestead, which had likely disturbed a pre-contact Indigenous site (minimally Pre-Inuit based on a chert microblade core, but possibly pre-contact First Nations as well). The Roman Catholic cemetery is maintained by the town of Leading Tickles, and we observed headstones with dates from 1920-1956.

Areas of high archaeological potential remain within the broader project area, which includes large former logging areas and borders on known Beothuk travel routes and campsites. Additional targeted field surveys may be required as the project progresses and as ground disturbance footprints are solidified.

Figure 1: Map of 2025 activity areas for Approach Archaeological Services.



PAO Permit 25.21 – Deer Lake RV Park

In July, we conducted an archaeological assessment ahead of a planned expansion to an RV park at the west end of Deer Lake Beach. The planned expansion was located adjacent to the known Beaches complex site (DhBi-06), which was excavated by David Reader in 1993-1994. Reader noted at that time that the site was experiencing severe erosion (Reader 1995) and repeat visits by the PAO over the years confirmed this assessment. Despite some shovel-depth test pits and much careful inspection of the eroding edges, we were unable to relocate the site, and with some comparison against several years of satellite imagery, we sadly confirmed that the site has been lost to erosion.

Figure 2: Collapsed late 20th century cabin (02E/03 Ethno 5) in former logging block, outside Botwood.

Figure 3: Deirdre taking a GPS point of lithics found in an ATV track at Butler Cove 1 (DiAu-10), view west.

No other historic resources were identified within the current project footprint, though we noted that much of the ground east of DhBi-06 had already been developed by the addition of fill and installation of an erosion barrier.

Nunatsiavut Permit NG25.03 – Torngat Mountains Base Camp and Research Station

In 2025, the Torngat Mountains Base Camp and Research Station (TMBCRS), at the south end of St. John's Harbour, Saglek Bay, required critical infrastructure upgrades, including a concrete pad for a water pump and a water line from a more reliable water source, a brook to the east of Base Camp. As the area contains a known Dorset habitation site (IcCq-04) and remains of an American Cold War Era camp (IcCq-03), these installations required an archaeological assessment and monitoring, which Deirdre Elliott undertook in August. In consultation with the Nunatsiavut Government Archaeologist Lena Onalik, and after test pitting the route, it was decided that the best option for the water line would be to use an existing gravel track constructed by the US military during the Cold War. IcCq-4 was relocated (Figure 5), with little apparent change since Whitridge's visit in 2007 (Whitridge 2008), and buffered with flagging. No additional cultural material was observed during construction of the concrete pad, and a UAV orthomosaic map was created showing the avoidance zones and the approved route for the eventual laying of the water line.

Figure 4: Corey next to a probable root cellar identified in Lidar imagery, Butler Cove 1 (DiAu-10), view south.

PAO Permit 25.33 – Great Coastal Trail

In early September, we conducted an archaeological assessment for a planned hiking trail from Parson's Pond to Daniel's Harbour on Newfoundland's west coast. Due to the deep sand substrate underlying the area, large sections of this coastline are experiencing catastrophic erosion, but we were able to relocate five archaeological sites in or near the planned trail route, and identified one new archaeological site in The Arches Provincial Park (EaBj-01, a small European site with a surface find of an expedient Pre-Inuit tool, Figure 6), and one new Ethnographic site south of Daniel's Harbour. None of these sites are likely to be directly impacted by the planned trail, but some are

Figure 5: Possible buried Dorset tent ring at IcCq-04, view north.
Small fragments of heavily weathered bone observed in gravel exposure.

experiencing erosion, and salvage and stabilization was recommended for one site (Parson's Pond 1, EaBk-01, Figure 7).

Nunatsiavut Permit NG25.06 – Seabourne's Wild Labrador Coast

In late September, Corey Hutchings boarded the Seabourne Venture in Pangnirtung to act as archaeologist for the Labrador stops on board Seabourne's Wild Labrador Coast cruise from Kangerlussuaq to St. John's. Although polar bears prevented some landings within the Torngat Mountains National Park, guests were treated to a spectacular show of wildlife in Nachvak Fiord (see CBC article linked below, Burden 2025). Landings were accomplished at Ramah Bay Mission, where guests observed from the beach while Corey interpreted the site's history. The site continues to experience minor erosion from wave action, though no artifacts were observed on the beach during this visit. At Hebron Mission, while the sod houses appeared undisturbed, the former HBC buildings continue their slow collapse, and the mission building displayed some recent water damage from a leaky roof. Some additional stone features (caches) were recorded at a former fishing station at Smokey, on Munday Island in Groswater Bay (Figure 8).

PAO Permit 25.35 – Cape Ray – Grand Bay West

In October, we undertook UAV (drone) mapping at the Cape Ray Light site (CjBt-01) and conducted a pedestrian and test-pit survey between Cape Ray Cove (J.T. Cheeseman Provincial Park) and Grand Bay West. The Cape Ray Light site is one of the richest and most important Dorset sites on the island (Brake et al. 2023, Fogt 1998, Linnamae 1975), and it continues to experience severe erosion, especially from storm waves (Figures 9 and 10). Evidence of erosion was present throughout the pedestrian survey area, but generally appeared most severe along bedrock headlands, where overlying organic soils were

Figure 6: Expedient Pre-Inuit tool (sidescraper/graver) from Arches 1 (EaBj-01), tool ID courtesy of Tim Rast and John Erwin.

Figure 7: Eroding culture-bearing buried cobble layer (center) just beyond existing erosion barrier (background center) at Parson's Pond 1 (EaBk-01), view south.

Figure 8: Cruise passengers on the ground at Smokey, a former seasonal fishing community.

washed away in large swaths (such as at the Cape Ray Light site), and in sediment substrates, such as sandy marine terraces, at the lateral margins of beaches, where wave undercutting and subsequent cleaving prevailed.

Within the survey area, we revisited two sites previously exposed by storm waves: CjBt-18, a 19th century structure in Grand Bay West recorded in 2022, and CjBt-19, a 19th century shipwreck on the beach in J.T. Cheeseman Provincial Park. We also documented six additional archaeological sites be-

Figure 9: Drone photo showing erosion at Cape Ray Light (CjBt-01), view west.

Figure 10: Cluster of lithics from eroding margin of CjBt-01.

tween Cape Ray and Grand Bay West: one probable cemetery (CjBt-23) and one early 20th century cellar (CjBt-22) at opposite ends of Rocky Barachois Bight, two late 19th-early 20th century sites with dry-laid stone house foundations at opposite ends of Windsor Point (also known as Jerrett Point) (CjBt-24 and CjBt-25), and one Groswater site (CjBt-21, Figure 11) and one undetermined pre-contact Indigenous site (CjBt-20, Figure 12) near Granby Point.

PAO Permit 25.36 – Lewisporte – Boyd's Cove

In late October, we conducted an archaeological assessment for a new transmission line planned between Lewisporte and Boyd's Cove. The proposed route crosses multiple rivers and in some places approaches within 100m of the coast, but the route was found to generally cut through wet or very steep terrain, and we recorded only a single Ethnographic site, a late 20th century cabin ruin outside of Baytona.

Nunavut Permit 2025-21A – Arviat

Approach also conducts fieldwork in Nunavut, and 2025 saw Corey Hutchings lead archaeological mitigation excavations and assessment surveys in Arviat, recording over 100 features across 11 sites, including

Figure 11: Chert sideblade found in a peat blowout at the Groswater site of Granby Point 2 (CjBt-21).

kayak stands, tent rings, qarmat, hunting blinds, a wolf trap, stone markers, and caches (Figure 13).

Acknowledgements

We have many people to thank for the success of our 2025 field season. Thanks first and always to the PAO and NG Archaeology for providing site data, advice, and support throughout the season. Special thanks also to Glen Patey and Geoff Bailey of ParksNL, our bear guards Abia Lane Zarpa, Eli Merkuratsuk, and Lucas Merkuratsuk (Nain) and Paul Iblauk (Arviat), Final thanks to Bill Hutchings, Allison Hutchings, and Elaine Anton, for cat care.

Works Cited

Brake, Jamie, John Erwin, Stephen Hull & Delphina Mercer
2023 PAO Fieldwork: 22.51 Post-Tropical Storm Fiona and Historic Resources on the Southwest coast. PAO Annual Review for the 2022 Field Season.

Burden, Regan
2025 "Torngat Mountains visitor gets front row seat as black bear fights polar bear". CBC News, September 28, 2025, https://www.cbc.ca/news/canada/newfoundland-labrador/torngat-mountains-black-bear-fights-polar-bear-1.7644788.

Figure 12: Corey placing what would be a positive test pit at Granby Point 1 (CjBt-20 – lithic flakes only, no diagnostic tools). Note erosion and scoured bare bedrock surrounding the small site.

Figure 13: Drone photo showing stone caches and modern cabins outside Arviat, Nunavut.

Works Cited

Fogt, Lisa
1998 The Excavation and Analysis of a Dorset Palaeoeskimo Dwelling at Cape Ray, Newfoundland. Unpublished Master's Thesis, Memorial University.
Linnamae, Urve
1975 The Dorset Culture: A Comparative Study in Newfoundland and the Arctic. Technical Papers of the Newfoundland Museum, No.1.
Mills, Steve
2025 A Predictive Model for Archaeological Resources in the Botwood-Leading Tickles Region of Newfoundland. Unpublished report on file, Strum Consulting.
Reader, David
1995 Humber Valley Archaeological Project: Interim Report of 1994 Investigations. 94.09. Unpublished report on file, Provincial Archaeology Office, St. John's.
Whitridge, Peter
2008 Archaeological Reconnaissance at St. John's Harbour, June-July 2007. Unpublished report on file, Provincial Archaeology Office, St. John's.

Archaeological Survey of Belle Isle, Newfoundland

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"Belle Isle is a sparsely populated island slightly more than 24 km (15 mi) off the coast of Labrador and slightly less than 32 km (20 mi) north of Newfoundland." --Wikipedia 2025 [Correction: Belle Isle is an *uninhabited* island....]

On 25 July the authors, Michael Cox of South Carolina, and Boyce Roberts of Quirpon, Newfoundland, conducted a one-day survey of Belle Island, which lies at the north entrance to the Strait of Belle Isle 32 km northeast of the northern tip of Newfoundland and 24 km from Labrador. The island and strait was named by Jacques Cartier in 1534. The purpose of the survey was to assess the island's potential for archaeological research, as no work had been done there previously. Our circumnavigation of the island by small boat from Quirpon had to be done in one day, because we were not equipped to remain overnight. A lighthouse was established on the SW end of the island in 1858. The NE light was built in 1901 and operated from 1905-1976, when it was electrified. Belle Isle has no safe anchorage or facilities for small boats, and following the 2001 departure of David Taylor, its last lighthouse keeper, Belle Isle lost its last permanent resident.

Belle Isle is a rugged, rock-bound island almost completely inaccessible to humans because of the absence of suitable harbors. Lighthouse keepers at the southwestern and northeastern ends of the island were the only residents, other than seasonal cod fishermen who lived aboard their schooners and rarely set foot ashore. The island, 17 kilometers long and six kilometers wide, has an oval shape and presents as a sheer massif whose relatively flat top reaches an elevation of 213m and is covered with spongy tundra vegetation, small lakes, and streams that drop to the sea through near-vertical gorges and waterfalls. Ninety-nine percent of the coast is ringed by 50 to 100m high cliffs. Streams reach the sea through boulder beaches too narrow for habitation. Only two locations—Black Joke and Green Cove— have uplifted marine terraces or flat land suitable for habitation. Fishermen lived aboard schooners anchored in Lark Harbor or a few locations where they could be roped to rocky clefts that had to be abandoned in stormy weather.

The island has never supported large land mammals but is surrounded by abundant sea-life. In fall, and spring, harp seals pass the island for weeks on end, and several species of whales, other seals, and porpoises are present; polar bears arrive when Arctic pack ice brings harp seal migrations. Many species of birds and fish are present, but only cod was economically important. Black Joke at the northeast tip of Belle Isle and Lighthouse Cove at its southwest end have concrete piers and had cranes for cargo but could be used only in calm weather. Today, the electrified lights and fog horns at the Northeast and Southwest Lighthouses are serviced by helicopter. From a fisherman's perspective, or that of the occasional duck-hunter, Belle Isle was a high-value destination. This would also have been the case for indigenous people whose boats were light enough to be taken ashore; but even they would have found few harbors and camp locations.

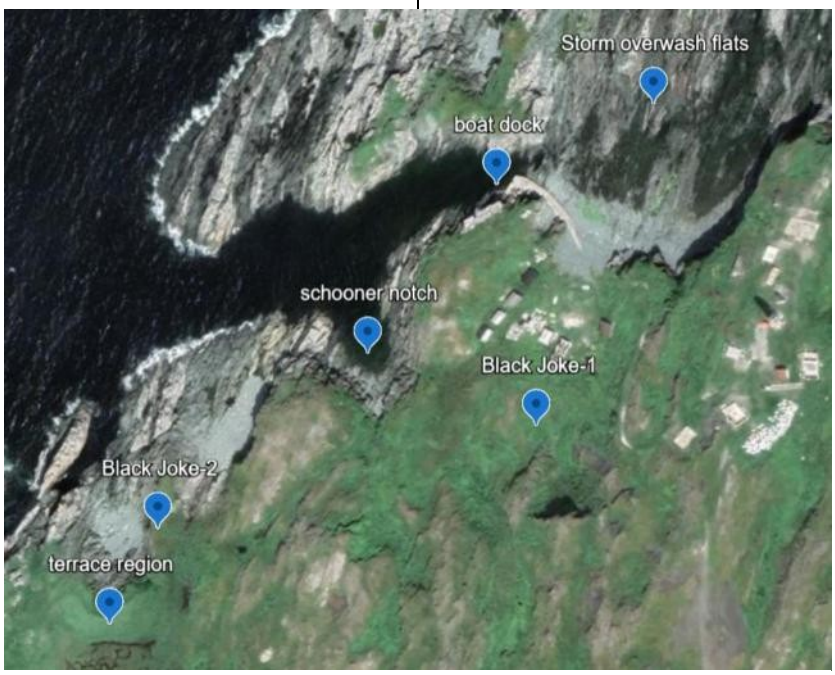
In recent years, Belle Isle attracted the interest of 'through-hikers' of the Appalachian Trail due to it being the northern terminus of the Appalachian Mountain chain. Several of these hikers have been dropped off at SW Light by Boyce Roberts and hiked overland to NE Light, which for a few years was designated as the official 'end' of the Appalachian Trail. One of the most celebrated of these hikers was M. J. Eberhart (a.k.a. 'Nimblewill Nomad') a retired optometrist who completed his trek from Key West, Fl. to NE Light in 2012. Later, because of the danger of boat crossings, the terminus of the AT was redesignated as Noddy Head, near the Norse site at L'Anse aux Meadows, Newfoundland.

The Survey Route

We left Quirpon Harbor in a speedboat skippered by Boyce Roberts at 9:00 and arrived at Southwest Light at 10:30 with the wind southwest at 15 knots. We proceeded north along the southeast-facing coast. A few iceberg remnants hugging the shore were dwarfed by the high cliffs and craggy outcrops. Boyce identified the sequence of coves as we passed them: SW Light, Barber's Cove,

Gull Battery, Showerbath, Three Brooks, Greenham, Hook, Batteau, Eagle, and Black Joke at the NE tip—the location of the NE Lighthouse. All places were named by Newfoundland fishermen who set cod traps in these locations. Beauty and a few others have narrow cobble beaches perched against cliffs rising a few meters from the shore; none have space for tents, and all are—and have been for millennia—subject to being over-washed by surf, and none support vegetation. The coast is literally a wall of rock rising 100 to 200 meters, and most coves are backed by waterfalls. During our visit the southeast coast was relatively calm, as the cliffs offered protection from the southwest wind.

Rounding the northeast tip, we entered Black Joke, a small cove created by a 10-meter-high offshore ledge. To the east the ledge descends to a flat expanse of rock that is awash at high tide and becomes a vessel wrecker when storm waves carry across into the cove. The only berth is a tiny notch in the south side of the cove into which schooners like Perry Colbourne's father would tie up with an anchor on the north side of the cove and multiple lines to either side of the notch. In the 'lighthouse era' a concrete pier was constructed on the inner south side of the cove with a ramp running up to the only level patch of ground near shore on Belle Isle. Around this swampy clearing, several cabins built to house fishermen are still standing. While walls and some roofs are intact, most floors have rotted out, and only one cabin might serve as a temporary shelter today. The center of this 'clearing' is filled with wreckage from wind-destroyed cabins and piles of rubbish. A narrow ATV trail carved into the hillside snakes up the hill from the cabins to the Northwest light and the keeper's cottage. Spongy tundra dominates landscape not exposed as bare rock, and tall grass is growing in middens around the cabins. Black Joke-1 occupies a separate grass patch about 30 meters west of the southern cabin line, and a second patch west of the southern cabins may hide a second BJ-1 structure.



Black Joke features map. (Google Earth)

West of Black Joke settlement area a stream descends into a sediment basin behind a prominent marine terrace 10-20-meters wide and 20-30m above the shore. This feature would be suitable for dwellings or observing game in the surrounding waters. A test pit in the middle of this terrace revealed peat deposits too deep for trowel excavation. However, a test-pit at Black Joke-2 on a rocky spur extending toward the cove east of the terrace produced a lead musket ball. Exploring the area behind the southwestern-most cabin, Treena found the remains of what seems to be a rectangular Inuit house (Black Joke-1). A 50x50cm test-pit here produced window glass, a square nail, iron sheet, and a felt or fabric remnant above a floor slab.

After two hours exploring Black Joke, the SW breeze and swells had dropped, and we continued the survey south along the island's northwest-facing coast. A cross on the rocks west of BJ-2 marked where a young person fell to his death from the cliff, and another marker near Wreck Cove stood on the cliff-top where a snowmobile rider careened off during a storm. A third site on the island's interior is the location of a plane crash. We passed another series of 'fishing coves', some with larger waterfalls and larger cobble beaches than on the southeast coast. From north to south these locations are Wreck

Black Joke-1 is the grassy mound in the foreground, view SE.

Cove, Lark Harbor (a schooner anchorage in calm weather), Ringbolt, Green, White Point, Round Head, Blandford, Lighthouse, and Scotswood Coves. Some of these, like Wreck Cove have boulder beaches that might accommodate tent camps, but all but Green Cove lack vegetation and are inundated in storms or when weather in Greenland or the Labrador Sea send seas south. Lark Harbor, protected from the west by a line of rocky reefs extending south from Lark Island, provided anchorage for fishing vessels, in addition to a 'notch' slip like Black Joke where schooners could tie to the surrounding rocks. Green Cove is the only location where small boats can land and launch safely on a cobble beach and find settlement options on marine terraces beside a stream. Here we found Green Cove-1, a small Dorset tent-ring. Green Cove has 8-10 clearly delineated marine terraces, both vegetated and barren, rising along the north side of the stream and may have Maritime Archaic sites. Blandford's Cove has the remains of a fisherman's stage and was occupied in summers long enough to support a patch of rhubarb on the high terrace above a shoreside stage. A cabin site may be present near the rhubarb, but we did not investigate. This location is across from a concrete landing pier for Southwest Light. Calm conditions made for a smooth one-hour crossing to Quirpon, which we reached about 6pm.

Black Joke-1 test-pit finds: window glass, square nail, iron sheet, and skin or fabric. Glass may be a recent cabin component.

Archaeological Assessment

Black Joke-1 Treena Beaudoin identified a depression in a patch of tall grass 30-40m west of the southern cabin line that contained a 12x4m rectangular sod-walled structure. Tall grass made accurate delineation unclear, but an entrance is suggested on the structure's south side, and layers of sod are exposed in the north wall. A test-pit in the north-center area of the depression was excavated to a depth of 20 cm when a large slab rock prevented further work. The sod walls, rectangular shape, and slab floor are consistent with 18th century Inuit winter house construction. Finds from the test-pit include a square cut nail, iron sheet, wool fabric or

Black Joke-2 musket-ball test pit, view NE., and musket-ball find.

skin, and window glass. We did not reach a black earth culture level, found no bone, and the window glass might have been trash from the cabins. The site is almost certainly an Inuit dwelling dating to the pre-lighthouse era, likely to the 18th century. Without a weed-whacker we were not able to clarify the shape of the structure, but it does not appear to be associated with the cabin occupation. Since it is unusual for early Labrador Inuit settlements to contain only a single winter house, and the thick vegetation west of the western-most southern cabin may obscure a second structure.

Black Joke-2 A 50cm test-pit on a rocky spur extending NE from the high marine terrace west of the cabins toward the cove produced a lead musket ball. This location is an ideal look-out for game and could have been used for hunting seals in the cove below. Similar musket balls are common finds in 18th century Labrador Inuit sites in Labrador and the Quebec Lower North Shore. Belle Isle would have been attractive to Inuit because of its birds and marine mammals and would have had few complications with Europeans. A likely source for the musket ball would be the residents of Black Joke-1.

Green Cove-1 Landing at the cobble beach at Green Cove was fairly easy and would have been fine for pre-contact access except in heavy seas. Its river drains a large part of the island's west-central area and has carried sediments and boulders that were reworked by the sea during land emergence into a series of terraces, of which I counted 9 or 10 in the first few hundred meters of the valley. A much smaller set of terraces lies on the south side of the stream. The lowest terrace on the north side is ca. 30m wide and is covered with tundra vegetation. A small cobble feature lies in the SW corner of the terrace, and in its center a roughly rectangular 3x3m outline of rocks protrudes from the turf. A test-pit in its center revealed 10cm of peat overlying a layer of small beach rocks where we found charcoal, a Ramah chert microblade, and a tan chert flake-knife. Time did not permit excavating to the sterile beach layer. No other lithics were found. The microblade is Ramah chert and is probably Dorset rather than Groswater, as the latter preferred 'Cow Head'-like

Outline of the Green Cove-1 Dorset tent site, view west with Treena Beaudoin; and Ramah chert microblade and flake knife from GC-1 test-pit.

(Top) Ceramic sample collected from one of the Black Joke cabins. (Bottom) "Scoop and Save" food menu found in the cabin with the ceramics, autographed by Corey Strickland, a 'self-employed fisherman' from Pilley's Island.

chert. A single piece of charcoal may provide a date.

Green Cove-2 A quick walk across the higher terraces, most of which are unvegetated cobble beaches, revealed possible rock alignments as found on Maritime Archaic longhouse sites in Labrador and Quebec. This location was not tested or photographed. Our brief time ashore (45 minutes) did not allow inspection of the still higher terraces further up the valley, whose marine beachlines and terraces can be seen on Google Earth images. The raised beach series in this narrow valley holds a remarkably long Holocene geological record.

Apart from Black Joke, which is covered with thick vegetation, peat growth, and modern refuse that may conceal pre-European cultural traces such as BJ-1, Green Cove is the most accessible location for landing and launching small boats and has many opportunities for establishing camps, either for short-term resource extraction or taking refuge from storms encountered when people were travelling between northern Newfoundland and Labrador. However, the absence of more than a single (likely Dorset) camp on the lower Green Cove terrace, suggests that few other occupations are present, and that early visitors to Belle Isle like the BJ-1 occupants were rare occurrences.

The possibility that walrus may have been present around Belle Isle was one of the motivations for our survey. Belle Isle, with its complex oceanography, winter pack ice, and mixing of Strait of Belle Isle and Labrador Current waters, would seem to have offered ideal conditions for walrus. If present, walrus would have attracted Norse visitors, and their remains would be found in Black Joke-1. No walrus remains have been found at L'Anse aux Meadows, where they would likely have been preserved. We saw no sign of walrus, and there is no local lore about their presence in the recent past. Perhaps Belle Isle offered little attraction to the Norse, even if walrus were present. Lacking strong anchors and lines, Norse skippers would have found the absence of safe harbors too great a risk to their precious boats.

Collections

Collections from these sites have been sent to The Rooms archaeological repository.

References

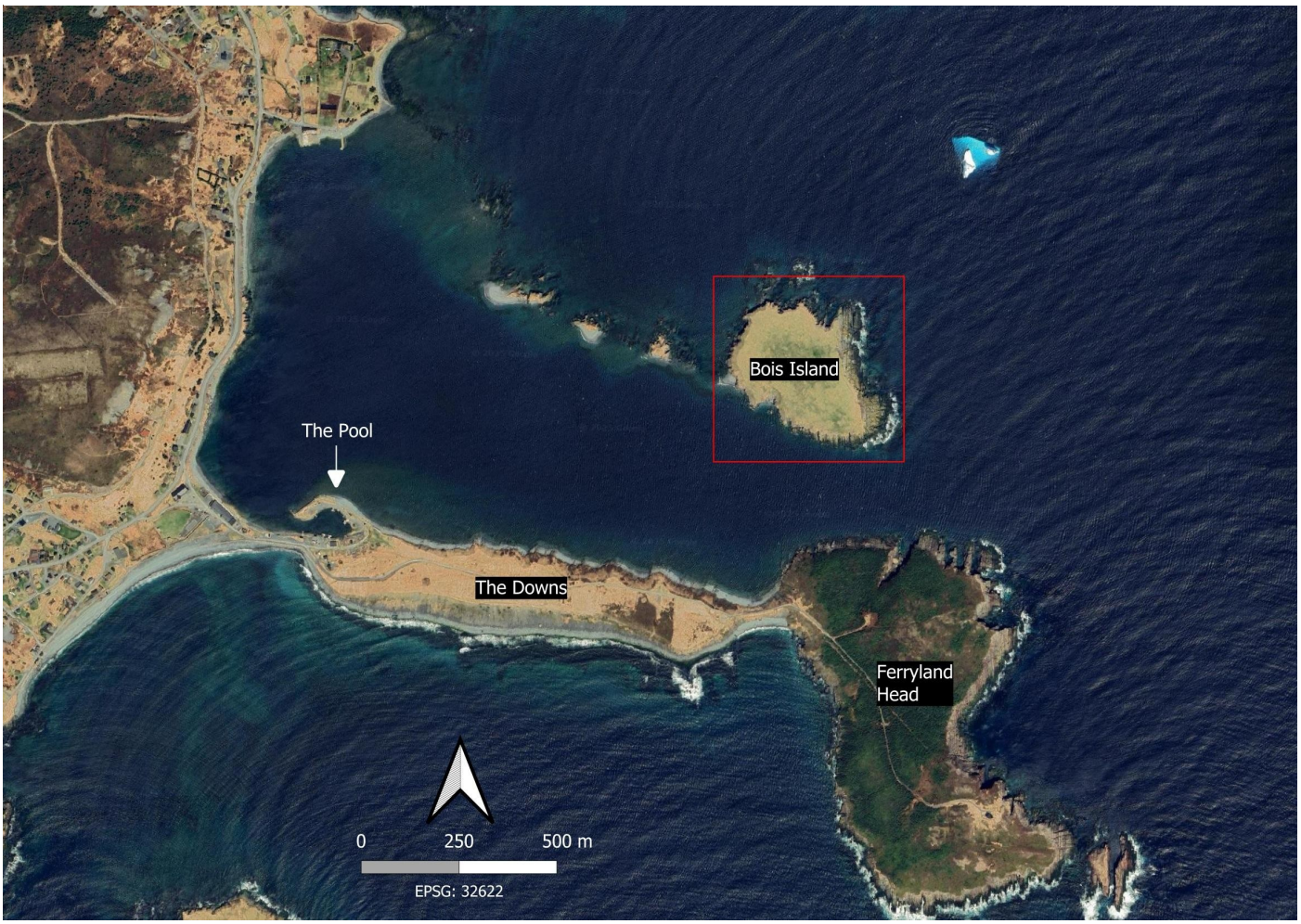
(https://www.lighthousefriends.com/light.asp?ID=1484)

Photogrammetric Mapping and Assessment of Bois Island, Ferryland, NL (CgAf-01)

Barry Gaulton & Calum Brydon
Memorial University

In May 1709, the "inhabitants of the Island of Buoys" wrote a letter to the Governor of Britain's New England colonies thanking the Crown for its naval support following recent French attacks on their community of Ferryland, Newfoundland (Amiss et al. 1709). The island's high cliffs and elevated position at the entrance of Ferryland Harbour, a short distance from the town, provided temporary succor for its war-weary residents. This letter marks the first recorded instance of intensive, yet short lived, European habitation of Buoys Island—also referred to as Gull Island, Bouy Island, Isle of Bois, and most recently Bois Island (Figure 1). A small militia force was garrisoned on the island several years previous, but its defensible features were not fully brought to bear until heavily fortified by the British military starting in 1743 (Newcombe 2017:11). A 1752 map by engineer Edmund Scott Hylton provides details on the defenses and structures present, including three strategically placed gun batteries (at the southeast, southwest and northwest), a magazine and storehouse, a barracks, two wells, a large wharf and several unnamed buildings. Interestingly, Hylton's map also references the "parrapetts cast up by the inhabitants" pointing to an amalgam of formal and vernacular defenses protecting the island (Figure 2). Defenses were refurbished

Figure 1: Google Satellite imagery of Ferryland Harbour showing the location of Bois Island.



and expanded in 1776 to include a fourth gun battery at the northeast. Officers, gunners and soldiers were inconsistently stationed on the island from the early 1700s until its initial abandonment in 1784 and, following a brief re-occupation during the War of 1812, again in 1815 (Newcombe 2017:17). The ordnance remained, having been deemed unserviceable (Haultain 1815; Faddy 1816) and it appears that the buildings were allowed to decay and/or be scavenged.

Today, Bois Island (CgAf-01) is a fantastically preserved archaeological site and represents an important part of Newfoundland's military history. Yet, it has also witnessed significant erosion along its perimeter in recent decades (Cromwell 2012; Newcombe 2016). A drone photogrammetry and erosion assessment were conducted in summer 2025 as part of the larger Transforming Climate Action research initiative at Ferryland (Brydon 2025; Gaulton et al. this volume). This work is an extension of previous archaeological surveys and provides a detailed aerial record of the current condition of the island. Furthermore, the high-resolution orthophoto mosaic of Bois Island produced in 2025 was overlaid on earlier aerial photographs of the island taken in 1951, 1995, 2008, and 2020 to measure and illustrate the degree of erosion that has taken place since the mid-1900s. The goal is to identify areas on the island where erosion is most acute so steps can be taken to record cultural features and/or intact deposits prior to their loss. Several recommendations are also made at the end of this report.

On July 17, 2025, the authors, along with several staff members from the Colony of Avalon Foundation, were transported by boat to Bois Island by local fisherman Leo Kavanagh. Access was via the same location used for centuries, a steep and unstable slope at the south side of the island which was improved in the 1740s with a wooden wharf, ramp and capstan to move cannons and stores to the top (see Figure 2). No trace of these historic features remains today. Once at the top, Calum set up the drone in preparation for photogrammetric mapping while the remainder of the group began to traverse the perimeter of the island recording areas of active erosion and/or displacement of cultural materials. By employing aerial and terrestrial methods simultaneously, the team was able to complete the survey in several hours.

Figure 2: Section of Hylton's 1752 map showing Buoy Island. Scale and legend are amalgamated from the original.

The drone-based photogrammetry consisted of a series of pre-programmed flyovers using a DJI Mini 3 drone operating at approximately 40m above the ground surface. The resulting 793 aerial photographs were subsequently processed using Agisoft Metashape Pro to create an orthophoto mosaic of the entire island with a resolution of 1.8cm per pixel (Figure 3). This high-resolution imagery enabled

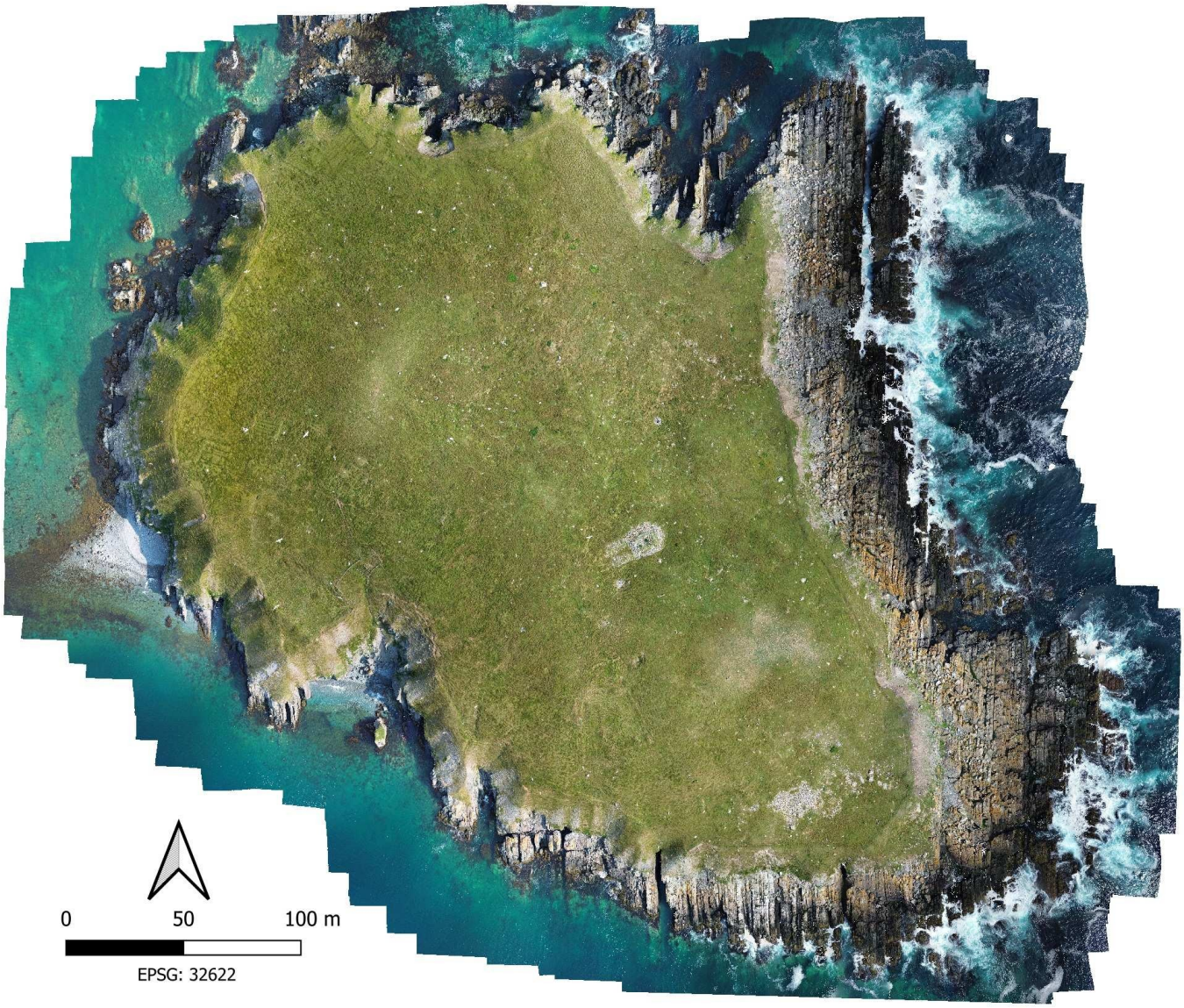


Figure 3: Orthophoto mosaic of Bois Island generated from drone images taken in July 2025.

straightforward delineation of the coastline using Geographic Information Systems (GIS), based on the presence of vegetation as is generally the standard in studies of coastal change (Webster 2012; MacDonald et al. 2023). In addition to outlining the 2025 coastline at Bois Island, a similar process was undertaken with aerial photographs dating back to 1951. Once georeferenced, coastlines could again be traced using GIS and then compared to each other to calculate rates of change through to the present (Figure 4). As the resolution of many of these images is quite poor (as well as other factors such as camera angles and positioning) there is an error margin of 3-4m associated with photos taken before 2008; however, this is not significant enough to prevent these photos from being useful and relevant. Once all coastlines were digitized, changes were measured to provide us with a quantitative measure of erosion at Bois Island over the past 75 years.

Terrestrial survey focused on the island's perimeter. Several areas of active erosion were recorded, particularly along the northern, eastern and southern ends of Bois Island. Vegetation and soil loss were severe in these areas compared to that noted in the 2012 and 2015 surveys (Cromwell 2012; Newcombe 2016). For example, one of the cannons positioned at the northeast battery was largely overgrown with vegetation in 2015 (Watton 2016:71; Newcombe 2017:32) but 10 years later its muzzle is now fully exposed due to continued erosion (Figure 5). The same

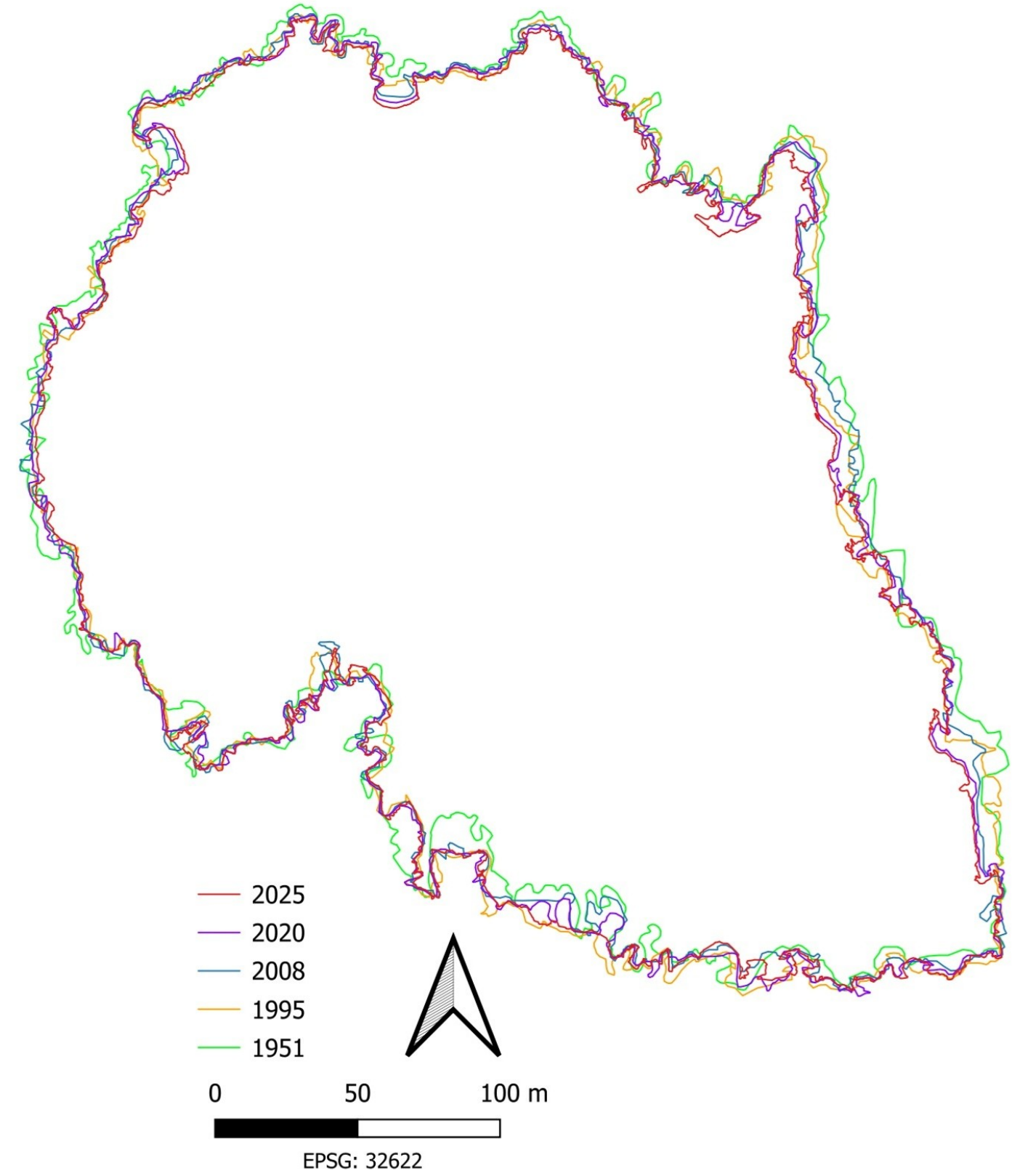


Figure 4: Digitized coastlines of Bois Island based on select aerial images taken between 1951 and 2025.

eroding embankment extends further south and among its displaced soils are wrought iron nails, faunal material and clay tobacco pipe fragments (Figure 6). Similar discoveries were made at the south end of the island, in places where the survey crew were able to access safely.

The drone survey and analysis of aerial photos can quantify this erosion to some extent. On the north, south, and west coasts of the island there are multiple instances where over 10m have eroded since 1951. The eastern coast is the most concerning, as

Figure 5: Cannon from northeast battery (c. 1776), looking northeast.

the entire area is heavily impacted, with the worst areas having seen over 20m lost. Importantly, the integration of multiple historic aerials allows us to measure changes in erosion rates. By comparing changes from 1951-2008 to those from 2008-2025, we can see that the 2008-2025 erosion rate is triple that of the 1951-2008 period on the north and east coasts of the island, and double on the west coast. Unfortunately, highly variable vegetation and poor image quality on the south coast prevented an accurate representative measurement in that area, though as mentioned above, erosion is occurring there as well. Sadly, we can only expect these erosion rates to see increased acceleration in the coming decades.

Based on the above discussion, Bois Island is under significant threat of erosion with clear evidence of elevated levels of landmass loss starting in the early 2000s. Such events will only be exacerbated in the future due to extremes in weather brought on by climate change. Several areas around the island exhibit actively eroding embankments and associated loss of cultural strata and artifacts. The in-situ ordnance positioned along these same embankments continue to be further exposed to the elements, in turn advancing their degradation. All the gun batteries are at moderate to severe risk, with some pieces already slumping on a downward trajectory toward the sea which will continue until their context is lost, including two cannons from the northwest battery presently laying on the shore. There is also a well indicated on the east side of the 1752 Hylton map of the island that appears to be visible on the 1951 aerial but is not in any subsequent year. Based on the amount of erosion that has occurred, portions of this well may still be present, but filled. It would be, however, at immediate risk of being lost, as would any other features in the same area. Unfortunately, this is the case for much of the island, and mitigation efforts will be necessary to record archaeological contexts before it's too late .

We conclude this report with several recommendations. First, a thorough metal detector survey be conducted along the perimeter of the island to record concentrations of metal objects and followed up by test pitting and targeted excavation. A two-stage survey would provide baseline information on the nature of at-risk cultural deposits, identify areas of urgency, and allow for future planning.

Second, with the loss of at least two cannons from their original context, and several more under threat of displacement, it would be an opportune time to record details on all the artillery pieces positioned at Bois Island. This work would necessarily involve exposure (and reburial) of each cannon for measurements and photography.

Figure 6: (left) Eroding embankment along northeast battery showing exposed muzzle from cannon; (right) a clay tobacco pipe fragment eroding out of the same embankment further south.

Third, it will be useful to continue drone-based monitoring of the island to ensure that we have an accurate representation of erosion on a year-to-year basis. It is worth noting that erosion processes at Bois Island are complex and variable (Watton 2016). Continued risk can be difficult to evaluate based solely on historic aerials, especially as their resolution tends to be poor. This was especially the case for the vegetated sloping escarpments around parts of the island, where presence/absence of vegetation may not be the best method for determining long-term coastline change but other indicators (i.e. bank edges) are not clear enough to be used. High-resolution drone imagery can effectively alleviate these issues and aid significantly in determining areas where further action must be taken.

Additionally, and on a somewhat unrelated note to the military occupation, consideration might be given to the interpretative potential of this island as a resource for eggs and bird meat utilized by early European fishers, the Beothuk, and later European settlers. The presence of a significant colony of Herring gulls so close to mainland Ferryland logically suggests that the island was frequented for eggs and meat prior to, and following, its intensive occupation during the 1700s. There may be other, potentially earlier, roles that Bois Island played in the larger story of human occupation at Ferryland. Afterall, it was known as Gull Island during the 1600s (Yonge 1663).

Finally, Bois Island, and its affiliated 18th-century fortifications around the Avalon Peninsula and beyond, deserve further archaeological attention. The activities, occupations, and events that took place here during the long 18th century are a microcosm of a much larger conflict between competing European powers for control of what is today Newfoundland and Labrador. Bois Island and other heavily fortified locations in Carbonear, Trinity and Placentia are an immensely informative assemblage of early modern military installations created and maintained within a unique geographical, political and cultural context.

Collectively, however they have garnered limited historical and archaeological consideration.

Acknowledgements

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References

Amiss, Richard et al.
1709 Petition to Governor Joseph Dudley of Massachusetts. Mss Acc. 468 (1), Boston Public Library, Boston.

Brydon, Calum
2025 Erosion Monitoring at Ferryland, 1951-2025. Presentation for the Colony of Avalon Annual General Meeting, Ferryland, NL.

Cromwell, Thomas
2012 Fieldwork at Bois Island, Newfoundland, Canada. Report submitted to the Provincial Archaeology Office.

Faddy. P.
1816 [Return of Iron Ordnance belonging to Government at the undermentioned out Harbour in Island of Newfoundland]. 3 November 1816. Canada, Vol. 1/S1, 27, p. 286. The David Webber Collection, The Rooms Provincial Archives.

Haultain, F.
1815 [A Return of Iron Ordnance belonging to Government at the under mentioned out Harbour in the Island of Newfoundland]. 7 October 1815. Vol. 1/S1, 26, p. 371. The David Webber Collection, The Rooms Provincial Archives.

MacDonald, Andrew, Luke Meloche, and Catherine Kennedy
2023 *Annual Report: RPAS Coastal Change Monitoring of Prince Edward Island*. Canadian Centre for Climate Change and Adaptation, University of Prince Edward Island.

Newcombe, Simon
2016 Bois Island (CgAf-01) Survey and Research, 2015. Provincial Archaeology Office 2015 Archaeology Review. Stephen Hull and Delphina Mercer eds. Department of Tourism Culture and Recreation. Volume 14: 148–153.
2017 An Examination of Military Life in 18th-century Newfoundland using the Archaeological Remains of an Officer's Barracks on Bois Island, Ferryland (CgAf-1). Unpublished MA Thesis. Memorial University of Newfoundland.

Watton, Eric Carl
2016 Coastal Geomorphology, Processes and Erosion at the Tourist Destination of Ferryland, Newfoundland and Labrador. Unpublished MSc Thesis, Memorial University of Newfoundland, St. John's, NL.

Webster, Tim
2012 *Coastline Change in Prince Edward Island, 1968-2010 and 2000-2010*. Atlantic Climate Adaptation Solutions Association.

Yonge, James
1663 Map of Ferryland. In Poynter, F. N. L. (ed.) (1963). *The Journal of James Yonge [1647–1721] Plymouth Surgeon*, Archon, Hamden.

Archaeology at Ferryland 2025

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The 2025 field season at Ferryland was an extension of the previous year's excavations. Our goals were essentially the same: continue to record and interpret intact deposits along the waterfront area of the inner harbour (the Pool) and further investigate the construction and occupation of a 17th-century outbuilding adjacent to the colony's principal residence (Mansion House). In conjunction with these primary aims, additional investigation into Ferryland's early 17th-century sanitation systems proceeded in 2025.

Work along the waterfront area continues to have a sense of urgency. The archaeological site faces a harsh reality as rising tides and storm surges are actively inundating and erasing its presence. The 2025 excavations along the south shore of the inner harbour focused on two parts of the site, designated Areas C and G (Figure 1, #1-2 respectively). Information gleaned from the previous year informed our operations in 2025.

In Area C, the archaeology team excavated beneath the remains of a previously exposed cobblestone pavement built in the late 1600s, which is actively eroding during tidal events in the fall and winter months. Investigation of these contexts has been ongoing since they were identified as being at significant risk in 2024; this season, Memorial University students Calum Brydon, Alannah Dejong and Santiago Ramirez Moreno were responsible for excavating a 1 x 4 m unit below the pavement immediately north of last year's excavation (see Gaulton et al. 2025). Interestingly, the mid-to-late 17th-century domestic midden recorded in 2024 was not present in these northern units to the same degree. Instead, the stratigraphy was dominated by several thick deposits of fill and refuse used to level the beach during the first decade of the colony's establishment (Figure 2). The highly stratified nature of these layers suggests that refuse deposits in several locations throughout the village were sequentially targeted for use during infilling, serving a dual purpose of "cleaning" the colony while also gaining

Figure 1: Aerial view of the Ferryland waterfront showing locations of the 2025 excavations outlined by red borders and numbered by order of their discussion in the report. Top of photograph points north. Photo credit: Calum Brydon.

ground on the waterfront. As previously discussed, (Gaulton et al. 2025; Tuck 1997), some of this refuse appears to originate from the colony's forge/blacksmith shop over 60m to the west, as demonstrated by a quantity of slag, wrought iron tool fragments, charcoal and scale. These deposits shed light on the activities at the blacksmith shop back in the 1620s-30s but also the daily lives of the people who lived and worked at Ferryland 400 years ago.

What was so striking about this year's excavation was the quantity and diversity of artifacts in these early deposits. This contrasts starkly with other filled sections of Area C, where the fill is essentially devoid of artifacts. There were hundreds of fragments of ceramic storage, cooking and serving vessels; most were produced in Devon, England, with others from Germany, Portugal, France and the Netherlands (Figure 3). Clay tobacco pipes were also among the most frequent finds including intact bowls and a marked heel bearing the initials 'TG' (Figure 4), possibly that of London pipe maker Thomas Graunt or Bristol pipe maker Thomas Grigg (Oswald 1975:137; Walker 1977:1155). The ceramics and clay pipes reveal important information about how 17th-century Ferryland was provisioned with food and supplies and, by extension, the international trading networks of which Newfoundland was a part.

Figure 2: Area C excavation trench looking north.

Metal artifacts were likewise prevalent in these refuse deposits. The variety of metal objects reaffirm that Ferryland's blacksmiths manufactured and/or repaired tools and implements for the fishery but also for the carpenters, masons and other tradespeople who helped build the village back the 1620s-1630s (see Carter 1997). Hundreds of iron nails and spikes, fishhooks, axe fragments, a gouge, a knife blade, and even a partial mason's trowel were among the discoveries this summer.

Figure 3: In situ fragments of North Devon earthenware ceramic storage vessels.

Figure 4: TG mark on the heel of an early clay tobacco pipe.

Figure 5: (left) Copper *duit* minted between 1612 and 1641; (right) tubular copper object of unknown function.

Figure 6: Decorated gaming pieces made of local slate/shale.

Two notable copper artifacts include a coin produced in the Netherlands and a tubular object of unknown function (Figure 5). The former is a *duit*, a small denomination coin minted in the Dutch city of Battenburg between 1612 and 1641. The function/purpose of the latter object is currently being investigated; however, the presence of a beaded pewter band around the terminal(?) ends of this artifact hint at its decorative nature. As an aside, the corrosion layers that often form around buried copper artifacts sometimes preserve adjacent organic matter which typically does not survive in the archaeological record (see Hett 1980 for an early NL example). In this instance, the corrosion layers around some copper scraps preserved a small patch of underlying animal hair. Examination under direct magnification using a Dino-Lite digital microscope revealed that the soil matrix containing the hair also contained insect remains including a weevil and fungus beetle (Véronique Forbes and Allison Bain, personal communications).

Two slate gaming pieces round out the interesting discoveries from the 1620s-30s deposits excavated in 2025 (Figure 6). Cut from thin pieces of local shale/slate, these objects were likely crafted by one of the masons or slaters residing at Ferryland. Each was shaped and decorated using a compass and ground/filed down to make circular gaming pieces (~5cm in diameter). These examples may have been part of a set used for a board game or for games of chance and speak

to the local manufacture of secondary products for sale or barter.

Excavation of the 1 x 4m unit in Area C stopped upon reaching what may be the interface to earlier pre-colonial occupations, potentially both European migratory and Beothuk deposits. Previous investigations in the 1980s, 90s and early 2000s (Tuck and Robbins 1986; Tuck 1996; Gaulton and Tuck 2003) have shown these occupations to be highly ephemeral, sporadic and/or mixed, perhaps unsurprising due to it being an intertidal zone. This was further evidenced by the presence of several water-rolled artifacts—including a tiny pipe bowl manufactured between 1580 and 1610—at the interface with the supposed pre-colonial beach. Interestingly, we also began to uncover the remains of a large circular (or semi-circular) stone feature consisting of angular slatestones and large beach cobbles at the interface with the beach. Though further work will be needed to better assess its precise function, a fishery-related use can likely be assumed. The stratigraphic positioning of the early deposits also makes them acutely vulnerable to rising sea levels and therefore challenging to excavate/record. Toward the end of the 2025 excavation in Area C, for example, salt water repeatedly percolated up into our excavation units during high tide and prevented further work (Figure 7). The lowest cultural deposits in this part of Area C could be perpetually submerged in the coming decades.

The same can be said for any pre-colonial deposits in nearby Area G, particularly given its relative proximity to the inner harbour. Although this year's investigations focused exclusively on higher, colonial-era deposits, continued work at Area G was prioritised for the purposes of mitigation. The goal was to expand excavations to the east and west of the 2024 test trench (Gaulton et al. 2025) and record intact cultural deposits and in-situ features while we were still able.

A 1 x 3m unit to the east was excavated first, followed by a 1 x 3m unit to the west (Figure 8). Significant deposits from both the 17th and 18th centuries were recorded in each operation. However, no *in-situ* features were found. Like last summer, the quantity and variety of 18th-century material culture from Area G suggest an intense occupation nearby. Objects include the ubiquitous clay tobacco pipes, bottle glass and iron nails alongside Westerwald mug fragments, English stoneware, creamware, lead shot, and copper items of personal adornment. Compared with the 2024 discoveries, the underlying 17th-century deposits were exceptionally rich in artifacts, spanning the early to late 17th century. Figure 9 illustrates a selection of finds recovered from these deposits. The diverse ceramic assemblage consists of North Devon sgraffito decorated earthenware, tin-glazed earthenware, Spanish lustre ware, German stoneware, and Chinese export porcelain, in addition to undecorated earthenware pieces from England, Spain, Portugal and the Netherlands. Such a varied assemblage runs counter

Figure 7: High tide at Area C, August 13th, 2025.

Figure 8: 1x3m excavation at Area G, looking south.

Figure 9: Collage of 17th-century artifacts from Area G

to our previous (2024) views that 17th-century deposits were largely attributable to fish processing activities. It now seems more domestic in nature. If correct, what remains unanswered is the source of this domestic refuse.

One clue may be the large number of brick fragments and slate roofing tiles recovered at the south end of the ongoing excavation, hinting at the remains of a nearby 17th-century structure. This theory is supported by small quantities of brick and roof tile recovered below the late 17th-century cobblestone pavement to the southeast in Area C (Gaulton 2024; Gaulton et al. 2025) as well as similar structural materials excavated to the southwest (Tuck and Gaulton 2001: 96). Unfortunately, all three excavation areas border our cherished Moose Shack currently used to store our field supplies, and the likely location of the presumed 17th-century building!

Moving south across the Pool Road to Area F, excavations focused on a partially exposed mortared wall segment (Feature 190) and refuse deposit located between the buttery/pantry and kitchen rooms within the large outbuilding directly adjacent to the stone Mansion House (Figure 1, #3). Investigations in 2012 and 2024 revealed this north-south wall segment, but its purpose within the larger ca. 1620s outbuilding remained unknown (Gaulton et al. 2025). Therefore, the archaeology in 2025 started with a 1m unit immediately south of last year's excavation, specifically targeting the area where the refuse deposit was presumed to continue while purposefully avoiding the nearby west wall of the kitchen room. Calum's instincts in placing this excavation unit were right on the mark; not only did he find the southern extent of the refuse deposit, but also another mortared wall running east-west. The stratigraphic position of this new segment in relation to the previously exposed wall clearly showed them to be part of the same construction, and that additional excavation to the west would result in their connecting to form a corner. This revelation thus points to a third, smaller room situated between the buttery/pantry room to the north and kitchen room to the south.

Figure 10: Upper courses of the east-west running wall in the foreground. Area F, looking east.

Excavations were subsequently expanded 1m to the east and west of the initial excavation unit to expose the upper courses of the east-west running wall and delineate its full extent (Figure 10). This operation proved relatively straightforward as the wall segment spanned only 1.8m (6ft) long, tying into the other wall at the south-west corner but ending abruptly at the east end. Here, the wall was dug and set into the subsoil with no trace of an accompanying north-south wall. Bearing in mind that the 2012 excavations determined that the north-south wall at the west end tied into the southern wall of the buttery/pantry, this newly revealed room measures roughly 1.8m x 1.8m (6 x 6ft), was walled up in stone on three sides, but had an 'unfinished' side against the subsoil

Figure 11: (left) 1.8m² storage space looking south; (right) aerial view of same room. Photo credit for aerial: Calum Brydon.

to the east (Figure 11). There was no trace of a heat source inside the enclosed space, and it had a dirt floor as in the adjacent rooms. Interestingly, the associated 17th-century refuse deposits that accumulated inside were also deposited atop the subsoil and slope upward to the east. This observation suggests that the 1.8m² room was accessed from above and via the east side, perhaps by way of a wooden ramp or stairs. If correct, access would be from the kitchen room, with this small subterranean space serving as cold storage for provisions.

All refuse deposits associated with this storage room were meticulously excavated, revealing scattered fragments of ceramic storage vessels, clay tobacco pipes and a large lead trade weight (Figure 12). However, the tiniest artifacts can easily be missed. Our standard practice of wet sifting midden deposits through two mesh sizes (¼in followed by 1mm) not only ensures a higher recovery rate but can enhance interpretation. The 2025 field season is a case in point. Using the wet screen, we retrieved a variety of small mammal, bird and fish bone, hundreds of pieces of lead shot, over a dozen tin-plated straight pins, several strands of silver-wrapped thread and—much to our surprise—7 wampum beads. To the best of our knowledge, these pieces are the first examples of wampum recovered on an archaeological site in Newfoundland and Labrador (Figure 13).

Wampum was made by many Indigenous nations in Northeastern North America. They were manufactured by cutting, shaping and polishing quahog and welk shells into tubular beads. Woven belts or lengths of wampum were used as a form of record keeping and storytelling, for ceremonial purposes, as gifts and as a means for exchange (Pena 2006). During the 17th century, wampum was frequently traded

Figure 12: Lead trade weight found inside 1.8m² storage space.

to Dutch and English merchants and colonists, who co-opted its use as a form of currency (Bradley 2011) Their presence in such small numbers at Ferryland is highly intriguing, yet one must be cautious when interpreting such finds. As with much of archaeology, context is key to understanding when and how they likely arrived at Ferryland, what they were used for, and by whom.

Although we can't say with certainty when the wampum beads were brought to Ferryland, they were found amongst objects dating from the 1630s to the last quarter of the 17th century. This temporal span coincides with the Kirke occupation at Ferryland, a time when Sir David and Lady Sara Kirke, and later their sons, operated a successful fishing plantation beginning in 1638. Trade with Dutch and New England merchants was frequent during this period. Given these facts, the most parsimonious explanation is that the wampum arrived through transactions and/or interactions with Europeans, as opposed to direct trade between Ferryland residents and Indigenous Nations in the Northeast. The latter possibility cannot be discounted, however, particularly considering David Kirke's prior occupation of Indigenous lands associated with the French colony of Québec during the 1620s, through which wampum may also have been acquired through trade or diplomacy. Regardless, as these 7 pieces are the only ones found at Ferryland in 30+ years of ongoing excavation, the quantity of wampum arriving here was insignificant. It might even be suggested that these were not part of a financial exchange at all but rather, acquired or brought here as part of a collection of items for sewing and embroidery.

Figure 13: Seven pieces of wampum.

The previously mentioned sewing- and clothing-related objects found this summer give credence to this idea, as do the pin and needle fragments, silver sequin and aglet recovered in the same deposits in 2024. J.D. Archer's (2022) examination of the adjacent kitchen room highlights the activities of the domestic servants who once worked and lived in this space, including sewing and mending tasks for the colony's principal residents. If you consider that all these tiny sewing related objects easily fall through a ¼ inch mesh screen typically used in archaeology, it's disheartening to ponder the lost opportunities for deeper interpretation elsewhere.

The final goal of the 2025 field season involved additional excavation and recording of the subterranean drain which redirected waste from the ca. 1620s brewhouse/bakery and stable, under the colony's cobblestone street and then north to discharge into the inner harbour (Gaulton et al. 2025; Fig 1, #4). This work was informed by the findings

Figure 14: (left) Exposed capstones covering slate drain, Area F; (right) drain floor showing the intersection of the drains from the brewhouse/bakery and stable.

from the 2024 field season and involved two separate actions. The first was limited to a 1 x 2m excavation unit targeting the area where the drains from the brewhouse/bakery and stable meet before continuing north toward the inner harbour. Excavation in the 1990s revealed a massive capstone/coverstone at the junction of these two drains, which was mapped, photographed and promptly reburied without exploring deeper inside the drain, its inner workings or aspects of its construction. Following the removal of said capstone in 2025, the underlying clay and silt deposits that accumulated inside the drain were carefully excavated. Samples were collected for future analysis, and notes, measurements and photographs were taken. What is so curious about this intersection is the fact that the individual drains congregate into a slightly larger void (Figure 14) before diverging again into two separate drains, instead of combining into a single unit. This raises the question of why they were purposefully built to intersect at this juncture only to separate again. Was there a functional/operational advantage to such a practice?

What's more, the slate drain continuing to the northeast—the same one discussed in 2024 (Gaulton et al. 2025)—was constructed of slate in the same manner as those originating from the brewhouse/bakery and stable. However, a second drain, which begins at the junction and veers northwest, was built entirely of wood and was undoubtedly less durable in the long term. First recorded in 1999, a short segment of this wooden drain was mapped and photographed to the point where it also continued under the ca. 1620s cobblestone street.

It is plausible that the wooden drain was an early iteration of a sanitation system built at Avalon, but then largely replaced (improved upon) following the arrival of skilled tradespeople such as the "…sixe Masons, foure Carpenters, two or three good Quarry men, a Slator or two…" requested by Governor Edward Wynne (Wynne 1622). The wooden remains discussed here would thus be a relict fragment of the former system. Alternatively, suitable raw material for slate drains may have been harder to acquire or more time consuming to quarry, cut and fit relative to wooden counterparts and so a decision was made to build using both wood and stone. This would make the two drains contemporaneous and operating simultaneously. Whether for practicality, expediency or otherwise, more work is required to unravel the fascinating complexity of Ferryland's early sanitation systems.

The second drain-related investigation in 2025 took place north, across the Pool Road in Area C, to locate the slate drain identified in November 2024 as continuing north before discharging into the inner harbour (Gaulton et al. 2025; Figure 1, #5). A 1 x 3m east-west trench was established at the southernmost extent of Area C, in a location containing no in-situ architectural features and which was previously excavated down (~130cm) to the compacted, yellow sterile fill layer deposited along the waterfront area back in the 1620s-early 1630s (Figure 15). If the slate drain passed through the area of the test excavation, it would be visible either as a cut through the early fill layer or directly below it in the event the drain was built prior to the major infilling episode. Neither possibility revealed itself, providing clear evidence that the slate drain is situated further east (most likely) or west of the excavation area.

What we did find underneath the sterile fill was equally, if not more, interesting: an undisturbed pre-colonial deposit associated with migratory fishers who plied the waters of Ferryland prior to official

Figure 15: 1 x 3m test excavation at Area C in search of the subterranean drain, looking south.

colonization in 1621. Although we could only begin excavating into this deposit, it contained scattered remains of ceramic storage and cooking vessels from North Devon, heavily corroded iron nail fragments, a fishhook and the occasional clay tobacco pipe (Figure 16). Historical records indicate that migratory fishers from Bideford, Barnstaple and other West Country ports frequented the Southern Avalon during the late 1500s and early 1600s. Traces of their presence have also been recorded on other parts of the site (Gaulton and Hawkins 2015; Tuck 1996); however, as already noted in this report, many of the pre-colonial deposits in Area C are along the intertidal zone and therefore mixed. The relatively elevated position of this newly exposed migratory fishery deposit compared to much lower contemporaneous strata to the west and north bodes well for its preservation, and perhaps that of earlier underlying cultural deposits. Continued excavation in 2026 will provide an additional opportunity to investigate this early but significant part of Ferryland's history.

Figure 16: North Devon storage and cooking vessel fragments, iron fishhook fragment and clay tobacco pipe recovered from migratory fishery deposit.

Outside of our investigations in Areas C, F, and G, the Colony of Avalon Foundation's "Archaeologist for a Day" program also continued in 2025, with a record number of participants. The public, under supervision by MUN archaeology students Santiago Ramirez Moreno and Alannah Dejong, excavated contexts associated with a 19th-century stone footing in Area D. Finds were diminished compared to the previous two years (Gaulton 2024; Gaulton et. al 2025) but still provide an important view of an area that is actively eroding and may require further mitigation. Notably, a thin layer of 17th- and 18th-century material appears to be undisturbed beneath the 19th-century contexts. It was not an immediate priority for excavation this season but may provide an interesting topic of investigation for our Dig Program coordinators in the coming years.

We would like to finish this report with several important remarks. First, ongoing work along the site's waterfront, in addition to being part of the larger research partnership between Memorial University and the Colony of Avalon Foundation, is associated with the Transforming Climate Action (TCA) research initiative. The primary goals of the TCA research at Ferryland are to map the present shoreline around the culturally important inner harbour (and nearby Bois Island, Gaulton and Brydon this volume), use aerial photographs from the 1940s-50s onward to measure the extent of coastal erosion that has occurred over the last 75+ years, to initiate targeted excavations in high risk areas, and to inform local, provincial and national stakeholders of our findings. Preliminary results indicate that erosion has (unsurprisingly) increased at an unprecedented rate

over the past few decades, with the most heavily impacted areas seeing their erosion rate triple compared to the mid-20th century (Brydon 2025). This speaks directly to the necessity of continuing mitigation efforts to record as many of the intact at-risk deposits as possible before they are destroyed.

Second, the Rotary Club of St. John's Northwest played an integral part in the success of the 2025 field season and our climate change related research goals. A Rotary Club community grant awarded to the Colony of Avalon Foundation helped fund MUN archaeology students working at Ferryland, who in turn received valuable training and public outreach opportunities.

Third, this summer marked the first time in the history of archaeology at Ferryland that someone entered the site after hours with a metal detector and dug holes through a 400-year-old cobblestone pavement in search of precious metal artifacts. Despite being a provincially registered archaeological site and a National Historic Site, and even with protective fencing along its perimeter, this brazen, illegal, and destructive event still occurred. Unfortunately, this is becoming a frequent problem on many historic sites in Canada.

Acknowledgements

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References

Archer, J.D.
2022 *"Smoky, Noisy, Bloody, Violent, and Smelly": Ferryland's Mansion House Kitchen*. Unpublished MA Thesis. Memorial University of Newfoundland.

Bradley, James
2011 Re-visiting wampum and other seventeenth-century shell games. *Archaeology of Eastern North America* 39: 25-51.

Brydon, Calum
2025 Erosion Monitoring at Ferryland, 1951-2025. Presentation for the Colony of Avalon Annual General Meeting, Ferryland, NL.

Carter, Matthew
1997 *The archaeological investigation of a seventeenth-century blacksmith shop at Ferryland, Newfoundland*. Memorial University of Newfoundland. Unpublished MA Thesis. Memorial University.

Gaulton, Barry
2024 Archaeology at Ferryland 2023. *Provincial Archaeology Office 2023 Annual Review*. Stephen Hull and Delphina Mercer eds. Department of Tourism, Culture, Industry and Innovation. Volume 22: 32-40.

Gaulton, Barry and Catherine Hawkins
2015 Archaeology at Ferryland, Newfoundland 2014. *Provincial Archaeology Office 2014 Annual Review*. Stephen Hull and Delphina Mercer eds. Department of Tourism Culture and Recreation. Volume 13:54-59.

Gaulton, Barry, Neil Jordan and Hannah Wade
2025 Archaeology at Ferryland 2024. *Provincial Archaeology Office 2024 Annual Review*. Stephen Hull and Delphina Mercer eds. Department of Tourism, Culture, Industry and Innovation. Volume 23: 88-98.

Gaulton, Barry and James A. Tuck

2003 Archaeology at Ferryland 1621–1696. In *The English in America 1497–1696*, James A. Tuck and Barry Gaulton, editors, pp. 187–224. Memorial University, St. John's.

Hett, Charles

1980 Unearthed Coins: a Pennyworth of History. *CCI The Journal of the Canadian Institution of Conservation National Museum of Canada* 4: 21-23.

Oswald, Adrian

1975 *Clay Pipes for the Archaeologist*. British Archaeological Reports, Oxford.

Pena, Elizabeth

2006 Wampum Diplomacy: The Historical and Archaeological Evidence for Wampum at Fort Niagara. *Northeast Historical Archaeology* 35: 15-28.

Tuck, James A.

1996 Archaeology at Ferryland, Newfoundland, 1936-1995. *Avalon Chronicles* 1: 21-41.

1997 Events – Ferryland 1992-1997. Descriptions on file with B. Gaulton as part of the Ferryland Archaeology Project, Department of Archaeology, Memorial University.

Tuck, James A. and Barry Gaulton

2001 Archaeology at Ferryland 1998-2000. *Avalon Chronicles* 6: 89-106.

Tuck, James A. and Douglas Robbins

1986 A Glimpse at the Colony of Avalon. *Archaeology in Newfoundland and Labrador 1985*, Annual Report no.6, edited by Jane Sproull Thomson and Callum Thomson, pp. 237-245. Newfoundland Museum, Historic Resources Division, Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador.

Walker, Ian C.

1977 Clay tobacco-pipes, with particular reference to the Bristol industry. In *History and Archaeology*. vol. 11. Parks Canada, Ottawa.

Wynne, Edward

1622 A Letter to George Calvert dated 17 August 1622, in Whitbourne R., 1623. *A Discourse and Discovery of New-Found-Land*. Felix Kingston, London.

Archaeology at Cupids, 2025

William Gilbert, Provincial Historic Sites/ Baccalieu Trail Heritage Corporation

In 2025 the Cupids Cove Plantation Provincial Historic Site opened to the public on May 17th but our various other duties at the site meant that excavations didn't begin until July 28. Despite our late start, we accomplished most of what we had set out to do this year. We finished the excavation of that portion of the 1610 sawpit not covered by Structure 9, successfully completed our search for the four postholes dug to hold the corner posts of the sawpit house John Guy's men erected over it, and mapped and photographed these features.

Our focus this year was on completing the excavation of those units associated with Structure 9 and the sawpit that had previously been opened. As a result, we only expanded the excavation area slightly this field season. Our long-term plan is to landscape the sawpit and the area around it and prepare it for interpretation. To facilitate the landscaping and prevent unexcavated areas immediately adjacent to the excavation from collapsing, in 2025 we extended the boundaries of Operation 165 and 167.

An unexcavated area immediately east of the northern half of Operation 167 and south of the eastern end of Operation 163 extended out over the sawpit and was in danger of collapsing into it. To prevent this from happening, we extended the excavation here, establishing a triangular half-metre unit, the southeastern boundary of which ran diagonally from E27N350 to E28N351. This small unit was excavated as an eastern extension of Operation 167. Farther to the northeast, an unexcavated area immediately south of Operation 165 and east of Operation 162 also extended precariously out over the pit. To prevent it from collapsing, we established another triangular half-metre unit, the southeastern boundary of which extended from E30N355 to E31N356. It was excavated as a southern extension of Operation 165. Neither of these units produced much in the way of cultural material. Given their location on a steep slope and near the edge of the sawpit, it is likely anything that may have been dropped within the perimeters of either of these units would have slipped down into the pit.

The Sawpit

As mentioned in earlier reports, the colonists' first sawpit seems to have been in use for just a short period, probably only while the terrace on which the plantation was built was being cleared and the first buildings erected. We know that by the spring of 1611, Guy's men had established a second sawpit up the hill from the plantation, on the north side of Cupids Pond, and by the fall of 1612 they had built a sawmill – possibly the first in North America. Once the original sawpit was abandoned, it quickly began to silt in. Our excavations revealed a deposit of fine, brown silt, measuring in places between 30 and 40 cm thick, immediately above the floor of the pit. Sometime between roughly 1620 and 1640, rubble was dumped on top of this silt and Structure 9 was erected immediately to the west of and extending southeast over part of the pit. At about the same time, the rubble that was still exposed in the pit to the east and south of Structure 9 was capped off by a roughly 10 cm thick deposit of silt and gravel, almost certainly to create a more even surface for the people using Structure 9 to move around on. The silt, the rubble, and the silt and gravel layers were all sealed deposits producing exclusively 17th century material. Over the next three centuries, other material accumulated on top of the 17th century layers resulting in deposits, varying between 20 cm and 40 cm thick, that produced a mixture of 18th, 19th, and 20th century material.

By the end of the 2024 season, we had removed this overburden and all the rubble and underlying silt from that section of the sawpit not covered by Structure 9, except for a roughly 5 square metre section at the south end of the pit (in Operation 163 and the southern end of Operation 114). In 2025 we completed the excavation of this part of the pit and removed the sandbags that had been placed in the pit along the southeast corner of Structure 9 to prevent that part of the building from collapsing. This exposed approximately two thirds of the sawpit floor allowing us to finish mapping and photographing as much of the pit as possible (Figures 1 & 2). Approximately one third of the sawpit floor remains unexposed beneath the southeast corner of Structure 9.

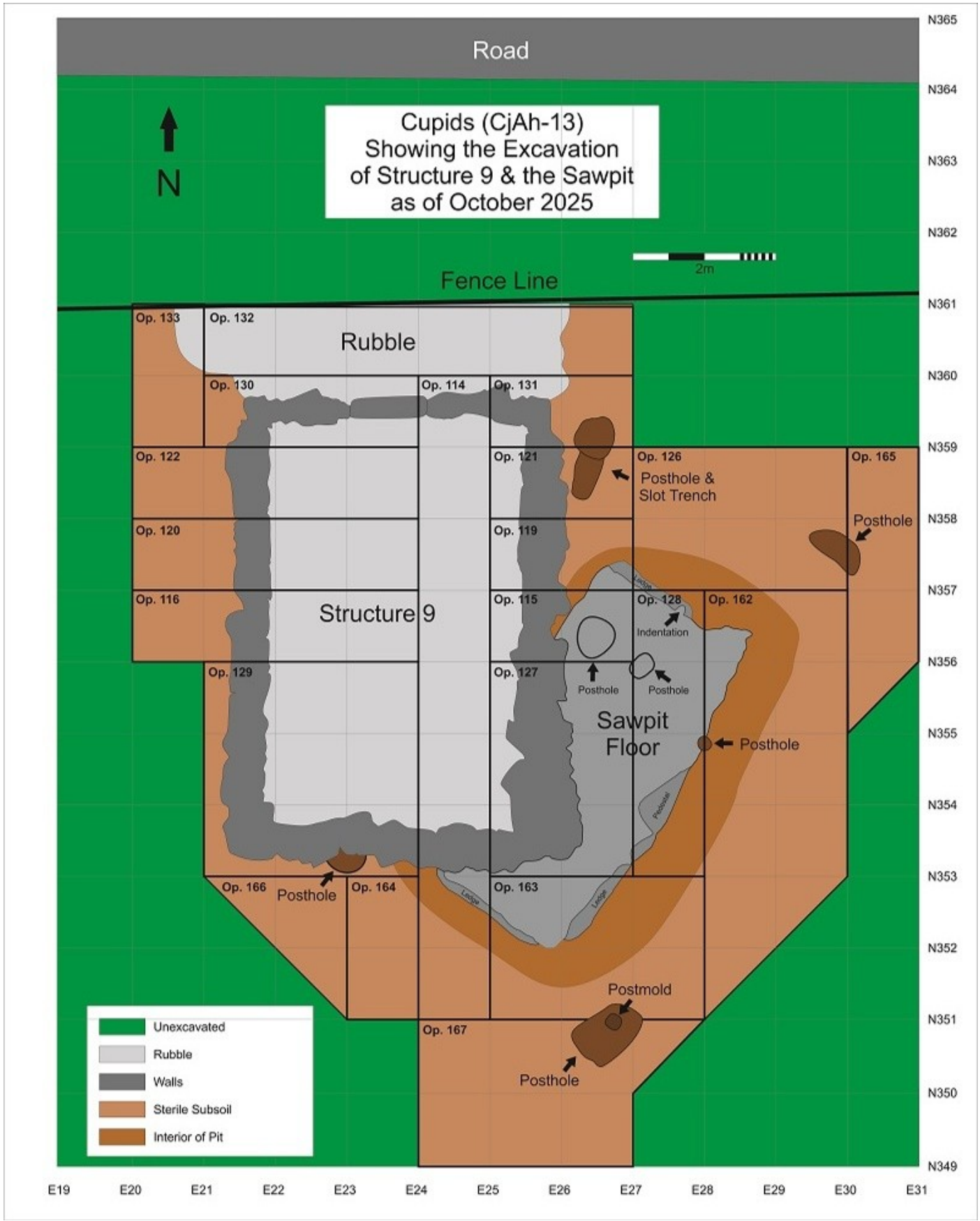


Figure 1: Map showing Structure 9 and the 1610 Sawpit.

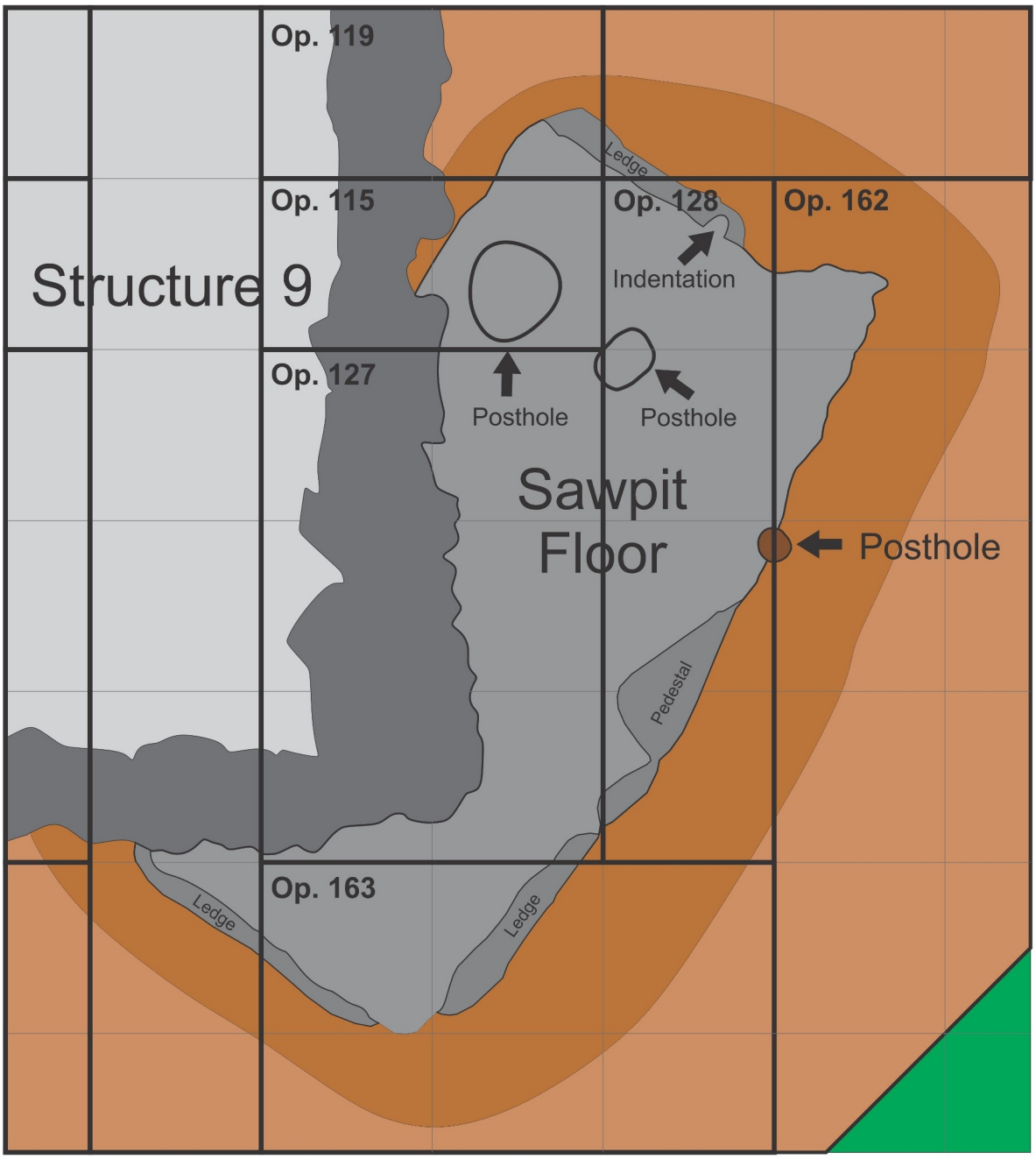


Figure 2: The Sawpit.

Figure 3: Uncovering the ledge at the south end of the sawpit.

The sawpit floor is well defined, consisting of a grey, hard-packed sand and gravel matrix, almost the consistency of cement, and very similar to the floor of the cellar inside the 1610 storehouse. The remains of a narrow ledge, carved into the sand and gravel of the sides of the pit, runs along much of the edge of the floor at an average height above it of about 6 in (15 cm). The best-preserved sections of this ledge run along the south side of the pit, where it is on average 4 ¼ in (10.8 cm) wide, and along the southern half of the east side, where it averages about 7 in (18 cm) wide (Figure 3). About halfway along the eastern side of the pit, the ledge projects out to the west for a maximum of about 1 ½ ft (45 cm) forming what appears to be some sort of pedestal, possibly used to support a post. Part of a ledge, averaging about 4 in (10 cm) wide, also runs along the western half of the north side of the pit. Whether a ledge ran along the western side of the pit we can't say for sure as most of that section is still covered by Structure 9. However, the roughly 1 m long section of that wall that is exposed at the north end of the pit shows no sign of one.

It seems likely that the ledge originally ran along all of the north, east and south walls of the pit but was damaged over time. Indeed, the missing section in the northeast corner may have been destroyed when the rubble was dumped there from the terrace above sometime between circa 1620 and 1640. As to the ledge's purpose, it may have been created to support interior walls designed to prevent the clay walls of the pit from collapsing. Various sources report that the clay walls of such pits were often reinforced with timber or wattle walls. It is possible that a posthole dug into the floor of the pit, along the edge of the eastern wall, about 1 ft (30.5 cm) north of the aforementioned 'pedestal' once held a post that was part of such a wall. An oval indentation located in the remaining section of the ledge in about the middle of the north wall also may once have held a post for this wall.

Having much of the sawpit floor exposed, allowed us to take more precise measurements than were previously possible. The working surface of the pit, excluding the ledge, measures 16 ft (4.88 m) long and 8 ft (2.44 m) wide (Figure 4). Two shallow indentations, both about 6 in (15 cm) deep, and labeled on the site maps (Figures 1 & 2) as postholes, were uncovered extending down into the sawpit floor. The centres of both are located about 3 ft (91.5 cm) south of the north wall of the pit: one roughly halfway between the east and west walls, the other farther west. The distance between these two indentations, from centre to centre, is about 2 ½ ft (76 cm). While we don't know whether they were intentionally dug into the floor or formed overtime from the weight of something bearing down on them, there seems little doubt they mark the location of posts that were once part of the sawpit and sawpit house's superstructure. It may be that they held the legs of one of the wooden trestles used to support the logs as they passed through the sawpit house whilst being sawn.

The Corner Posts

Northwest Corner: As mentioned in my last report, in September 2018, we uncovered a 20 in. (50 cm)

Figure 4: The sawpit and Structure 9 looking northwest.

wide posthole, spanning Operations 121 and 131, just east of the northeast corner of Structure 9 and 4 ½ ft. (1.4 m) north of the northwest corner of the sawpit. A 1 ft. (30.5 cm) wide slot trench extended south-south-west from this posthole for 2 ft. (61 cm). The posthole itself produced only one artifact, a pipe stem with a 9/64 bore diameter, suggesting the hole had been dug early in the 17th century. When we first found this feature, we weren't sure if it related to the sawpit or to Structure 9. However, given its age and position in relation to the other postholes, it now seems clear it was dug to hold the northwest corner post for Guy's first sawpit house.

Northeast Corner: In 2014 excavations in the southeast corner of Operation 126, just north of the pit, uncovered a dark deposit extending down into the sterile subsoil and east into an unexcavated portion of the site. It seemed likely this deposit was part of another posthole but between 2015 to 2022 our efforts shifted back to the terrace where the 1610 enclosure had once stood. In 2023 we returned to our work on the sawpit, and in 2024 we established a 1 m x 3 m unit (Operation 165) immediately east of Operation 126 and the northernmost metre of Operation 162 to determine if this feature was in fact a posthole. Digging here revealed a dark, circular deposit about 12 in (30.5 cm) in diameter, extending down into the sterile orange subsoil. Further digging in 2025 revealed that this was not the posthole but rather the post mold left behind either by the remnants of the decayed post, or by silt that had filled the empty space after the post had been removed. As we dug deeper, we found the outline of the actual post hole, 84 cm long east to west and 36 cm wide north to south, extending down below the orange clay and into the underlying grey gravel for 25 cm (Figure 5). The post mold and, it seems clear, the original post was located roughly in the centre of the hole dug to hold it.

Southeast Corner: Several attempts were made to determine the location of the southeast corner post before we were successful. Assuming the sawpit house was more-or-less symmetrical, and that it may have been as much as 28 ft long, in mid-September 2024 we established a 2 m x 2 m unit (Operation 167) extending south from Operation 163. When our initial attempt to find the posthole was unsuccessful, we changed tack. Hypothesizing that the south end of the sawpit house may have been oriented more to the west, we extended Operation 163 west by another metre in the hope of finding it there. This attempt also was unsuccessful but on September 28, Patricia Elford had a closer look at a dark deposit we had first noticed on the southern

Figure 5: Uncovering the northeast posthole of the sawpit house, looking southwest. The second arrow marks the location of the southeast posthole.

Figure 6: Uncovering the southeast posthole of the sawpit house, looking north.

edge of Operation 163 in September 2023 and found it extended south into Operation 167, forming an elliptical stain measuring roughly 1 m in diameter.

It was too late in the 2024 season to investigate further, but in 2025 we returned to this feature, and further excavations revealed it was indeed a large posthole. Fortunately for us, like the northeast posthole, this one had also been dug below the sterile orange clay and into the underlying hard-packed grey gravel, thus retaining its shape. The hole is roughly four-sided with rounded corners and measures 90 cm long (southwest to northeast) and 65 cm wide (Figure 6). It was also clear that the original hole was much bigger than the post it had been dug to accommodate. Not only had the hole retained its shape, but the impression of the base of the post (the post mold) it once held could be seen imprinted in the northwest corner of the post hole. This post was 8 in (20 m) in diameter.

Southwest Corner: Having established the location of three of the sawpit house's four corner posts, we now know both the building's orientation and rough dimensions. The distance, from centre to centre, along the east wall of the building, as measured from the northeast to the southeast corner post, is 23 ft 11 in. (7.30 m). We had originally assumed the building was longer, perhaps as much as 28 ft (8.5 m), and, based on this assumption, in September 2024, we had established a triangular unit (Operation 166) extending south from the southwest corner of Structure 9 for 2 m. Our attempts to locate the posthole within the boundaries of this unit proved unsuccess-

ful and we now know why. Since the building was roughly 4 ft shorter than we had assumed, it was clear that its southwest corner would be much closer to the south end of Structure 9 and might even be buried beneath it. As it turned out, we were lucky. Digging along the western side of the south end of Structure 9 in early September 2025 revealed part of a posthole extending south from beneath that building. Given its location, and the fact that it clearly predates the construction of Structure 9, there can be little doubt that this is the hole dug to hold the southwest corner post of the 1610 sawpit house.

The Sawpit House

Perhaps not surprisingly for a 17th century vernacular structure erected quickly and not intended to be permanent, Guy's first sawpit house was not symmetrical. Measuring from the centres of the postholes, gives us a distance of 23 ft 11 in (7.30 m) along the buildings east side, 22 ft 3 in (6.78 m) along its west side, 12 ft 6 in (3.81 m) along its north side, and 14 ft 3 in (4.34 m) along its south side. Of course, the outside dimensions of the building would have been somewhat larger. Measuring instead from the outer edges of the postholes, the external dimensions of the building would have been about 24 ½ ft (7.47 m) along the east side, 22 ft 11 in (6.89 m) along the west side, 13 ft 2 in (4.01 m) along the north side, and 14 ft 11 in (4.55 m) along the south side (Figure 7 & 8).

The fact that the building was wider at the south end than at the north may provide a clue as to how it functioned. It seems logical to assume the raw logs entered the sawpit at its wider south end, closest to the terrace on which they were cut, and the finished boards exited at the narrower north end, closer to the water's edge and from whence those boards being shipped back to England, or elsewhere, could more easily be loaded aboard boats and transported to the larger ocean-going vessels farther out the harbour.

An Exciting Discovery

While in Cupids in late May 2025, I ran down to the local post office to mail something and the post mis-

Figure 7: The sawpit with posts marking the four corners of the sawpit house.

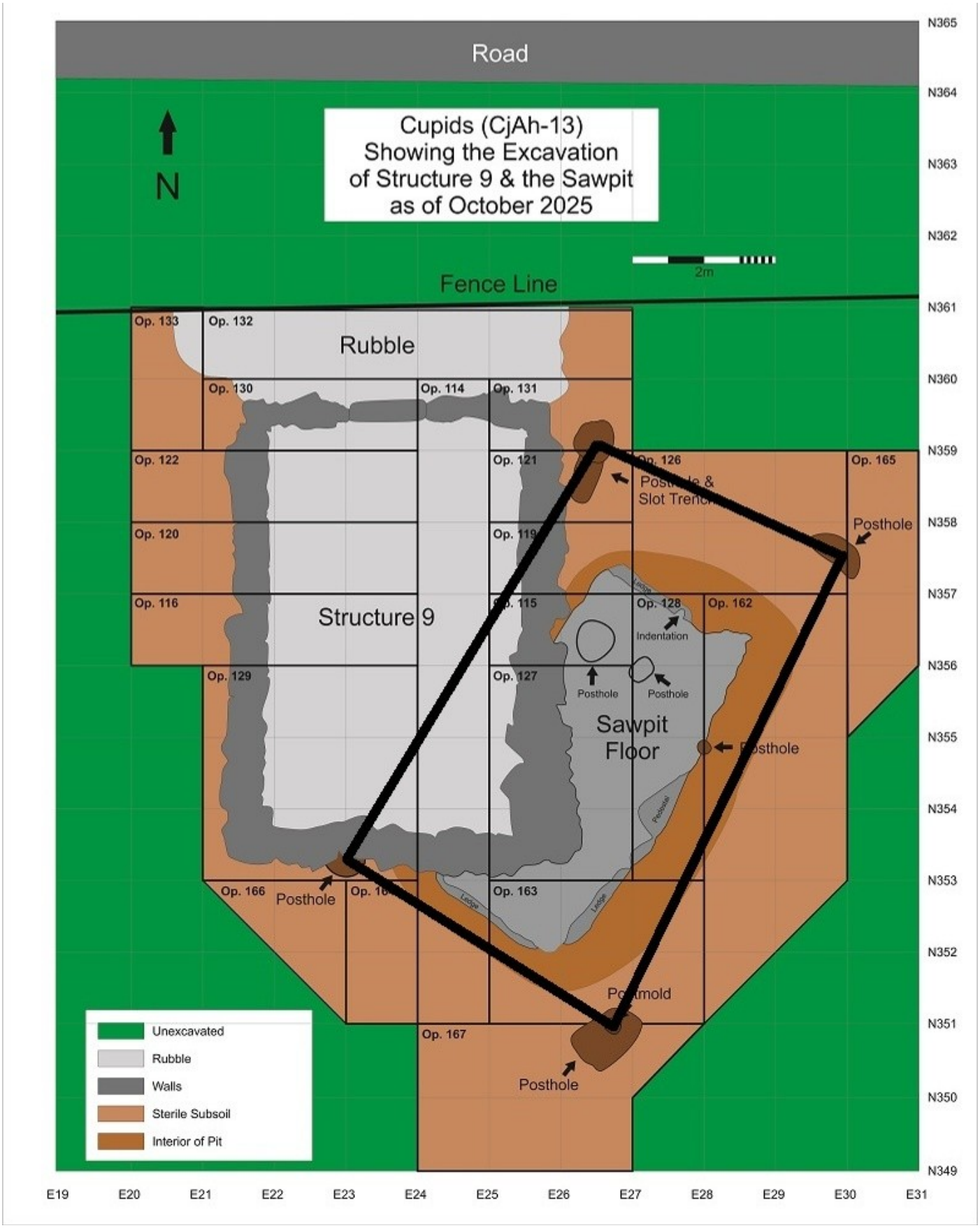


Figure 8. The outline (in black) of the 1610 sawpit house based on the location of the four corner posts.

Figure 9: The corner-notched biface found at Cupids, May 2025.

tress, Michelle Dawe, mentioned that, while out walking one evening, she had found something on the side of the road that I might find interesting. She had some photos on her phone, and I was more than a bit surprised to see it was a large (11 cm long) corner-notched, stone biface. I asked Michelle if she would bring it to work one day so I could photograph it. She agreed and a few days later (May 28), I photographed the artifact and sent copies of the photos to the staff at the Provincial Archaeology Office (Figure 9).

I had not seen anything quite like this point before in a Newfoundland context and when the staff at the PAO got back to me, I realized why. They replied saying that it looks like an Intermediate First Nations point dating to between roughly 2000 and 3000 years ago. If this is correct, and the place the artifact was found turns out to be a site from that period, it would be one of very few such sites found on the island of Newfoundland.

On May 31, Michelle showed me where she had found the point and on August 13, the Provincial Archaeologist, Jamie Brake came out to have a look. The artifact was found on the landward side of the main road that runs through Cupids, about 1 ½ km out the harbour to the northeast of the Cupids Cove Plantation PHS. To the north of the road, the bank falls away steeply down to the salt water, while to the south it rises about 1m to a level meadow about 60 m wide that extends back from the road for about 22 m. An old house once stood in the meadow but all that remains of it today is a stone foundation. While it may be possible that someone lost the artifact in the recent past, this seems highly unlikely, and it certainly doesn't look like the sort of thing someone would just discard. It is far more likely that it eroded from the bank below the meadow not long before Michelle discovered it on her walk. It's hard to imagine it being on the side of the road for very long without someone seeing it and picking it up.

Stray finds are sometimes made in archaeology, and it could be that this tool was dropped by someone passing through the area over 2000 years ago and that there is nothing else to be found. It's also possible it could have been part of a cache of tools stored in the meadow by people several millennia ago and never recovered, or an offering placed in a grave. Or it may be that the meadow was once the site of a hunting camp. It's located in an elevated area overlooking the entrance to Cupids harbour and would have been an excellent place to monitor whales or other sea mammals moving in or out.

Excavations around Structure 9 and the 1610 sawpit have now been completed. In 2026 we will be stabilizing the sawpit and landscaping the area. Our excavations in 2026 will focus on the 1610 enclosure walls in an attempt to better define their boundaries and uncover more of the postholes. If time permits, we may also do some testing in the meadow where the biface was found to determine if it is indeed a prehistoric site.

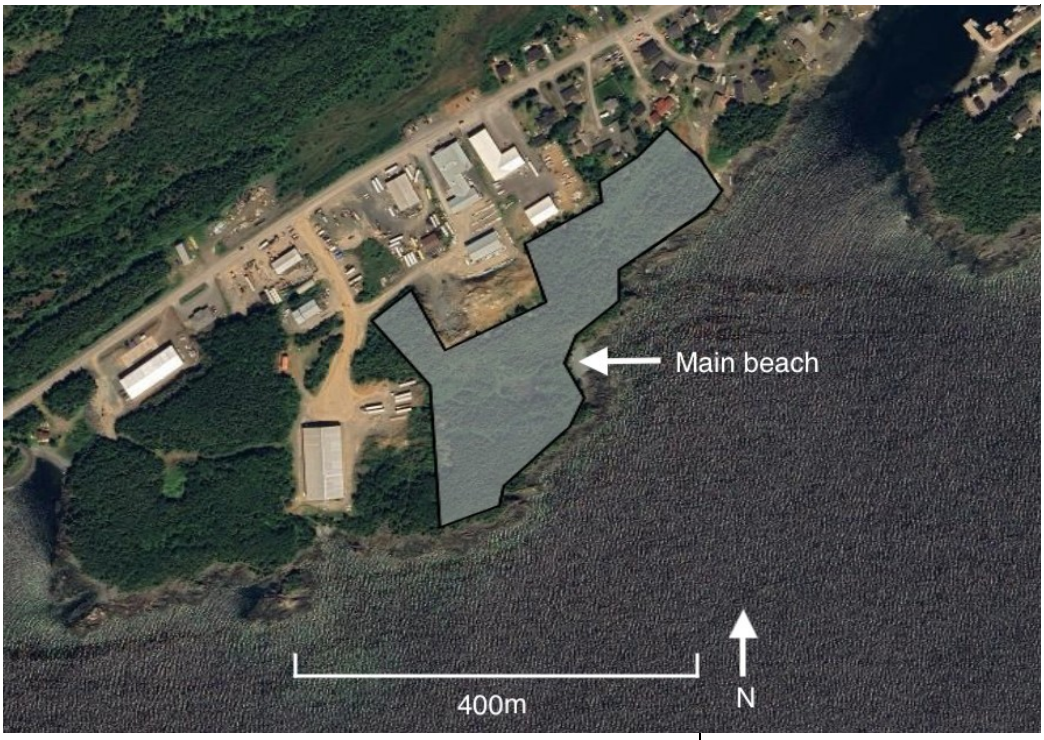
An HRIA in Triton, Newfoundland

Zoe Helleiner & Pier-Ann Milliard
Era Nova Archaeological Services

Project overview and previous research

In June of 2025, Era Nova Archaeological Services conducted an Historic Resources Impact Assessment for a proposed land development located on a portion of the coast in Triton (see Photo 1). No previous work had been conducted on this parcel of land, but the wider area is known to be archaeologically sensitive. Most notably, Laurie McLean (2021, 2022, 2023, 2024) has recently conducted intensive research and survey work in Badger Bay and the wider region, locating new sites and revisiting known ones with a focus on Beothuk archaeology. Historical records provide clear evidence of Beothuk use of the Badger Bay area, particularly in the early 19th century, when the watershed appears to have become the preferred access route to the sea (McLean 2021). Of relevance from McLean's recent work are two locations approximately 5km southwest and northeast of Triton, which were recently tested and noted as sterile (McLean 2022).

Photo 1: Satellite view of land parcel with location of main beach.



Thompson (1980), Penney (1988), and Reynolds (2005) have also conducted surveys of Notre Dame Bay, including Badger Bay. Known site locations as a result of this survey work in the immediate vicinity on Triton Island include a site yielding Little Passage and Beaches material (DjAv-05), and other small find locations dotted around the island found during test pitting or construction (DiAw-15, DjAv-10, DiAw-13). A Beothuk burial site is also located nearby (DjAv-11 burial, DjAv-09 habitation), and archaeological material has been found on the nearby Big Island and Brighton Tickle Island belonging to Beothuk, Recent Period, and Pre-Inuit Indigenous cultures.

Methodology and results

Previous work has therefore made it evident that investigating this parcel of land was critical, especially since most of the other sites in this region have been located on the coast. The objective of this assessment was therefore to determine whether the project area exhibited characteristics suitable for past occupation or seasonal use, and, if so, to identify the cultural affiliation and temporal context of any findings. To meet these objectives, a systematic pedestrian survey was conducted covering the entirety of the parcel under investigation. Areas exhibiting archaeological potential were flagged for further testing. Special attention was paid to the three beach coves seen from satellite imagery to see if they presented ideal locations for ocean access for past populations.

During the walkover survey, it quickly became evident that much of the project area had been heavily disturbed by surrounding activities, in some cases making access inland extremely difficult. While the

Photo 2: Panoramic view from the main beach.

largest beach was reached and presented potential in that it was flat and dry, the second two were inaccessible as they were surrounded by steep cliffs. It also became clear many large swaths of the parcel were waterlogged, which had resulted in what originally looked to us like promising flat areas with low vegetation in the satellite imagery. The remaining terrain was largely unsuitable for archaeological activity due to highly uneven ground and inland cliffs/heavy slopes.

Subsurface testing was carried out mainly around the flat beach, but also in the more disturbed areas to ensure full coverage, with bedrock or underlying beach rock generally encountered at shallow depths. Although no cultural material was recovered, a small, 20th century constructed log cabin (measuring approximately 8 ft by 12 ft) was identified. Based on the results of the archaeological field assessment, no other features or artifacts were identified within the project area. Combined with the heavily disturbed nature of the terrain and the presence of unsuitable environmental conditions (e.g., bogs, cliffs, and severely uneven ground), we concluded that this parcel of land does not exhibit significant historic resources. However, we would like to extend our gratitude to the many wonderful people in Triton who helped us throughout our experience by allowing us to access through their properties and by contributing their passion and knowledge of the local history and archaeology!

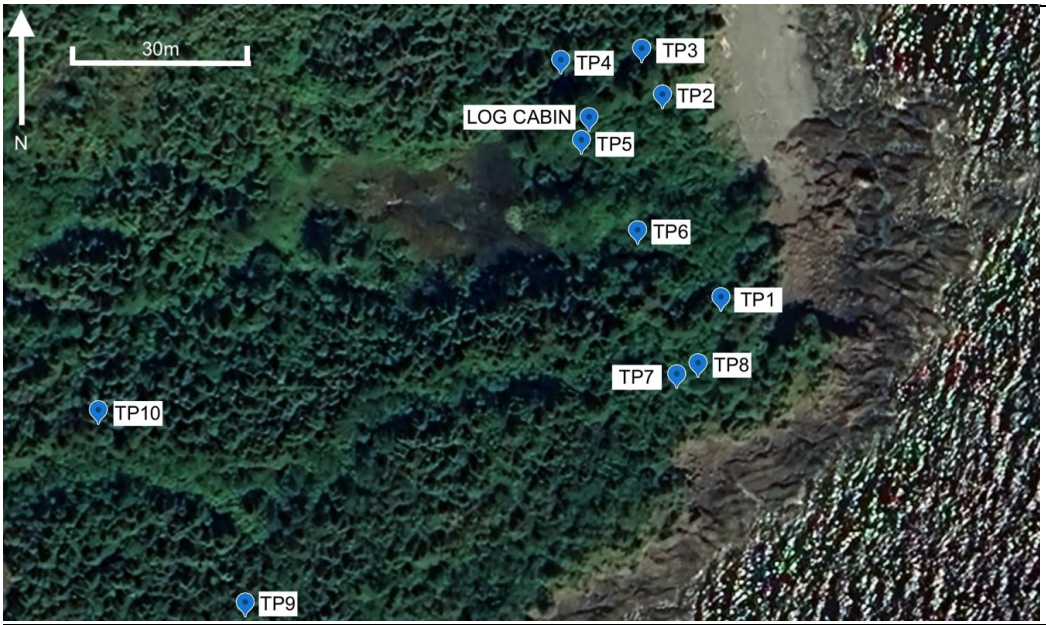


Photo 3: Test pit locations around main beach.

References

McLean, L. (2021) The Beothuk, 2021 And Beyond A Recap Of Past Research And Future Prospects.

McLean, L. (2022) Final Report for an Archaeological Survey of Badger Bay, Newfoundland. Permit No. 22.25, 22.25.01. Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Arts and Recreation, Government of Newfoundland and Labrador. St. John's.

McLean, L. (2023) Summary of Research Undertaken in 2022. In Provincial Archaeology Office 2022 Archaeology Review.
McLean, L. (2024) Tracing Shanawdithit: An Archaeological Survey of the Badger Bay Watershed and the Adjoining Coastline, Permit 23.21. Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Arts and Recreation, Government of Newfoundland and Labrador. St. John's.

Measuring Muntins:
The First Steps Towards a Chronology on the Avalon

Tienne Johnson
Heritage Foundation of Newfoundland and Labrador

Since June of 2025, the Heritage Foundation of Newfoundland and Labrador (Heritage NL) has been visiting properties across the Avalon Peninsula to measure and profile muntins bars on historic wooden windows. These bars were once essential to the structure of a window as it was not possible or too expensive to make panes of glass large enough to cover an entire window. Instead, multiple smaller panes of glass would be used and held by wooden muntin bars. By the early to mid-20th century, glass-making technology advanced enough that it was affordable to use single large panes, slowly making muntins obsolete.

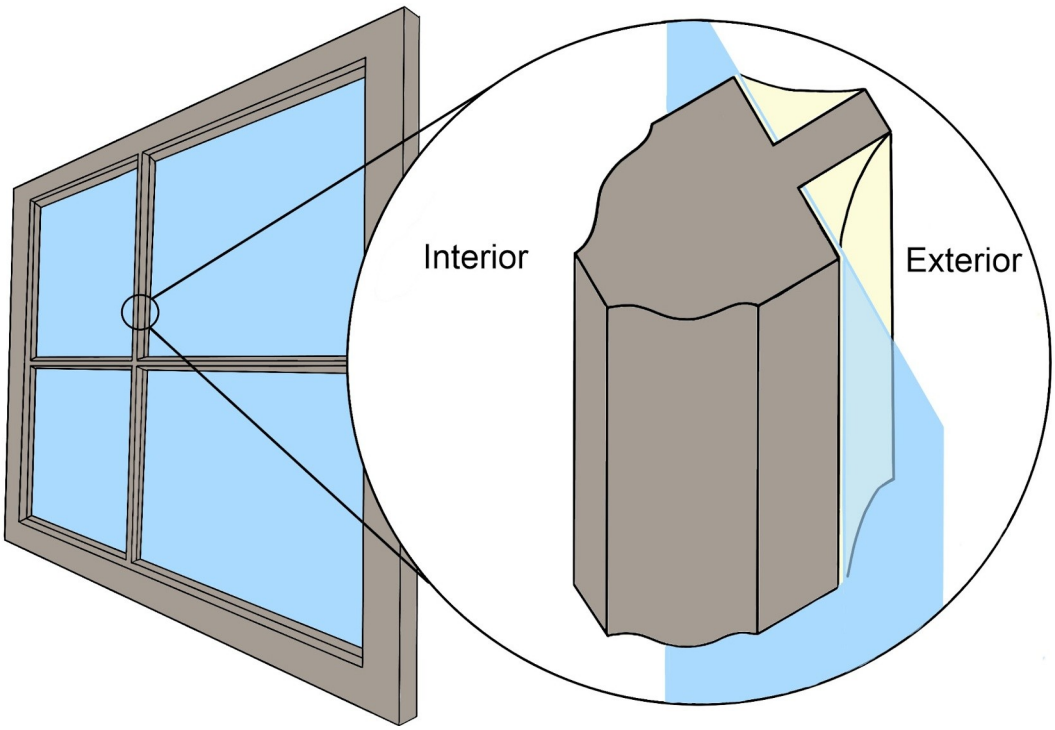
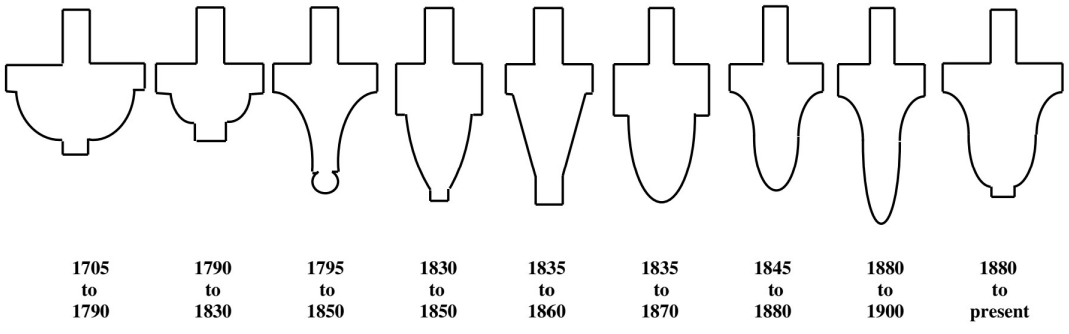


Figure 1: Close up of a muntin, showing the interior side that is moulded.

Although these bars were present in most western-style wooden windows for centuries, there is very little written about them. We do know, however, that the evolution of their design since their creation in the late-16th century follows a 'thick to thin' trend as new techniques were developed, where older muntins are bulkier, and later styles are more thin (English Heritage 2014; Garvin n.d.). These bars were also moulded (or cut) on their interior side to reflect architecture trends, and transition from simple shapes to more elaborate profiles.

The only research-based chronology of muntin profiles was created by James Garvin and offers a generalized evolution of muntins from New England, featuring nine styles from 1705 to 'present' (see figure 2) (n.d.). While this is a helpful place to begin, it cannot be assumed that other regions will have the same evolution of styles. It was decided that Heritage NL would create an inventory of muntins from within the

Figure 2: Garvin's Chronology from New England.



province to hopefully create a chronology unique to Newfoundland and Labrador.

To learn how muntins changed through time, we began by establishing a pool of properties to visit. This was done by releasing a call on social media asking audiences to reach out to us if they had a property with a window that was: (1) wooden with muntins, and (2) original to the building or datable to a decade. As we are attempting to create a chronology, it is necessary to only include windows that we are relatively confident of the date of construction. It is not possible to be completely confident of dates for several reasons. First, the tools used to mould muntins could have been originally made in the 1890s, but used again in the 1950s. Second, windows are easily–and often–replaced, without record or knowledge of current owners.

To mitigate these challenges, photographic evidence and property records were used to help support the date of construction for windows. Moreover, the physical appearance of windows is taken into consideration. For example, older windows will have hand-made 'wavy' glass, whereas newer windows will have industrially made, perfectly-flat glass. The location of a window is also taken into consideration, as windows that are less accessible, such as in eaves or above doors, tend to be expensive to replace and are often left alone.

This report offers the preliminary results of this project, however further research in this area is necessary. A general trend of muntin profiles was revealed, but with the dataset being small, it is not possible to draw confident conclusions.

Methodology

So far, twenty-one properties have been visited and forty-two muntins have been measured and profiled. One property was on the Bonavista Peninsula, while all others were on the Avalon Peninsula (see figure 4). Muntins were measured using a caliper and ruler, and profiled using a profile gauge. To ensure each muntin was measured the same way, morphological terms were given to the features of a muntin that were measured (see figure 3). The profile sketches were transferred into Sketchbook Pro, and digital renderings of each profile were created.

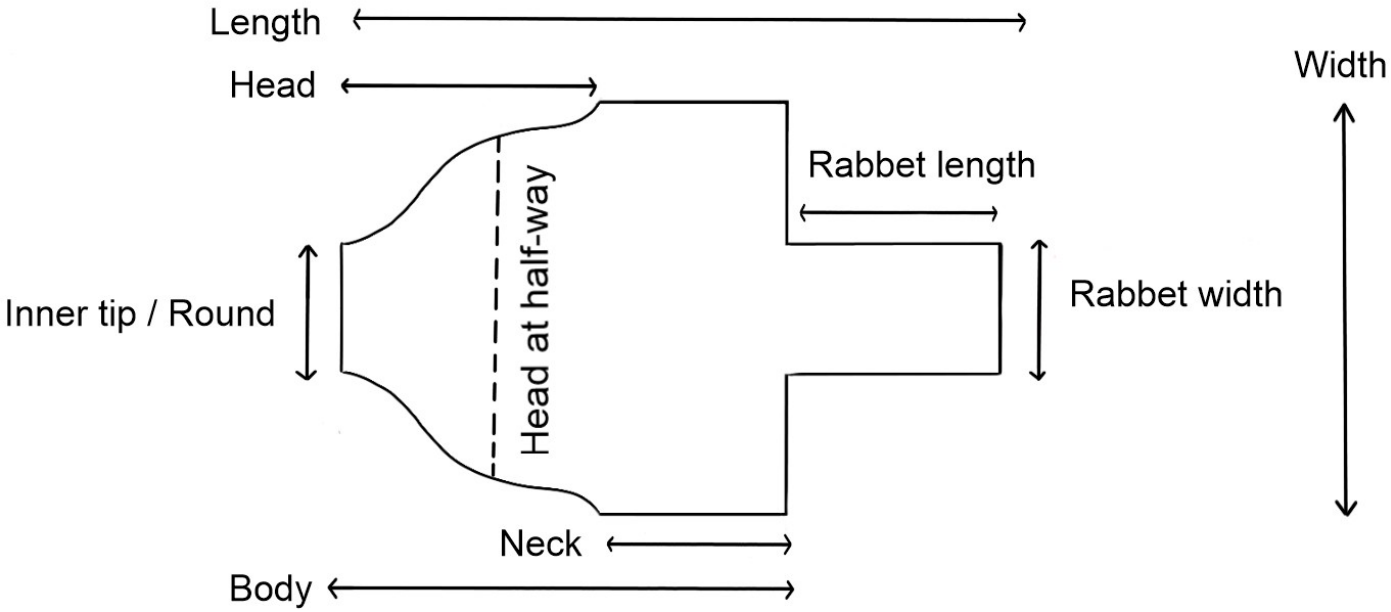


Figure 3: diagram showing the morphological features of standard muntin.

Four windows were excluded from the dataset: 2025-4a and 2025-4b, as (a) was a replica, and (b) was located where it was not possible to properly profile the muntin. 2025-17c was excluded as it was made of metal. 2025-20a and 2025-20b were excluded as a confirmed date of construction could not be found. This left 38 profiles in the dataset for analysis.

Classifying Muntin Profiles

Preliminary analysis of the dataset has led to the identification of three key factors to classify muntins: (1)

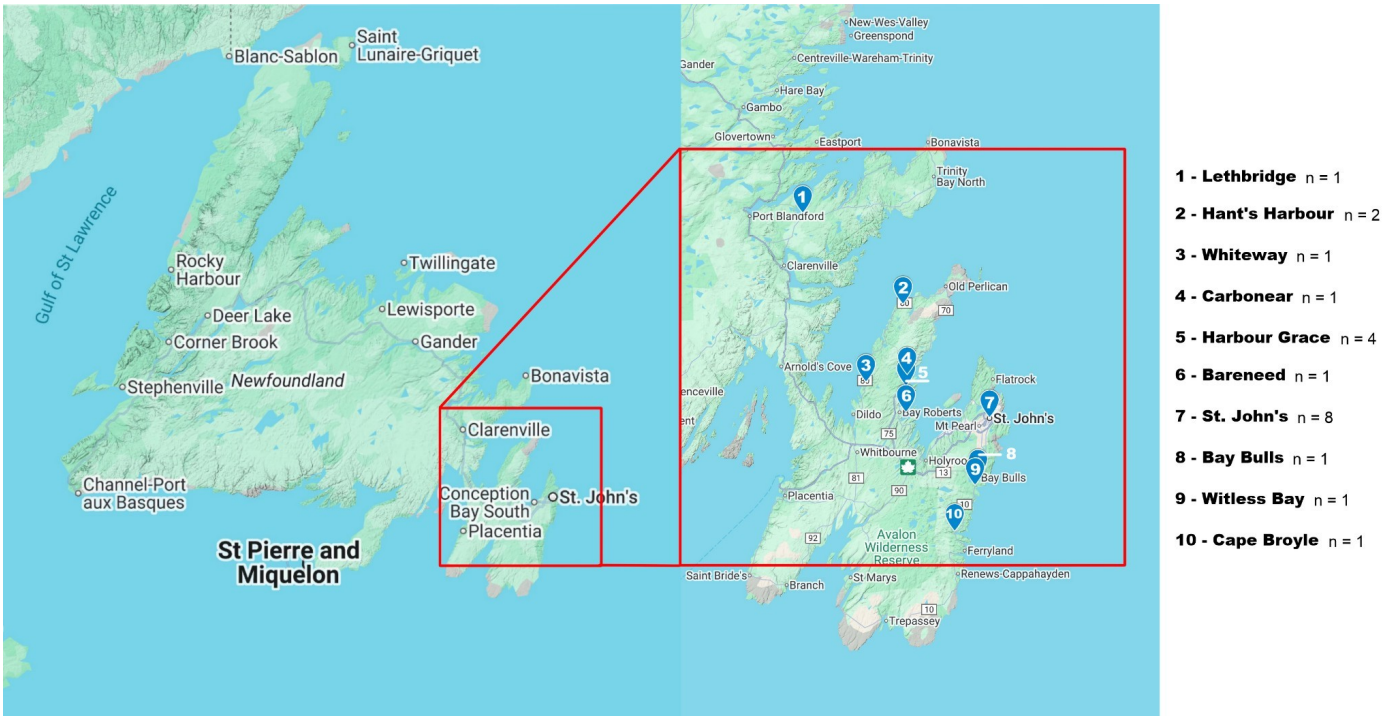


Figure 4: Map showing locations of towns and number of properties visited.

Figure 5: Taxonomic Key for classifying muntins.

Fillet?	
Yes	No
Fillet Location: 1. Tip 2. Neck 3. Both	
Head Shape 1. Multi Curved 2. Spherical 3. Angular a. Presence of body? i. Yes - Rustic ii. No - Flat 4. Conical a. Convex b. Concave	**Head Shape** 1. Multi Curved 2. Spherical 3. Angular a. Presence of Body? i. Yes - Rustic ii. No - Flat 4. Conical a. Convex b. Concave
Tip Width 1. Thin 2. Wide	**Tip Width** 3. Thin 4. Wide

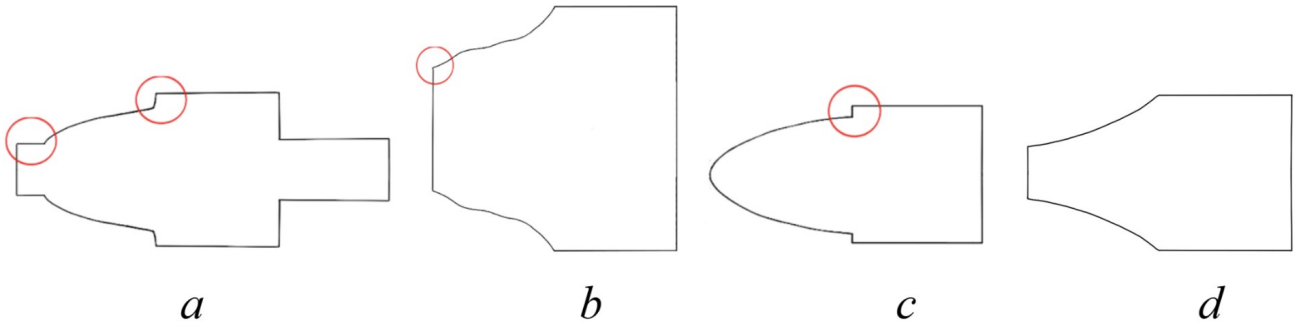


Figure 6: (a) fillets on tip and neck, (b) fillet on tip only, (c) fillet on neck only, (d) no fillets.

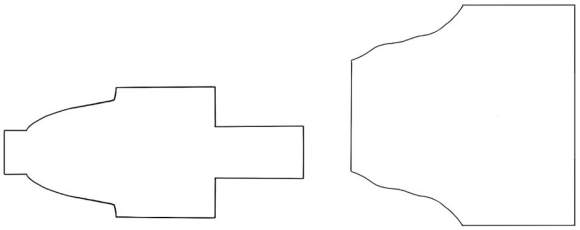


Figure 7: Two variations of Mutli-Curved profile; (left) angular, (right) curved.

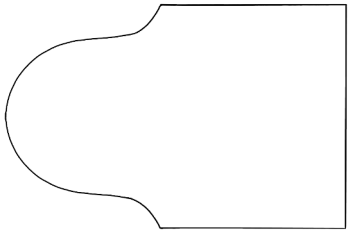


Figure 8: Example of a Spherical head shape.

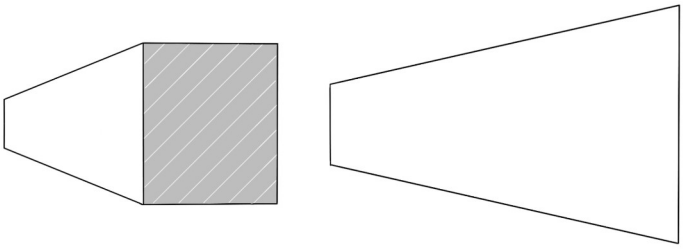


Figure 9: Two variations of the Angular profile, (left) Angular Rustic with body, (right) Angular Flat without body.

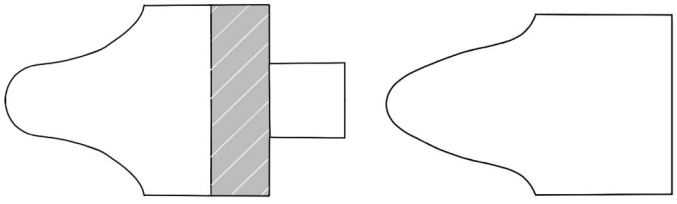


Figure 10: Two variations of the Conical profile, (left) Conical Concave, (right) Conical Convex.

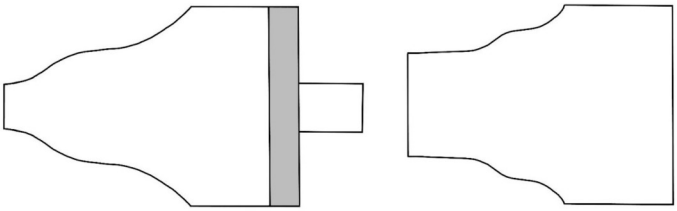
Presence and location of fillets, (2) Head Shape, and (3) Tip Width. For ease, a taxonomic key was created.

The first step of classification is determining if and where a muntin has fillets. These are corner-like surfaces that appear on the tips and/or necks of a muntin (see figure 6).

With fillets identified, focus is placed on the shape of the head. There were four shapes identified in the dataset: Multi-Curved, Spherical, Angular, and Conical. Multi-Curved are identified by multiple curves or angles along the head (see figure 7). Spherical are identified by having no distinct concave or convex angle in the head, and where tip width is equal to the head width (see figure 8). Angular are identified by having sharp angles. These are divided into two sub-categories: (1) Rustic, with a distinct body and (2) Flat, with no distinct body (see figure 9). Conical are identified by having a cone-like appearance, where there are few to no sharp angles. These are divided into two sub-categories: (1) Concave, where head slopes inward and (2) Convex, where head slopes outward (see figure 10).

Once the presence/location of fillets and head shape is decided, a distinction is made between thin and wide-tipped muntins. It was found that the tip width does not have a standard co-relation to the overall width of the muntin, making this an interesting feature to compare (see figure 11). To quantify

Figure 11: (left) 2025-3a with tip that is 28% of muntin body; (right) 2025-16 with tip that is 42% of muntin body.



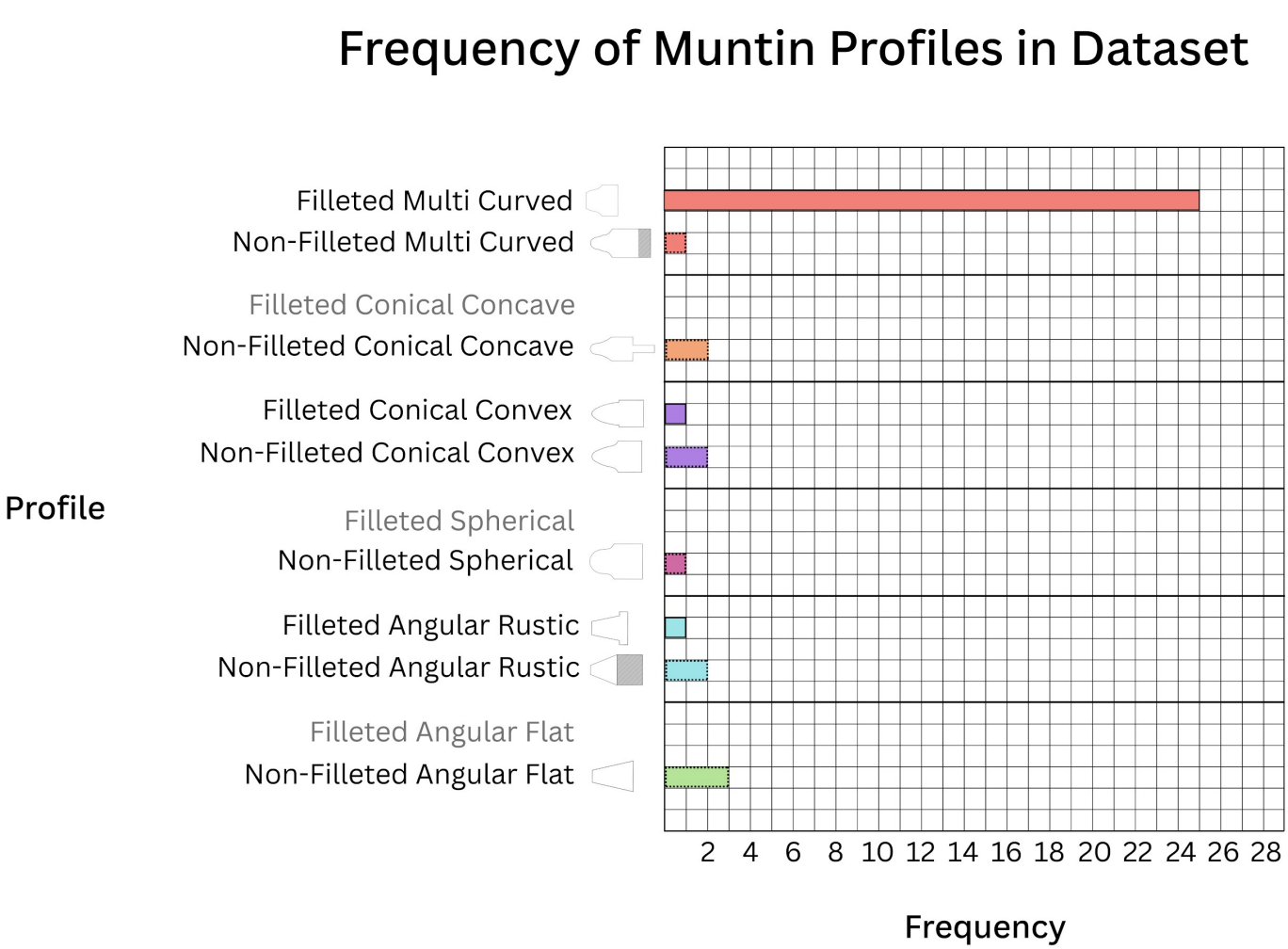


Figure 12: Graph showing the frequency of muntin profiles as they appear in the dataset.

the variation, the difference between the tip width and overall width was converted into a percentage, and then the average was taken (equaling 36%). If the difference was below the average, muntins were categorized as 'thin tipped', and if the difference was above the average, muntins were categorized as 'wide tipped'.

Trends

Filleted Multi-Curved is the most common and enduring profile (see figure 12 and 13), with its first appearance between the years 1827-1831[1] and its last in 1963, and a total of twenty-five profiles from within the dataset. Multi-curved were used at commercial, residential, public, religious, governmental, industrial, and farming property types. Non-Filleted Multi-Curved appears only once in the period 1827-1831 and appeared at a governmental property.

Other profiles (n=12 of 38) appeared between one and three times, demonstrating a drawback in the data set (see figure 12 and 13). With minimal appearances, it is not possible to draw conclusions about the beginning or end of when a given profile was in use. Based on the inventory, profiles appeared through time as follows: Multi-Curved, Conical Concave, Conical Convex, Spherical, Angular Rustic, then Angular Flat (see figure 13). Whether or not these styles followed this order of appearance cannot be confirmed, but it is notable that they had an almost sequential appearance.

The 1890s were seen to be the most concentrated and varied decade, with fourteen profiles total. Part of this concentration is due to multiple windows being measured at individual properties, with fourteen profiles coming from only seven properties. Ten of which are from St. John's, and seven of those are a result of the rebuilding process after the fire of 1892. These profiles consist of five Multi-Curved and two Angular Flat.

[1]*The property was constructed between the years 1827 - 1831, therefore the window cannot have a construction date of a single year.*

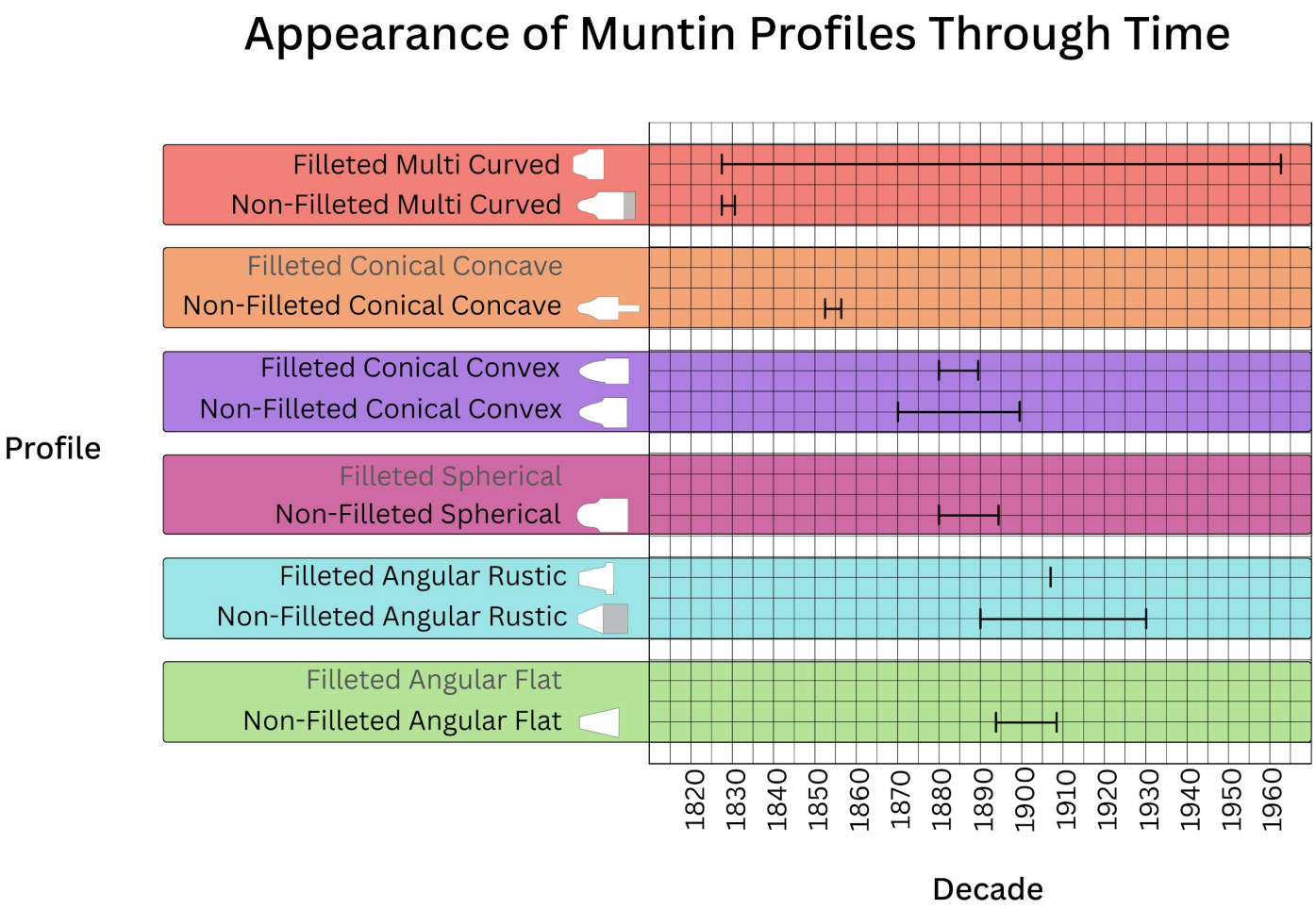
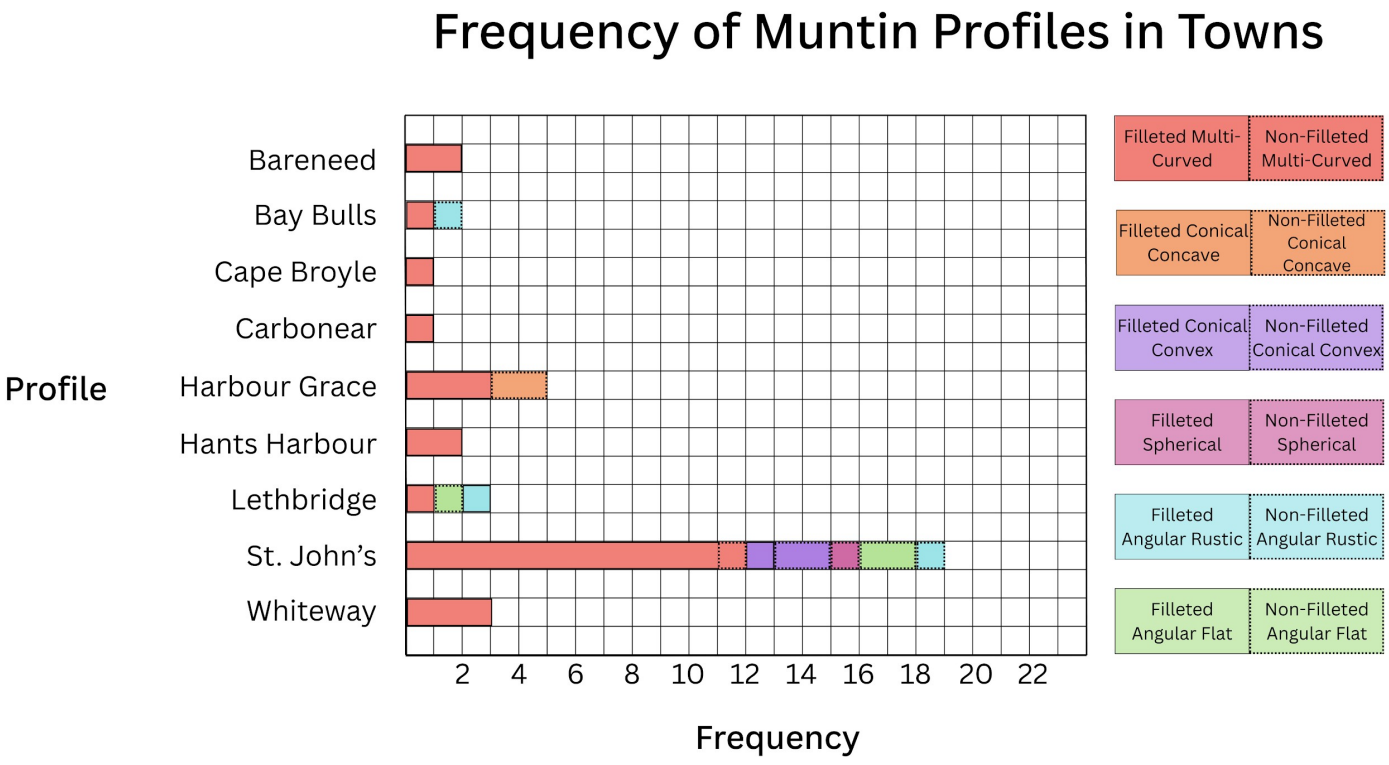


Figure 13: Graph showing the appearance of muntin profiles through time.

Figure 14: Graph showing frequency of profiles in different towns within the dataset.



At this time, there does not seem to be a co-relation between 1) tip width and construction date or 2) profile and town of origin.

Conclusion

Interestingly, when looking at the dataset we can see—though minimally—those profiles appeared one after another. Further research is necessary to find timeframes of when profiles were being used, but the results of this project may outline a chronology of muntins on the Avalon Peninsula. Moreover, when compared to Garvin's chronology (see figure 2), we see head shapes in this dataset that are not present in Garvin's, such as Spherical and Angular Flat. Vice versa, there are profiles in Garvin's chronology that have not appeared in this project's dataset, such as the Angular variation from 1835-1860 (see figure 2). This demonstrates that there are distinct trends and profiles seen in the Avalon Peninsula that call for its own chronology to be created.

This project has laid the groundwork for future researchers to build upon, where more muntins from the Avalon—and hopefully beyond—could be inventoried. Eventually, we hope to fully understand the transitions between muntin styles, and possibly see a full chronology.

References

English Heritage
2014 Traditional Windows: their care, repair and upgrading. English Heritage, London.

Garvin, James
N.d. Historic Wooden Windows, New Hampshire Division of Historical Resources. From: http://www.james-garvin.com/images/Window_Sashes2.pdf

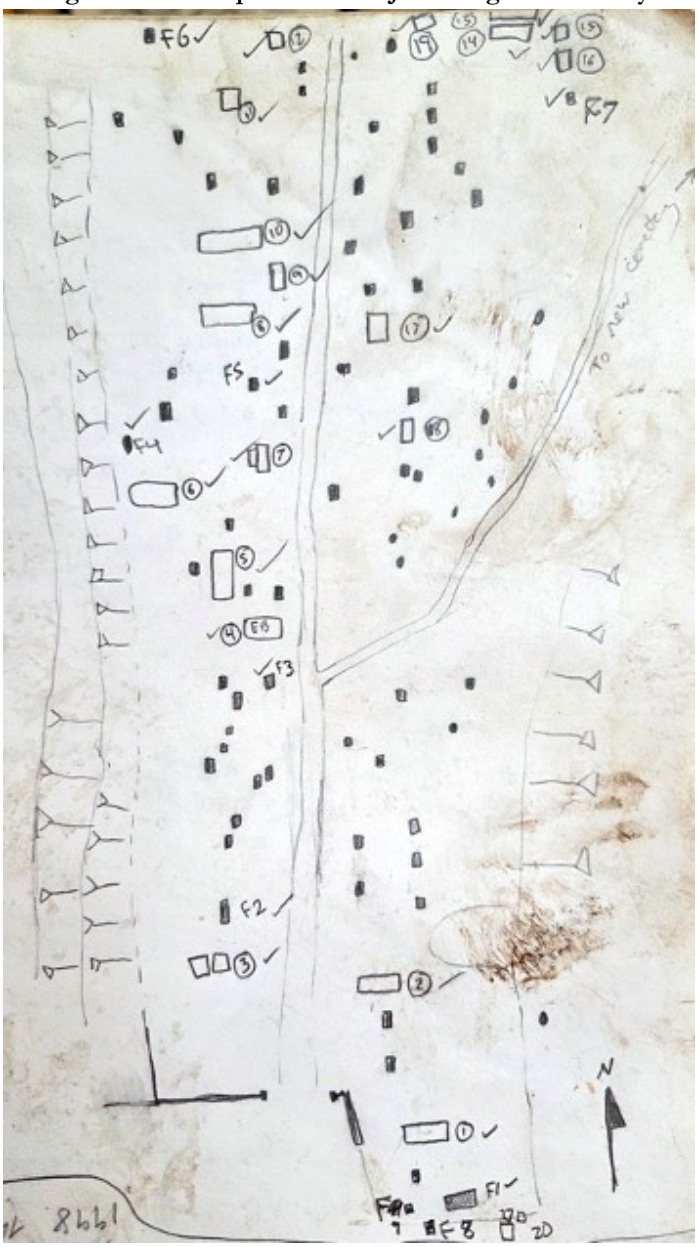
Fieldwork Report 2025 Season - Black Cat Cemetery Preservation

Robyn Lacy & Ian Petty
Co-Directors, Black Cat Cemetery Preservation

Another cool spring this year had us waiting until mid-June before starting on any of the fieldwork projects around the province. Fieldwork this year was carried out between mid-June and late-October, with a community event taking place the weekend before Halloween, and a consultation in November for volunteer assistance. The majority of supplies used in store restoration and repair are not suitable for temperatures below 10.C, which makes a field season in Newfoundland and Labrador interesting. This year, we began researching alternative cold-weather epoxies, and through discussion with colleagues in the fields of stone buildings and gravestone conservation, have acquired a new epoxy which can set down to just below freezing, which should significantly extend not only our ability to carry out fieldwork in the Atlantic region, but also the strength and stability of the repairs in our climate.

This season, Black Cat Cemetery Preservation (BCCP) completed 10 projects across multiple communities in Newfoundland and Labrador and Ontario, including our first project in Labrador in collaboration with the Battle Harbour Historic Trust. Field projects took place in St. John's, Trepassey, Battle Harbour, Greenspond, Open Hall, Torbay, and a digital training lecture in London, Ontario. In total, 91 gravestones were cleaned and/or restored, and a further 222 gravestones were surveyed and assessed for future conservation in Trepassey. BCCP also hosted four (4) public events, including our 3rd time as a host for the Talk Death Cemetery Scavenger Hunt. Robyn presented an online training session to summer staff at the Mt. Pleasant Cemetery in London, Ontario, which was well attended by permanent staff at the cemetery as well, and was organized by a former colleague from Robyn's time at the Woodland Cemetery, also in London.

Figure 1: Sketchmap of the Old St. James Anglican Cemetery.



Battle Harbour

The biggest project in 2025 was Battle Harbour. Director Peter Bull of the Battle Harbour Historic Trust contacted BCCP in 2023 about the potential for conservation work to be carried out on the two cemeteries located on the island of Battle Harbour. After a meeting and presenting a proposal for the work, the fundraising began on the side of the Trust. It is extremely hard to find funding for these types of projects, especially when they involve travel to remote locations. How-

ever, in March 2025, we received an email that funding was secured and the fieldwork was in motion. The trip to site took two (2) full days of travel, and involved two different ferries to arrive at the island. We were put up in the Director's cabin, a former fishing stage on the water, with a small sink and wood stove, but took most of our meals up with the guests in the made hall/former storehouse. Battle Harbour has been visited and used by Indigenous peoples in Labrador for years before the arrival of the Europeans in the late 18th Century, though little formal archaeology has been carried out on the island. The mercantile premises was established around the 1770s by John Slade from Poole, England, and later became the location for one of the Grenfell Missions. The community was known as the unofficial capital of Labrador for its role in the sealing and fishing industries, and some of the original 18th-century buildings are still present, carefully restored by the Trust and community members who were trained in historic building carpentry. A number of members of staff grew up in Battle Harbour when there was still a seasonal town, before the cod moratorium.

Figure 2: Gravestone of Thomas Blan[ford] after restoration (Lacy 2025)

The island is home to two graveyards, the Old and New St. James Anglican Cemeteries. The Old Cemetery is a short walk from the historic church in a gully, which is also home to a pair of Arctic Foxes, while the New Cemetery is accessed by circumnavigating the island on a trail, or climbing a near-vertical cliff face aided by chain railings from the Old Cemetery. This is the path pall-bearers would have had to take when bringing coffins up for burial. Conservation at the Old Cemetery included 52 gravestones, and a further 29 gravestones at the New Cemetery. The earliest gravestone we recorded at the Old Cemetery with a visible date was that of 'Henry Cram Manston', who died in 1840, but the burial site itself was likely established as early as the late 1700s. The limestone grave of Thomas Blan[ford] may date to 1833 or the early 1800s, based on records of several individuals with the same name on the island. This stone was extravagantly decorated, featuring a central image in the lunette of a casket with an urn on top in an oval frame, flanked by sheaves of wheat. The image is 'hung' by a ribbon or fabric, and has decorative laurels below and bells or flowers on either side. Wheat can symbolise several things, including a long and fruitful life, or the seasons of life.

Most of the gravestones at the Old Cemetery were made from limestone, imported from Ireland or England, with a few marble headstones, and numerous uninscribed fieldstones marking additional graves. A large limestone gravestone to Aquila John Hedderson, was inscribed with the carver's name 'C. Curtis/Poole', indicating that the carver was located in England, and this stone had been imported from Poole, where Battle Harbour had strong connections. Locating gravestones imported from Europe that include the carver information is relatively rare in the province, and the identification of the Hedderson stone's carver is significant for our understanding of the trade.

There were several uninscribed fieldstones, made from locally sourced material, around the site. It is also likely that a number of graves were marked with wooden crosses that have since degraded. This is the case for Pomiuk, a young Inuit boy brought to

Figure 3: Gravestone of Aquila John Hedderson, carved by C. Curtis Poole (Lacy 2025)

Battle Harbour to be cared for at the Mission after suffering injuries while being displayed at the World's Columbian Exposition in 1893. Photographs from after his death in 1897 show a white painted wood cross marking his burial near the fence at the Old Cemetery (fence no longer present). The exact location of his grave is unknown today within the site.

The New St. James Cemetery, situated to the northeast of the Old, occupies a slight, northeast slope and has been in use since the early 1900's. Accessing this New site meant climbing a steep trail up and out of the basin that the Old Cemetery is set in and a full afternoon was spent precariously hauling our gear, including fish pans full of gravel from Old to New. Burials at this site followed this same steep path, with coffins hauled up and over to their final resting place.

Many of the stones at the New Cemetery were manufactured from white marble though a smattering of granite, and concrete markers were present as well. A single fieldstone was also present at the site. The most notable grave at this cemetery is Victor Croucher, well known for being immortalized in Newfoundland history at the age of three when he was photographed between two king cod hanging at the pork storehouse in 1901, by photographer Robert Holloway (father of Elsie Holloway). Our first task at this site was to reset Victor's gravestone, which had fallen from its base years before. Victor was well loved in his community, and tragically died during a bird hunting accident when he was only 21 years old. The bottom of his epitaph reads: "Erected by his sorrowing Wife and Father'. It was an honour to restore his gravestone.

Greenspond

The ongoing project in Greenspond continued this summer, with one visit to the island to wrap up work at the Old United Church/Methodist Cemetery (see Lacy and Petty 2024). We are working with the Greenspond Historical Society on this project, which began with a survey of all cemeteries in Greenspond in 2022. In August 2025, we worked on eight (8)

Figure 4: Before (left) and After (below) Restoration at the Old St. James Cemetery, Battle Harbour (Lacy 2025).

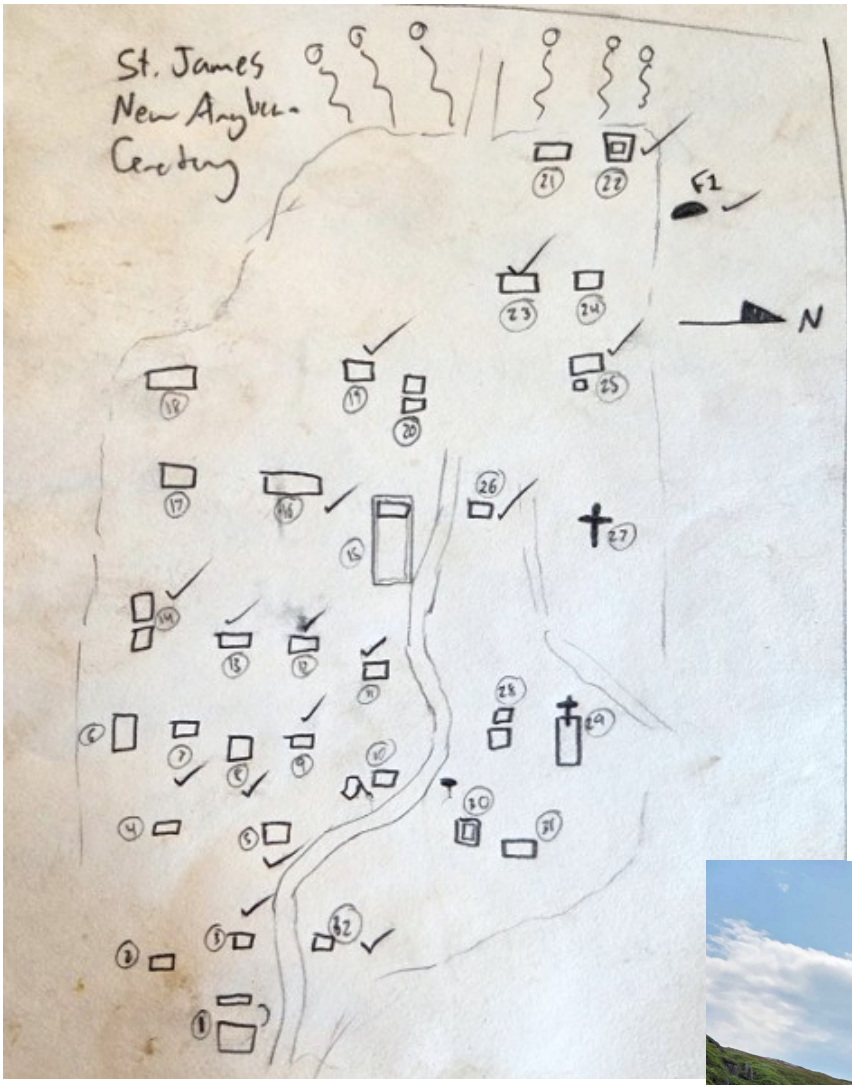


Figure 5: Sketch map of
New St. James Anglican Cemetery.

Figure 6: The gravestone of
Victor Croucher after restoration (Lacy 2025)

gravestones at the Old UC Cemetery, including four (4) complex monuments. This included the grave of Reverend William Dutton, who arrived from England in July 1870 to be a Methodist reverend in Greenspond. Unfortunately, he contracted typhoid fever and died on December 13, 1870. His gravestone was a unique design for the site, with a three-dimensional opened book on top of the complex monument, with a carved rose laying on the pages. The other three complex monuments were surrounded by a low iron fence within the White family plot. These monuments were all disarticulated and scattered across the plot.

Fieldwork was particularly difficult in Greenspond this year, due to the heatwave in August. We confined our fieldwork to early morning, stopping between around 11am and starting work again after 6pm, once the hottest part of the day had subsided. Like other fieldwork trips in Greenspond, the depth of burials continued to present an issue, and we had to operate with the utmost caution while digging foundations for resetting gravestones. No human remains were disturbed or uncovered, but excavation was stopped when linear wood fragments were uncovered near a gravestone.

Figure 7: The three complex monuments of the White Plot, Old UC Cemetery, Greenspond (Lacy 2025)

Trepassey

In June of this year, we carried out a conservation survey on behalf of the Earhart Cultural Heritage Organization (ECHO) at the Old Trepassey Graveyard. A Catholic burial site, the site contained an identified 222 gravestones through the survey in need of restoration and care, though it is likely that additional stones are buried and/or obscured through dense foliage in the southeast quadrant of the cemetery. The cemetery, located behind the Holy Redeemer Church and school, is bounded by Church Road to the north and Molloy's Road to the south, and covers approximately 4.3 acres. Access is from the north, along the centre of the boundary fence.

The oldest known grave at the site is that of Joseph Hewett, who died on July 9, 1843, and the first recorded parish priest in Trepassey is Jeremiah O'Neill, who served the parish from 1843-1860 (Newfoundland Grand Banks 2002). These dates coincided with the establishment of the formal parish and clergy in much of Newfoundland, however most communities had burial spaces that were consecrated

after clergy arrival, but had been used for decades prior. It is unknown if this site is one of those, but the ECHO committee is currently seeking to expand our understanding of the site. We hope that our survey and recording of all gravestones in need of restoration will contribute to that goal.

Most of the gravestones at this site were marble, and some had seen various previous attempts at repair, including non-sympathetic epoxy and bolts. Most notably, at least four gravestones carved by the same individual were highly ornate, with intertwined IHS in vines in the lunette, with foliage along the edges of the stone. These stones dated to the mid-late 19th century.

The conservation report we prepared included a catalogue of each gravestone which required care in the future, including cleaning, resetting, and/or repair, including photographs. We assigned each gravestone a catalogue number (TR-001 to TR-222), marked with a labeled pin flag in the field for our future reference, and for the reference of the Client.

Open Hall

We completed a small project for a family with ancestry in Open Hall, on the northwest side of the Bonavista Peninsula. The St. Michael's Anglican Cemetery is tucked off the main road to Open Hall on an unpaved path. The gravestones of Sarah and James Fitzgerald had each broken in one place, and the family member had since removed the top of each stone for preservation, returning them to site when we visited. The bases were levelled, and the breaks were repaired with a UV-stable stone epoxy.

Unfortunately, James' gravestone repair did not hold. This could be due to the cold and damp weather of mid-October, or the state of the marble itself. When marble is degrading, it starts to feel like sugar as the material holding the grains together dissolves. At this point, we believe it is not possible to repair the gravestone. We will attempt to repair the stone again in the Spring of 2026, in warmer and dry weather, in order to determine whether the failure was due to the weather or the stone.

This year, BCCP partnered once again with TalkDeath, an organization based in Ontario which encourages conservation and acceptance around death and dying, to host a cemetery scavenger hunt the weekend before Halloween. This year we were back at the General Protestant Cemetery, and had the opportunity to speak to the CBC about the event. Thanks to the CBC coverage this year, we had over 40 individuals and families join us for a wonderful afternoon exploring the historic General Protestant Cemetery, and were even treated to some history of the site by local expert Suzanne Sexty. It was wonderful to see so many people interested in coming out and learning a little more about their local history.

The 2025 season was a wonderful experience, and we were able to complete our first project in Labrador, as well as continuing with our long-term project in Greenspond. We are looking forward to exploring more of the province during the 2026 season, and continuing to work with community groups, towns, and families, to preserve their history.

References

Lacy, Robyn S. & Ian Petty
2024 2023 Fieldwork Season – Black Cat Cemetery Preservation. In Provincial Archaeology Office 2023 Archaeology Review.

Newfoundland Grand Banks
2002 Holy Redeemer Parish [Roman Catholic], Trepassey, Newfoundland. Website: https://ngb.chebucto.org/Articles/presentation.shtml. Accessed on June 9, 2025.

Excavations in the Archives

Stephen Loring
Arctic Studies Center, Smithsonian Institution

Introduction

Archival research is part and parcel of many archaeological endeavors. As with fieldwork there is often a sense of excitement and anticipation and wonder that the next conservation-approved acid-free box brought up from storage might contain clues, or even the answers, to research questions. And, as in archaeology, just as likely there might be surprises un-looked for that send one down unintended research trajectories. Such an incident recently occurred when I accompanied a visiting researcher to the Smithsonian's National Anthropological Archives (NAA) in Suitland, Maryland. I had talked my colleague into looking into the Arctic folders in the Source Print Files (SPF) as one introduction to the breadth and diversity in the Smithsonian collections. Arranged culturally and by tribe the SPFs contain a hodgepodge miscellany of clippings, prints, lantern slides, photographs and drawings much of which were derived from old Bureau of American Ethnology (predecessor of the Department of Anthropology) files. In the first (of four) "Arctic" boxes I chanced across a folder labeled "Beothuk" that had heretofore escaped my notice. The file contained 7 items: a 1932 clipping from Ripley's Believe It Or Not devoted to odd historical facts from the Maritimes that paired a sketch of Lady Hamilton's portrait of Shanawdithit with the caption "When Shanawdithit DIED THE NATION OF THE BEOTHUCKS -Original Inhabitants of Newfoundland CAME TO AN END"; a newspaper clipping describing the discovery of a Beothuk burial in Notre Dame Bay "Extinct Race. Traces of a Once Powerful Tribe of American Indians" from the *New York Telegraph*, 8 June 1887 (Anon 1887); three pen and ink drawings that I recognized as copies of the sketches drawn by Shanawdithit for W.E. Cormack in 1829 which are reproduced in Howley's classic work on the Beothuks (1915); and two beautiful watercolour paintings of diagnostic Beothuk artifacts (pendants, combs and gaming pieces). On the back of one of the watercolours was written "Bone ornaments etc. found in a Bethuk grave on Pilley's Island, Notre Dame Bay". And also, in another hand, "Lady Edith Blake, St. John's, N.B". The second watercolour contained the inscription "EDITH BLAKE, Government House, St. John's, Feb. 1888". The copy of Shanawdithit's drawing of a Beothuk store house and birch-bark containers has the inscription: "Copies of drawings by Shanandithit, From Lady Edith Blake, Kingston, Jamacia". So, who was Lady Edith Blake and how did this group of drawings end up at the Smithsonian?

In the notes accompanying the description of the artifact plates in Howley's book he attributes the drawings of some of the distinctive Beothuk bone pendants to "Lady Edith Blake, wife of Sir Henry Blake, late Governor of Newfoundland. Her ladyship took a deep interest in the subject of the Aborigines while here" (Howley 1915:340). Polyglot, author, artist, naturalist Edith Blake (1846-1926) accompanied her husband, a Colonial Government administrator, to his postings as Governor of the Bahamas (1884-1887), Newfoundland (1887-1888), Jamaica (1889-1897), Hong Kong (1898-1903) and Ceylon (1903-1907) before returning and retiring to their homeland in Ireland in 1907 (Ellwood and Harvey 1990). An accomplished amateur artist Blake had a keen interest in natural history and the Indigenous populations in the places where she and her husband were posted. Her drawings of Caribbean flora and fauna are in the collections of the Natural History Museum of London and the Botanical Gardens in Dublin. She acquired a large collection of Pre-Columbian Taino artifacts from Jamaica now in the collections of the National Museum of the American Indian. How her drawings reached the Smithsonian is almost certainly a result of the active engagement of James Howley with the Smithsonian's Prof. Albert S. Gatschet. Gatschet was a founding member of the Smithsonian's Bureau of American Ethnology, a linguist, philologist and ethnologist, he was the preeminent student of American Indian languages of his generation. Howley and Gatschet worked closely on the study of the Beothuk language with Gatschet providing three synthesizing chapters on Beothuk vocabulary for Howley's book (Howley 1915:302-322) that included an 18th-century vocabulary recorded in Trinity Bay "a copy made of the original at Trinity by Mrs. Edith

Figure 1: Lady Edith Blake's watercolour drawing of Beothuk bone pendants. Labeled on reverse: "Bone ornaments etc. found in a Beothuk grave on Pilley's Island, Notre Dame Bay." Beothuk folder, Source Print File "Arctic" Box 1. National Anthropological Archives, Smithsonian Institution.

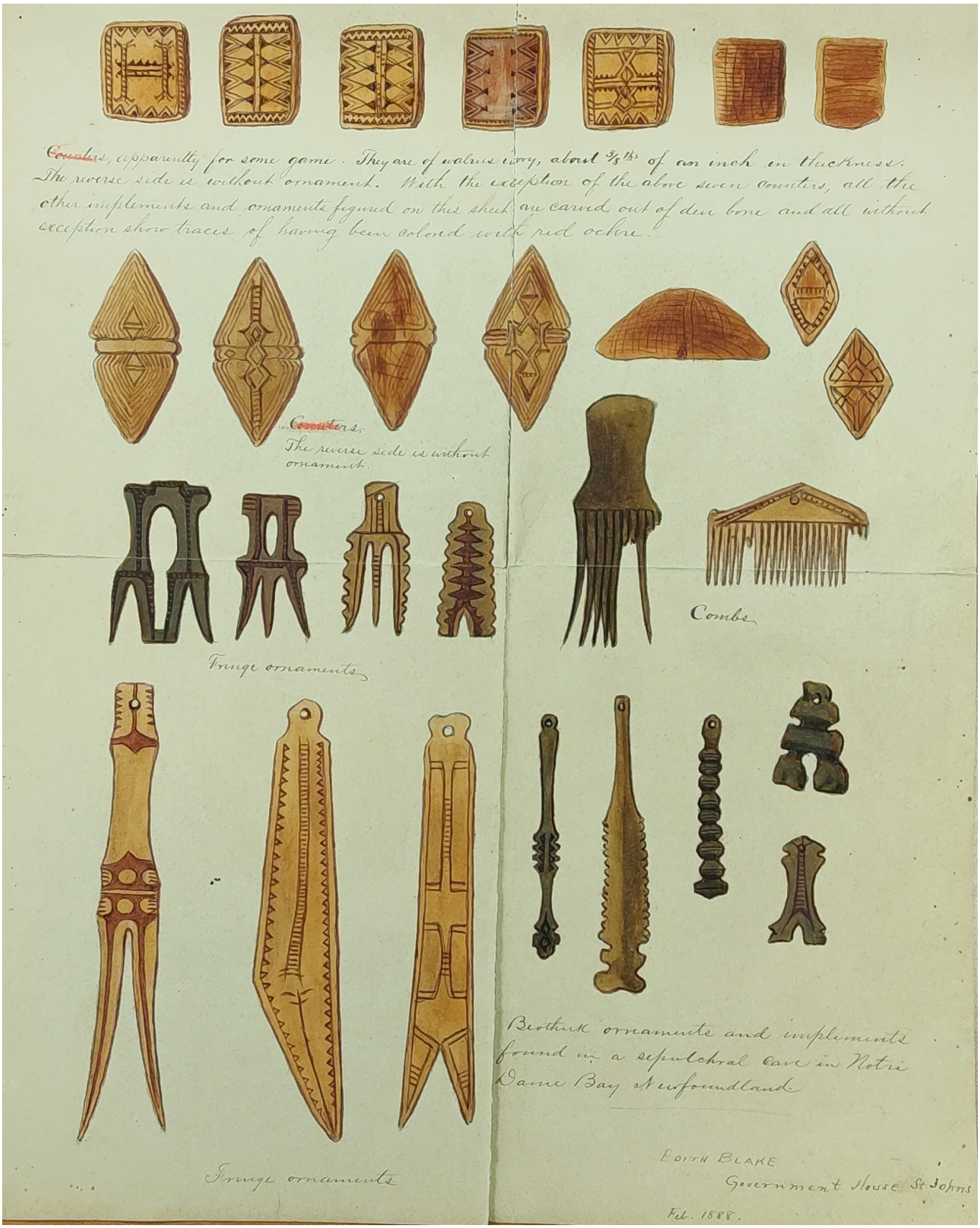


Figure 2: Lady Edith Blake's watercolour drawing of Beothuk artifacts. Labeled lower right: "Beothuk ornaments and implements found in a sepulchral cave in Notre Dame Bay Newfoundland. Edith Blake, Government House, St. John's, Feb. 1888" Beothuk folder, Source Print File "Arctic" Box 1. National Anthropological Archives, Smithsonian Institution.

Blake who took the greatest pains to secure accuracy" (Howley 1915:318).

Edith Blake drawings of Beothuk artifacts

Drawing #1. (Figure 1) Watercolor, pen-and-ink drawing on 10x14 inch paper features 28 apparently life-sized carved bone pendants arranged on 5 rows. In the lower right corner are drawings of two bone combs. Labeled on the back "Bone ornaments etc. found in a Bethuk [sic] grave on Pilley's Island, Notre Dame Bay."

In describing these pendants Blake writes: "Some are triangular in shape, but many of the ornaments resemble two- or three-pronged forks with a wide handle. They vary from an inch to five inches or so in length, and are made of deer-bone. Usually on both faces are scratched or engraved notches and lines, forming designs, some of which are intricate and show considerable ingenuity and fertility of inventions" (Blake 1888:913).

Drawing #2. (Figure 2) Watercolor, pen-and-ink drawing on 10x14 inch paper. Labeled: "Beothuk ornaments and implements found in a sepulchral cave in Notre Dame Bay Newfoundland. Edith Blake, Government House, St. John's, Feb. 1888". There are 28 artifacts arranged in four rows. The top row has seven intricately carved small rectangular bone pieces beneath which Blake has written: "Counters, apparently for some game. They are of walrus ivory, about 3/8ths of an inch in thickness. The reverse side is without ornament. With the exception of the above seven counters, all the other implements and ornaments figured on this sheet are carved out of deer bone and all without exception show traces of having been colored with red ochre." The second row labeled "Counters. The reverse side is without ornament" depicts an additional six diamond-shaped counters with intricate mirrored designs divided by a belt-like central band, a seventh artifact is a hemispherical object with a simple cross-hatched design (also divided into two mirrored parts and reminiscent of designs on soapstone pendants found at the Maritime Archaic site at Nulliak in northern Labrador and also on small stone carvings from the Ceramic Period Holt's Point site in New Brunswick [Fitzhugh 1985]). This hemispherical carving is striking like "a crescent shaped piece of wood with a heavy coat of ochre and a burnt pattern" that was recovered with a cache of Beothuk pendants on Long Island in Notre Dame Bay in 1942 (Marshall 1974:46). The third row illustrates four multi-pronged Beothuk pendants identified as "Fringe ornaments" and two bone combs. The bottom row has seven additional pendants in a variety of forms. That many of these pendants were attached to the edge of caribou-skin garments or robes is attested by observations of the Notre Dame burial. In her paper on the Beothuk, Blake comments on this association: "The recent discovery of a grave containing the body of a child enveloped in a deer-skin robe, has shown that the supposed armlets were worn as ornaments attached to a fringe into which the edges of the deer-skin were sliced" (Blake 1888:913).

Pendants

Carefully fashioned, intricately decorated with engraved designs, carved caribou bone pendants are among the most distinctive surviving aspects of Beothuk material culture (Marshall 1973, 1974, 1978). Some 400, mostly fashioned from mammal – presumed caribou—long bone, with intricate designs and almost always stained with red ochre, have been recovered from burial sites and caches and from archaeological excavations (Pastore 1992, Kristensen and Holly 2013, Marshall 1978).

The pendants are described by Howley in a postscript to plates XXVIII and XXIX: *Exhibit a selection of the various forms, drawn by Lady Edith Blake, wife of Sir Henry Blake, late Governor of Newfoundland. Her Ladyship took a deep interest in the subject of the Aborigines while here. She copied all these ornaments and also wrote a paper on the Beothucks which was published in the* Century Magazine *for December 1888. What the exact use or purpose of those ornaments was we do not know. The fact of so many of them being always found deposited with the dead seems to suggest some symbolic or talismanic idea…In the case of the little Beothuk boy's interment, some of these ornaments, together with bird's legs and feet were found attached to the fringe of his outer garment* (Howley 1915:340).

Kristensen and Holly (2013) provide an excellent summation of the scholarship surrounding the form and function of the pendants and build a compelling argument for their incorporation into the belief systems and world view of the Beothuk. The wide variety in the forms illustrated by Blake suggests that the pendants accompanying the Pilley's Island burial were carved by a number of different individuals, an observation Marshall made as well when considering the diversity of pendant forms in a cache

from the Long Island site in Notre Dame Bay (Marshall 1974:49). It might be so inferred that the presence of pendants in mortuary settings is evidence of a strong cohesive bond uniting families in a shared group identity.

The Pilley's Island burial

One significant aspect of the Blake drawings at the NAA is that they provide *prima facie* evidence for the association of the artifacts as being found together reaffirming their provenance which may have become uncertain after nearly 150 years of shuffling in museum storage (Marshall 1973:18, 1974:43). There are several accounts of the Pilley's Island burial in inner Notre Dame Bay:

However the recent discovery, in Notre Dame Bay, on a small island, of the child's grave already alluded to, throws some light on the hopes and beliefs of the Red Indians regarding a future state. The body lay on the left side as if asleep, the legs drawn up, and the arms lying along the sides, as if the child slept. The body was in wonderful preservation, even the skin and nails remaining. We know some tribes lament more over the loss of a child than at the death of a grown person, on the ground of the helplessness of its soul in the strange spirit-land. The "happy hunting grounds" to which nearly all Indian people look forward after death, lay to the westward, far beyond the setting sun. The Beothuk parents believed that their child's journey to that distant country would be a toilsome and tedious one, so with the little corpse they had buried all things needful by the way: packets of dried meat and fish, drinking cups of birch-bark, tiny canoes lest there should be rivers or lakes over which the soul must cross, and bows and arrows to bring down game when the supply of food which was provided should be exhausted. Several pairs of moccasins were ready, so that the youthful feet might not be bruised on the long, long journey. Beside the body was a curious little wooden figure, which one would suppose was a doll, but for the fact that Cormack found three small wooden images of a similar kind when he visited the burial-place of Mary March at Red Indian Lake. This would seem to point to the conclusion that these images or dolls interred with the dead had some religious or mystical signification. The idea that the welfare of the soul, and its reception in the unseen world, were influenced by the value and variety of the offerings interred with the body may have been held by the Beothuks, for in this instance the boy had been buried in his finest clothes, the deer skin robe being fringed, and many carved ornaments decorated the border (Blake 1888:914).

Quite recently an important discovery was made of two of their graves on an uninhabited island near Hall's Bay called Phillig's Island… [the first grave contained a skull and a few scattered bones found with polished celts, gouges, ground slate spears, *and one or two vessels of soft magnesian stone*]. *The contents of the second grave possesses much more interest. In it was found the perfect skeleton of a boy, about ten years of age. It lay on the left side, the legs bent up, and was wrapped in a covering of otter skins carefully sewed together. To this were attached some birds' claws on an ornamental fringe, and the bone ornaments of various shapes – in all thirty-two in number—on the carving of which a world of labor must have been expended* (Anon. 1887).

Mr. Samuel Coffin…was made aware of an Indian burying cave having been discovered on a small island in Pilley's Tickle… [which he investigated and collected from in September 1886]. *The body was lying on its left side, enshrouded in a skin covering, (probably beaver skin but now destitute of fur) the flesh side turned out and smeared with red ochre.* [On the inside of the shroud the body was found clothed in skin pants and moccasins with additional pairs of moccasins placed beside the body.] *The outer robe was also fringed with finely cut skin down one side of the front and along the lower end of the garment. On the other side of the front were fastened several carved bone ornaments and a couple of birds feet (ducks or gulls), this appeared to be the outer side. All had been smeared with red ochre, traces of which were clearly visible. The body itself was enshrouded in its natural skin, now dried and shrunken…Accompanying the body and arranged around about it were a number of articles consisting a small wooden image of a male child, two small birch bark canoes, miniature bows and arrows, paddles, a couple of small packages of red ochre tied up neatly in birch bark, and a package of dried or smoked fish, salmon and trout, made up in a neat parcel of bark and fastened with a net-work of rootlets like a rude basket. There were no stone implements found with the boys body, but about 14 or 15 feet away, on the same shelf of rock, the skull and bones of an adult…were accompanied by several well made spear and arrow heads of stone, a stone dish, and an iron axe, …an iron knife, …with a few other articles of iron much corroded by rust. There were a number of drinking cups and other small vessels made of birch bark…All these articles without exception were reddened with ochre* (Howley 1915:330-332).

Perhaps the most interesting yet known was discovered in the year 1886 on Pilley's Island, near the entrance of Hall's Bay, an arm of Notre Dame Bay. For the following account of its contents I am indebted to the Rev. Dr. Harvey, of St. John's: ---It contained two skeletons. Of the one only the skull and a few bones of the leg remain…Various stone implements

were found alongside the bones, stone arrow heads and hatchets, etc.

The other skeleton is nearly perfect. It is that of a Red Indian boy, nine or ten years of age. There was with it a small wooden image, very rudely carved and having a covering of birch-rind….The strange peculiarity of the skeleton is the perfect preservation of the skin, …The appearance is not unlike that of a mummy…The body had been wrapped in deer-skin, which had been made to fit closely and was neatly sewed together. Attached to this was an ornamental fringe of deer-skin, having fastened to it some birds' claws and about thirty-two small pieces of bone of different shapes, all carved ingeniously. Several small models of canoes showing accurately the shape of those in use by the tribe, were near the skeleton; also small drinking-cups and vessels, all of birch-bark, and several pairs of small moccasins of deer-skin, the size of a boy's foot of the age of nine or ten. Beautifully shaped and well-polished arrowheads of slate, a number of toy arrows of wood and a small bow lay around. Another interesting object was a small birch-rind basket, laced close, and containing a piece of dried salmon, the scales being visible, and several dried trout wrapped in separate parcels (Patterson 1891:156).

The different accounts are all in basic accord: a young child, buried in a flexed position on their left side accompanied by a variety of birch-bark artifacts, moccasins and covered with a fine red-ochre stained robe to which were attached a number of deer-bone ornaments (pendants). Two accounts mention the presence of a small carved wooden figure or doll (pictured in Patterson 1891 (Plate XII), and in Howley [1915: Plate 12]). The main discrepancy in the accounts concerns the presence of a second burial found at some remove from the mummified child but in the same rocky exposure. According to the 1887 newspaper account (Anon. 1887) and Howley (1915:332) the partial human remains were found with polished celts, gouges, ground-stone spears and a soapstone vessel. The polished celts and gouges along with the "beautifully shaped and well-polished arrowheads of slate" (Patterson 1891) are possibly attributable to a Maritime Archaic component but whether their interment on the ledge preceded the Beothuk component or whether these were artifacts discovered, collected and venerated by the Beothuk it is impossible to conclude. In Patterson's paper (1891 Plate X) he figures four ground-slate projectile points two of which are like Maritime Archaic forms but two –with gouged-out perforations—are clearly Dorset end-blades. It is not clear from the text that these

Figure 3: Decorated caribou skin robe, Innu attribution, ca. 1840. George Catlin collection, E.386525 NMNH, Smithsonian Institution.

are artifacts associated with the Pilley Island burials. Making the matter even more difficult is the mention of a soapstone vessel –clearly a Dorset artifact from the near-by Fleur de Lys soapstone quarry and the historic period iron axe and knives. Something of a mystery to puzzle over. While it doesn't completely resolve the mystery of the relationship of the second burial with it's assortment of diagnostic artifacts from earlier periods and different cultures to the Beothuk child, a forensic investigation in 1994 confirmed that the child –of uncertain gender-- had been between 5

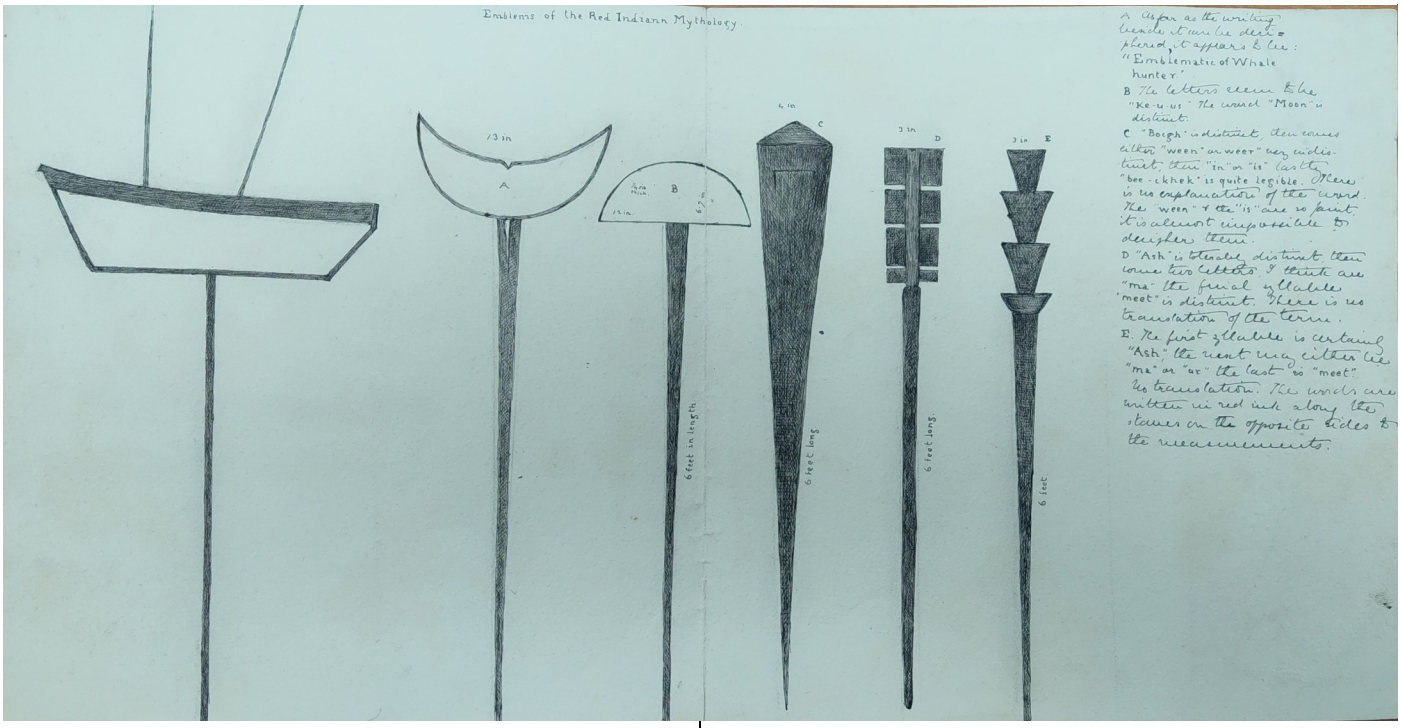
and 6 at the time of death and was radiocarbon dated to AD 1311-1443 (Jerkic et al 1994).

All the accounts concur that the child was wrapped in a finely crafted, ochre-stained animal skin robe, presumably of caribou skins and perhaps also beaver and otter, to which were fastened many of the bone pendants and the feet of birds forming a fringe along the edge of the robe. Among the neighboring Innu of Labrador, decorated caribou skin robes (Figure 3) were the paraphernalia of shamans who used them in a variety of ceremonies to affect changes in the weather, to communicate with the guardian spirits governing the movement of caribou and as coverings to protect themselves when conversing with Animal Masters and seeking supernatural aid (Webber 1983, 1987). Webber recounts a *mokushan* –a ceremonial thanksgiving feast—witnessed by James Clouston, a Hudson's Bay Company fur-trader traveling with the Innu in 1820, in which the youngest child in the group was tightly wrapped in a painted caribou -skin robe to protect it from the powerful spirits that were being invited to the feast (1987:79). The ochre-stained robe covering the Pilley's Island child, festooned with the distinctive bone pendants, may have served a similar protective conveyance for the child's spirit. The intricate designs incised on the pendants are similar to the patterns that appear on painted caribou-skin coats worn by the Innu that –perhaps— form a language or map to traverse the spirit world.

Blake's Copies of Shanawdithit's Drawings

In addition to the two watercolours the NAA collection includes three pen-and-ink drawings that proved to be very accurate copies of some of the sketches that Shanawdithit drew for W.E. Cormack in St. John's during the winter of 1829 and which are reproduced in Howley's book. One sheet labeled: "Copies of drawings by Shanandithit", and then in a different hand "From Lady Edith Blake King's House Jamaica" has drawings of the Store House and the birch-bark vessels that appear on Shanawdithit's Sketch VII (after page 248) and another labeled "Different kinds of animal food" is after Howley's Sketch VII (after p.246). A third drawing labeled "Emblems of the Red Indian Mythology" is a careful copy of Shanawdithit's sketch "Totems? Or Emblems of Mythology" Howley's Sketch IX (before p.249). Blake's drawing includes measurements that are absent from Howley's published version and a legend that presents an interpretation of the Beothuk vocabulary that appears beside the original drawings (Figure 4).

Figure 4: Lady Edith Blakes' copy of Shanawdithit's sketch "Totems? Or Emblems of Mythology". Beothuk folder, Source Print File "Arctic" Box 1. National Anthropological Archives, Smithsonian Institution.



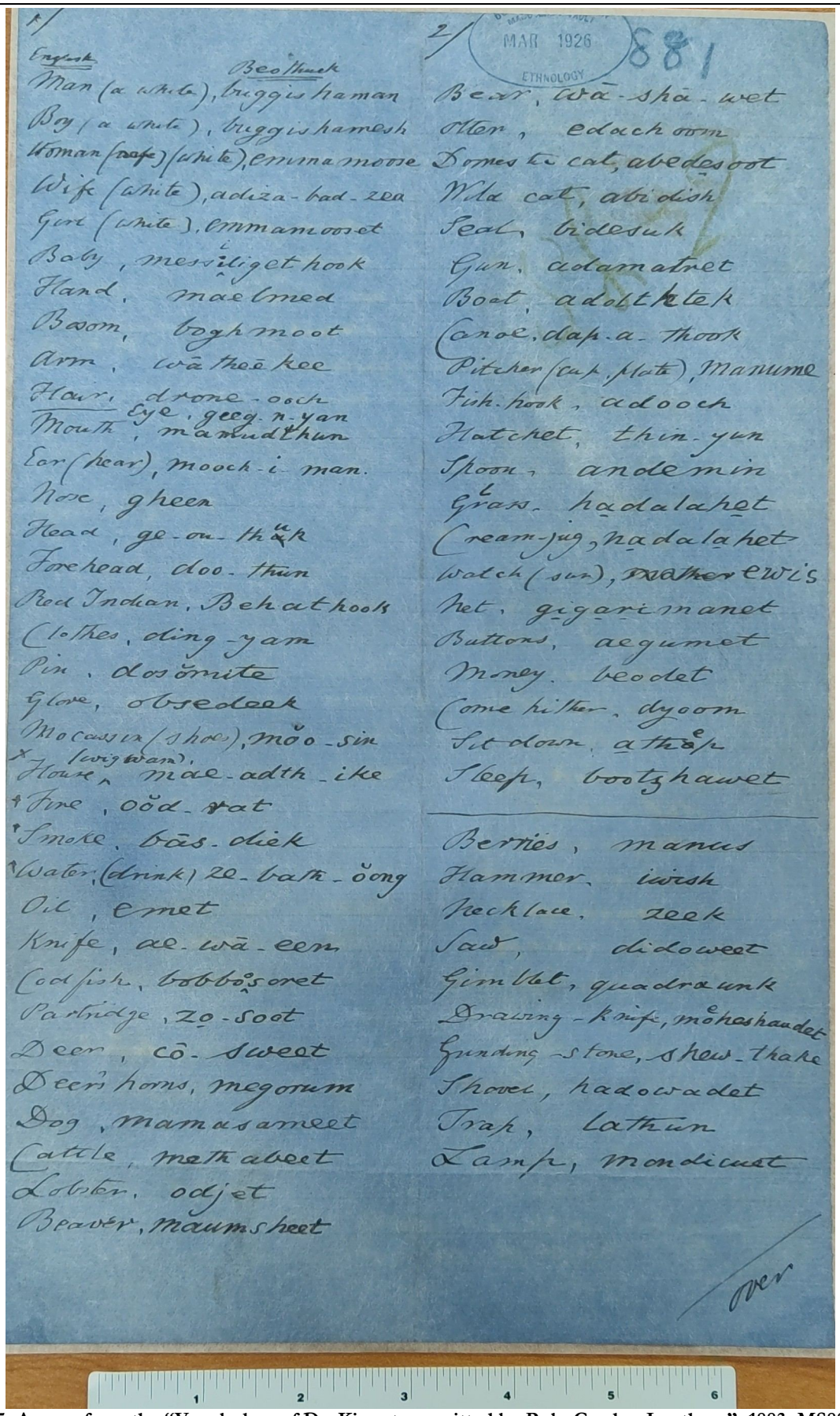


Figure 5: A page from the "Vocabulary of Dr. King, transmitted by Rob. Gordon Lantham", 1883. MS881 in the Bureau of American Ethnology catalogue of manuscripts. National Anthropological Archives, Smithsonian Institution.

Vocabulary

There is a second Beothuk item in the NAA collections. MS881 in the Bureau of American Ethnology catalogue of manuscripts is a five-page Beothuk vocabulary (Figure 5) transcribed by R. G. Latham (Putney S.W. London), 2nd January 1883, who writes in an accompanying letter:

Dear Sir,

The accompanying is a copy of a MS concerning which Mr. Gatschet made an inquiry, & although the papers with which so kindly forwarded me, are not exactly on the same subject. I hope you may find something in [the] vocabulary which I have the pleasure of sending to you. Until about a week ago I thought the MS was lost, & gave it up; but making up some old papers I met with it. I have lost no time in forwarding copies to yourself, Mr. Gatschet, & Mr. Howley of Newfoundland, who is specially interest in the subject.

The Beothuk vocabulary prepared by Albert Gatschet in 1885 is included in Howley's book (Gatschet 1915). It appears to have considered most of the words from this ms. which Gatschet cites as "Vocabulary of Dr. King, transmitted by Rob. Gordon Lantham, London, April 1883" but some omissions and discrepancies between the two remain.

Concluding Remarks

The past is so often unknowable not because
it is befogged now but because it was befogged then,
too, back when it was still the present.
-Adam Gopnik, *Angels and Ages,* 2007

The Newfoundland narrative contains within it the theme of loss: the deaths of sailors and sealers at sea, the decline of the cod fishery, the disappearance of the Beothuk, the extinction of the Great Auk. Archaeology as well is all about loss and things that have been misplaced and forgotten. The task of archaeologists (and archivists) in rediscovering and interpreting what traces remain link the past to the present and people to place (Figure 6). The modest results of this essay, in addition to sharing an appreciation of the work of Lady Edith Blake, is in providing a provenance for some of the Beothuk artifacts in the Newfoundland Museum collections and –perhaps—to

Figure 6: Newfoundland idyll. "The last camping ground of the Boethics or Red Indians of Newfoundland." Postcard, Stephen Loring collection, Arctic Studies Center, Smithsonian Institution.

draw attention to the significance of the burial shroud covering the Pilley's Island child.

Acknowledgements

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References

Anon. 1887. "Extinct Race. Traces of a Once Powerful Tribe of American Indians." *New York Telegraph*, 8 June 1887. Byline source: *Montreal Star*. Newspaper clipping for Spencer Baird in the National Anthropological Archives, Source Print Collection "Arctic", Folder: Beothuk.

Blake, Edith

1888. The Beothuks of Newfoundland. *The Nineteenth Century* 87:899-918.

Ellwood, C.V. and J.M.V. Harvey

1990. The Lady Blake Collection: Catalogue of Lady Blake's collection of drawings of Jamaican Lepidoptera and plants. *Bulletin of the British Museum (Natural History) historical series* 18(2):145-202.

Fitzhugh, William

1985. The Nulliak pendants and their relation to spiritual traditions in Northeast prehistory. *Arctic Anthropology* 22(2): 87-109.

Gatschet, Albert

1915. First paper by Albert S. Gatschet, read before the American Philosophical Society, June 19th, 1885. In, The Beothuks or Red Indians by James P. Howley, Cambridge University Press, pp. 302-307.

Howley, James P.

1915. The Beothuks or Red Indians. Cambridge University Press

Jerkic, S.M., P. Horne and A. Aufderheide

1994. Biology and history studies of a Beothuck mummy. Unpublished ms. typescript. Provincial Archaeology Office, St. John's, Nfld. 10pp.

Kristensen, Todd J. and Donald H. Holly

2013. Birds, burials and sacred cosmology of the Indigenous Beothuk of Newfoundland, Canada. *Cambridge Archaeological Journal* 23:41-53.

Marshall, Ingeborg

1973. A study of Beothuck decorated bone pieces. *Aspects* 6(1): 17-24.

1974. A new collection of Beothuk Indian decorated bone pieces. *Man in the Northeast* 8:41-55.

1978. The significance of Beothuck carved bone pendants. *Canadian Journal of Archaeology* 2, 139–54.

Pastore, Ralph

1992. Shanawdithit's People. Atlantic Archaeology: St. John's Nfld.

Patterson, G.

1891. The Beothucks or Red Indians of Newfoundland. *Transactions of the Royal Society of Canada* 9: 123-171.

Webber, Alika Podolinsky

1983. Ceremonial Robes of the Montagnais-Naskapi. *American Indian Art Magazine* 9 (1).

1987. The Naskapi Shaman. Unpublished ms. Arctic Studie Center, Smithsonian Institution, Washington, DC. 154pp.

Caribou House Chronicles: Documenting Innu and Ancestral Innu Land Use Adjacent the Quebec-Labrador Boundary in northern Nitassinan

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The fall migration of the George River caribou herd photographed at Kamestastin October 2006. Photo: Stephen Loring

Preface

This paper is a slightly modified version of a report "Searching for the Caribou House: a community anthropology initiative with the Innu (Montagnais-Naskapi) of northern Quebec-Labrador, Canada. Interim Report on the 2014-2015 fieldwork centered on Lac Mistinipi" that was prepared for the Ministère de la Culture et des Communications, Québec (Québec). The research described took place in the Mistinipi drainage east of the George River and immediately adjacent to the 1929 height-of-land border between the provinces of Quebec and Newfoundland & Labrador.

Introduction

The Caribou House project, at its heart, is a community anthropology initiative that is a research partnership between Smithsonian anthropologist Stephen Loring and Innu colleagues (students, educators, guardians, community members) and experiential educators from the communities of Natuashish and Sheshatshit, Labrador and the Innu Nation. The project combines archaeological practice with Indigenous knowledge and participation to explore aspects of Innu/Iyu culture and history. Prominent among the themes under consideration is the nature and practice pertaining to the interaction between caribou herd dynamics and human beings over time. The research initiative is a continuation of a long-standing (since 1993) cooperative program in paleoecology and cultural heritage developed as a community archaeology education initiative between the Innu Nation (and their office of Innu Environment), the Tshikapisk Foundation (an Innu Experiential education program centered in Sheshatshiu and Natuashish, http://www.tshikapisk.ca/home) and the Smithsonian's Arctic Studies Center (Loring 1998, 1999, 2001, 2006, 2008a, 2008b, 2011; Loring and Ashini 2000; Loring, McCaffrey, Armitage and Ashini 2003) much of it centered in the region of Kamestastin and Border Beacon immediately adjacent to and just east of the Quebec-Labrador provincial boundary. This research initiative combines the ar-

chaeological, ethnohistorical and paleoecological expertise of Stephen Loring (35 years of active research in Labrador) with the knowledge and experiences of older Innu men and women knowledgeable about Innu subsistence practices and values to provide country-situated training and learning opportunities for Innu youth.

Some of the earliest evidence for the emergence of social complexity among Indigenous peoples in post-Pleistocene North America comes from northern Labrador where elaborate mortuary traditions and social aggregations begin to appear around 7000 years ago (Fitzhugh 2006, Tuck 1975). It has been suggested that the dependable characteristics of the marine ecosystem formed the subsistence-base for these pioneering human populations. However, recent work at caribou-crossing places in the interior of Quebec-Labrador suggests that the significance of caribou as a prey species for early hunters has been over-looked (Loring 1997b, 2007a). Archaeological survey and excavation, coupled with the observations and knowledge of Innu hunters offers an unprecedented opportunity to interpret the role of caribou predation in the evolution of hunting and gathering cultures in North America, and theoretically to contribute to an understanding of the relationship between subsistence practices and the maintenance of social boundaries and identities that figured so prominently in the success of early human societies in both the New World and Ice-Age Europe.

Project Description

One cannot spend much time in the caribou country of northern Quebec/Labrador without hearing tales of the caribou master and his mountain abode. The Innu believe that the Caribou House was a hollow mountain wherein the caribou dwelled when not in the environs of humans. Coincidentally the presumed location of the Caribou House was in the heart of the Torngat Mountains which is both the location of the George River caribou herd calving-grounds, as well as the source for a highly desirable lithic raw material that was used by First Nation people for well over 7000 years and Pre-Inuit hunters by 4000 years ago (Loring 2002, 2017). The trail to the Caribou House is the metaphor employed here for a project that utilizes the converging research trajectories of archaeology, ethnohistory, oral history and ecology in pursuit of Innu/Iyu history. Fieldwork in 2014-2015 in the Mistinipi region of northern Quebec (just east of the George River and adjacent the Quebec-Labrador provincial boundary) sought to expand upon the earlier work of Gilles Samson and Jean-Luc Pilon at Indian House Lake (Pilon 1982; Samson 1975, 1978, 1983) and the Smithsonian/Tshikapisk Foundation work at Kamestastin by focusing on the Mistinipi drainage – the prominent north-south river and lacustrine drainage immediately to the east and parallel to Indian House Lake— that would serve to link the previous research and create a broad, prominent, regionally significant area, from which to explore the specialized caribou-predation subsistence strategies of historic Innu populations as well as those of their ancestral predecessors.

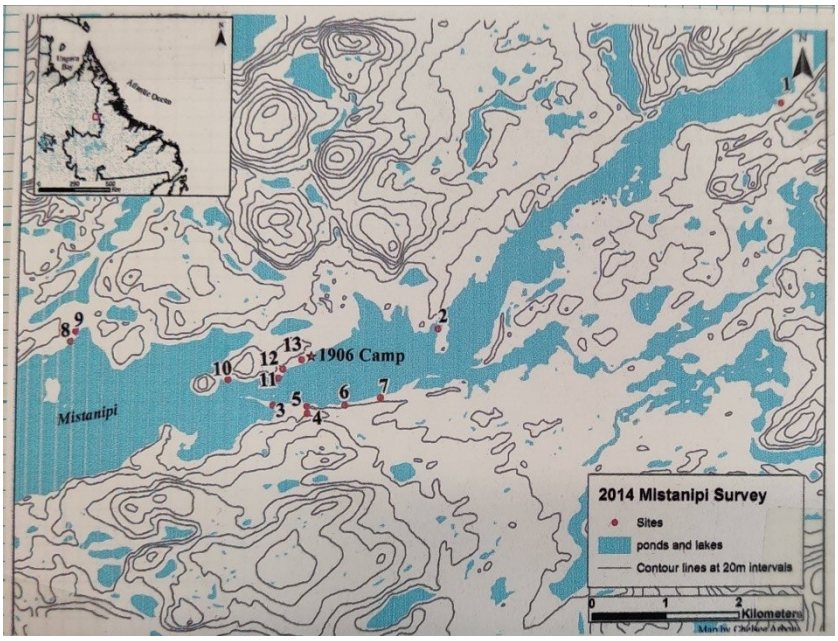
With the excavation of a suite of Paleoindian sites in the Northeast (Bull Brook in Massachusetts, Whipple in New Hampshire, Vail in Maine, and Debert in Nova Scotia) caribou, rather than megafauna, have become accepted as the preferred prey species for the earliest pioneering peoples in the region (Meltzer 1988, Meltzer and Smith 1986). To a significant extent these models have been predicated on analogies to the specialized caribou hunting practices of 19th-century Innu groups in northern Quebec-Labrador and the Caribou Inuit of the central Canadian Arctic (Funk 1972, 1978; MacDonald 1968). This research sets out to explore the basis (and biases) of these analogies through the archaeological and ethnohistorical investigation of a remarkable site, the caribou crossing place at the narrows on Mistinipi Lake in northern Quebec. In 1906 the intrepid Bostonian Algonquinist, William Brooks Cabot, visited the Innu camp at Mistinipi (Cabot 1920, Loring 1985, 1997a, 1997b). His observations and photographs form one of the few extant eye-witness accounts of the Innu at their fall-gathering caribou hunting camps in the interior of the Quebec-Labrador peninsula. When Cabot arrived at the camp in September 1906, a small Innu band of between 20-25 people, including four men and as many boys, had in the weeks preceding Cabot's visit speared several hundred caribou as they swam across the lake narrows. In 1997 while working on a film about William Brooks Cabot ("*In Caribou Country: the Adventures of William Brooks Cabot in Labrador 1903-1910*.", a film by Nigel Markham [Lazybank Productions, St. Johns, Nfld.]), the site of the 1906 camp was relocated.

The Innu camp at the Mistinipi caribou crossing place in 1906.

Location of the Innu camp in 1906, photographed in 2014. The large boulder in the center of the photograph is the same one as seen in Cabot's photograph just left of center. The boulder seen in the upper center appears in Cabot's photograph just right of center behind the most prominent of the three tent structures. In Cabot's photograph a person is seen spreading skins or meat to dry on top of the rock.

2014 Fieldwork at the Mistinipi Narrows

On the 4th of September, Air Labrador's veteran pilot Lester Powell, flying a Twin Otter with oversized tundra tires, landed a portion of the field-crew (Loring, MUN Graduate student Chelsee Arbour, and the director of the Innu Guardians Richard Nuna) on an esker adjacent to an abandoned commercial caribou hunting camp on the south-side of the river-like eastern arm of Mistinipi Lake, about 8 kms northeast of the main body of the lake. The next day we were joined by additional crew members from Sheshatshiu (Marcel Ashini and Anthony Jenkinson co-director of the Tshikapisk Foundation, an Innu experiential education initiative) who had previously flown into the southwestern corner of Mistinipi where the Naskapi at Kawawachikamach maintain a commercial hunting-fishing lodge and from whom we had arranged the loan of a freighter canoe. With the crew assembled we moved to establish a base camp in the cove on the south side at the western end of the prominent esker system that forms the most conspicuous landform in the vicinity. Our camp was situated just across the narrows from the site of the Innu camp visited by Cabot in 1906. Fieldwork between the 5th of September and the 2nd of October, when winter weather brought an end to our field season, was centered on both sides of the Mistinipi "narrows" -the caribou crossing place— and the network of converging caribou trails that were concentrated at the beginning of the easternmost arm of the lake. Research was directed at detecting the nature and extent of the regional "foot-print" left by the Innu who camped at this crossing place in the late 19th/early 20th century, to document, in addition to the major camping places, evidence of hunting (ambush) features, caches, look-outs and related trac-



Archaeological sites identified adjacent to the Mistanipi Narrows in 2014.

1. **HaCw-5, indeterminate precontact, quartz battering event**
2. **GlCx-1, late 19th-early 20th century Innu camp, tent-ring**
3. **GlCx-2, late 19th-early 20th century Innu camp, hunting blind, cache**
4. **GlCx-3, Ancestral Innu hearth**
5. **GlCx-4, indeterminate pre-contact quartz battering event (QBE)**
6. **Not assigned, late 19th-early 20th century Innu camp, tent-ring**
7. **GlCx-5, late 19th-early 20th century Innu camp, tent-ring**
8. **Not assigned, late 19th-early 20th century Innu camp, tent-ring**
9. **Not assigned, indeterminate precontact, quartz battering event**
10. **Not assigned, late 19th-early 20th century Innu camp, tent-ring**
11. **GlCx-7, pre-contact component, possibly Archaic Period**
12. **GlCx-8, indeterminate pre-contact, possibly Ancestral Innu**
13. **GlCx-9, Ancestral Innu component, (BETA-395998 860±30) 1906 Innu camp, GlCx-6**

es visible on the land which might form a template for recognizing similar structures and subsistence practices in earlier occupations. Excavations and documentation of archaeological features was conducted in the immediate vicinity of the caribou crossing and the 1906 Innu camp. With its detailed historical description and photographs, the location provides a unique opportunity to compare and ground-truth historical observations with archaeological documentation. We systematically mapped the site, recorded and excavated several features (including tent-rings, midden deposits, and ritually disposed faunal remains) to document the spatial and physical attributes of the site.

While fieldwork focused on assessing the nature and extent of the post-contact historic Innu/Iyu utilization of the region and determining the physical signature of their specialized caribou hunting subsistence economy, we also made every effort to document any evidence of earlier occupations. And while no large pre-contact sites were located, we recorded several small ephemeral campsites and activity areas adjacent to the Mistinipi caribou-crossing place.

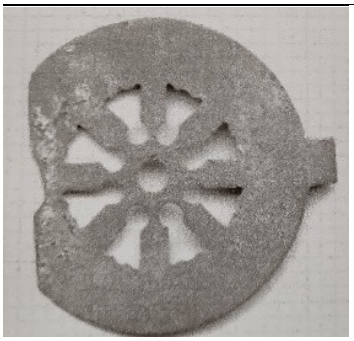
Late 19th-early 20th century Innu/Iyu Occupations at the Mistinipi Narrows

The 1906 Innu camp (GlCx-6)

The Innu camp visited and described by William Cabot in 1906 (and again in 1910) was, with the aid of Cabot's photographs –which revealed conspicuous large erratic boulders— received our initial attention once our own camp was established. Previously visited in 1991 it was immediately apparent that a significant amount of encroaching vegetation –mostly alder, crowberry and Labrador tea— had occurred in the intervening 23 years, likely on account of changing climate conditions. The (re)vegetation of the area made relocating some of the feature's observable in the Cabot photographs problematic although the central hearth stones of the two most prominent tents were identified protruding slightly through the vegetation cover. In mapping the site we identified several features, consisting of cut poles and stakes, weathered hard and bleached still intact and partially covered with vegetation. One of these stick features was possibly the remains of a dead-fall trap, the other an apparent cache of stakes –perhaps for staking out caribou skins to dry.

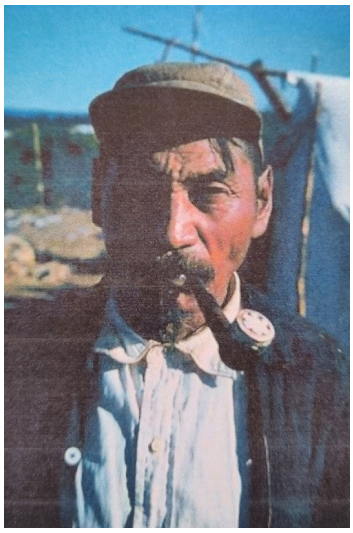
A systematic sweeping of the site area with metal detectors found surprisingly few artifacts: several pieces of cut tin, an iron knife blade, and four 44-40 rifle cartridges. The apparent paucity of ferrous objects can, we believe, reflect the core independence and autonomy of the Innu at the beginning of the 20th century. While access to sources of manufactured objects and materials (most likely at trading posts on

The remains of what appears to be a dead-fall trap (described in Cabot 1912:265) that was placed adjacent to a mound of crushed and boiled caribou bones.



(Left) A brass pipe bowl cover in the collections of the Voyageurs National Park, late-19th century (Birk 2004)

Detector finds from GlCx-6 include a knife blade, cut tin strips, and four 44-40 rifle cartridges; the circular mica disk (a pipe bowl cover), the large spike and the polished whetstone are from the Feature A tent ring which was only partially excavated.



(Left) Helge Ingstad's photograph of Shimun Gregoire, Sheshatshiu, Labrador ca. 1960.

the Labrador coast), especially for artifacts related to hunting caribou with firearms, is apparent, their overall scarcity speaks to the primacy of locally manufactured tool inventories made from wood, skin and bone and reflects the nomadic, transient nature of Innu subsistence-settlement strategies predicated largely on mobility. As Cabot has it, "Some things that the people had were from white hands, but the essential life was the same; the manners, the occupations, the means to a livelihood, the ancient belief" (Cabot 1912: 243).

We anticipated excavating the principal tent structure seen and photographed by William Cabot in 1906 (our Feature A) but inclement weather, and eventually snow, intervened. We had barely begun to clear off the surface vegetation and expose the central rock-lined hearth before we had to abandon the work. Subsequently we focused our attentions on the south side of the Narrows at Mistinipi-7 (GlCx-5) which could be accessed without a canoe crossing.

One of the most conspicuous features of the 1906 camp, was a great mound of broken and crushed caribou bones three to four meters in diameter and ten to twenty centimeters thick which Cabot describes, "A great lot of broken up marrowbones had accumulated; they had been boiled and reboiled. What we saw may have represented the leg bones of a thousand deer. This of itself would show that the camp had been kept there a very long time" (Cabot 1912:265). A similar feature of crushed caribou bone was observed at Innu camps on the George River by Clifford Easton in 1905, where he mentions heaps of cracked bones "ten feet in diameter and two or three feet high" (Easton 1908:298) and by us at Mistinipi Eshatshiut (HaBd-1) –at the northern head of the lake— in 2015 (see below). Traces of the bone mash feature are still apparent where bone fragments are visible eroding out along the edge of a caribou path

Innu man (Nutamikuesh) standing beside his tent (*tastueikantshuap*)-our Feature A– at the caribou hunting camp at the Mistinipi Narrows, photograph by William Brooks Cabot, 1906.

Initial excavation of the Feature A tent, excavations had barely proceeded beyond the partial removal of its vegetation cover before inclement weather brought a close to fieldwork.

that bisects the feature, but for the most part it lies buried beneath a thick carpet of crowberry such that we did not have the time or inclination to expose it further.

These crushed bone deposits result from the practice of breaking the caribou long bones to extract the marrow, crushing their oily epiphyses, and then boiling the mash so produced to draw out its fatty content. The resulting *atikupimin* figures prominently in the deeply ceremonial *mukushan*, a thanksgiving feast and celebration honoring the caribou and their spiritual identities. For the Innu/Iyu the *mukushan* is an intrinsic unifying practice that links social identities and coherence with this cardinal prey species on which their lives depend. Reciprocity and respect for the gifts of the animals –the source of food, shelter and manufacturing materials— is a fundamental aspect of Innu/Iyu culture that is evidenced by the ceremonial preparation and deposition of animal remains.

A prominent demonstration of Innu propitiatory practices were the large windrows of caribou antlers that were to be found adjacent to camping places. Cabot commented on such at the Mistinipi camp, "A long windrow of horns, besides a separate pile of very large ones, were close by, and each pair must have stood for four or five does and smaller deer killed. It is a matter of necessity that the horns are piled together; if they are

left about it is understood that the deer will scatter when they come through the country and be hard to get" (Cabot 1912: 241-242.) A year prior to Cabot's visit to Mistinipi another traveler, Dillon Wallace, descending the George River, some 50 kms to the west, wrote, "The George River all the way down to this point had been in past years a veritable slaughter house. There were great piles of caribou antlers, sometimes as many as two or three hundred pairs in a single pile, where the Indians had speared the animals in the river…Abandoned camps, and some of them large ones and not very old, were distributed at frequent intervals…" (Wallace 1919: 153).

Donald MacMillan (a travelling companion of William Cabot in 1910) stands beside the mound of crushed, broken and boiled caribou bones at the site of the Innu encampment at the Mistinipi narrows in 1906. (WBC1910-10, William Brooks Cabot collection, National Anthropological Archives, Smithsonian Institution.)

Despite featuring prominently in the expedition narratives of early 20th century travelers to the George River country no vestiges of these antler windrows remain even where remnants of tent poles and stakes (albeit in a fragmentary state) are still extant. Reportedly, as one aspect of their attention to honoring a spiritual obligation to the caribou and the caribou master, the Innu would place the antlers on the ice adjacent to their camps so that they would disappear with the melting ice. It remains a very intriguing prospect to try and locate such submerged antler assemblages as they could provide a wealth of data that could address outstanding questions about the population dynamics and cyclical nature of the George River caribou herd.

Mistinipi-7 (GlCx-5)

Fieldwork at the Mistinipi Narrows was never intended to focus on a single component, but rather by taking a landscape approach sought to situate the 1906 Innu camp, with its wealth of historic description and photography, within a greater regional con-

A windrow of caribou antlers at the Innu camp, photographed by William Brooks Cabot in 1906. When he returned to the site in 1910 the antlers had vanished, "…the long windrow at the camp had disappeared –of course into the lake. This disposal counts as an offering to the powers that rule the chase; without some such observance the surviving deer will be offended and avoid the hunters" (Cabot 1912:265).

text to more fully explore the spatial dimension that characterized the specialized caribou subsistence practices of 19th-20th century Innu groups in the Quebec-Labrador interior. We were interested in documenting archaeological (and architectural) traces – caches, ambush settings, hunting blinds, tent-sites, etc.— that would contribute to a perception of the extent and duration, as well as something of the population dynamics (of both humans and caribou) in the Mistinipi vicinity. The topography of the south side of the Narrows features a high conspicuous esker whose broad level top (it provided the tundra landing field for the Twin Otter that brought us in and took us out) forms a dramatic "highway" running for more than 12 kms along the south side of the river-like extension of Mistinipi Lake. Between the esker and the lake is a level terrace about 50 m wide. All along this terrace, from its western terminus in the lake eastwards for about 2 kms, and situated more-or-less directly across the Narrows from the 1906 camp, were a number of tent-sites (oval earthen-wall structures with central cobble hearths), stone tent-rings, hearth and cache features (Mistinipi-5, -6, and -7) which were mapped and photographed. We selected one of the larger and more conspicuous tent rings (Mistinipi-7 Structure 1) to excavate.

Structure-1 was a large oval, raised earthen-wall tent-ring (*tastueikantshuap)* slightly over four meters in diameter. It had a well-constructed oval hearth of stones situated slightly forward of the center of the tent facing out on to the water.

Our survey documented at least six additional oval raised earthen-wall tent structures at MIS-6 and MIS-7 in addition to a variety of stone features and small discrete midden deposits. All appear to date to the late-19th/early-20th century and are coterminous with the 1906 camp that William Cabot visited.

Mistinipi-7 (GlCx-5), Structure-1: raised earthen-walled tent-structure with central hearth. View to west along the terrace beneath the prominent esker. The 1906 Innu camp is located on the far shore at the right side of the photograph.

Mistinipi-7 (GlCx-5) Structure-1 central hearth. The pair of round flat-topped stones at the bottom center of the photograph served as anvil stones (*atan*) in breaking bones for fat extraction and/or for processing dried caribou meat (to make *niueikan*).

Midden of broken caribou bones in a 1x1 meter test-pit in front of the MIS-7/Structure-1 tent-ring.

Artifacts recovered from the excavation of Structure-1 at Mistinipi-7 (GlCx-5). Clockwise from upper left: Cartridge cases and bullets: top row 45-70 cartridge cases (Headstamp: "D.C.Co. 45-70-M"), lead bullets and lead shot, bottom row 44-40 cartridge cases; Very small glass seed beads; Miscellaneous objects: lid for tin can, dark glass lens for snow goggle, porcelain button, large spike, two small nails, unfinished iron bodkin (for weaving snowshoes); Sherds from small saucer: blue/green printed transferware.

Circular tent-ring at MIS-2 (GlCx-1). Lacking the raised earthen walls and a built up formal central hearth, such structures are probably indicative of short-term occupations during open-water seasons.

Historic (post-contact) Innu features included a variety of tent-rings:

***Matutishanitshuap* (sweatlodge)**

An isolated carefully prepared circular ring of round beach rocks approximately a meter and a half in diameter was discovered and excavated at MIS-6. It was found in a dense stand of willow brush just above the lake shore, a hundred meters or so from the pair of tent rings at MIS-6. The stones composing the feature were placed atop the beach sand, and there was no sign of any fire, charcoal or ash, nor any cultural materials found associated with it. Almost certainly this is the foundation of a sweatlodge. It appears to be similar in shape and size to a *matutishan* (a tent for a medicinal sweat) that Jacques Rousseau's Innu guide Comis Pinette, made when they descended the George River in 1947.

Hunting blinds and caches

MIS-3 (GlCx-2) is a prominent boulder feature that has been partially dug into the top of the esker at the western terminus of the prominent esker system that parallels the south shore of the Mistinipi Narrows. Two large boulders form the west wall. The east wall is made up of two courses of stones piled on top of each other. A dozen or so additional stones lay on the ground to the west of the feature where they appear to have been cast aside when opening the cache. Situated at the crest of the esker, exposed to the westerly winds off the lake, it would probably remain free of snow cover and visible throughout the winter and early spring months. At some time, it appears that the

Feature-4 at MIS-6 view to northeast across the Narrows.

Constructing a sweat lodge during Jacques Rousseau's George River expedition in 1947 (photo from the Jacques Rousseau Archives at the Montreal Botanical Garden).

MIS-3 (GlCx-2) boulder cache/hunting blind.
(Above) view to northeast up the long river-like eastern arm of Mistinipi Lake.
(Below) detail of structure.

cache was opened and the feature transformed into a hunting blind.

Landscape:
at the interface of history and memory and belonging An integral feature of the Caribou House Project and the Tshikapisk initiative is to create opportunities that engage with Innu community members in *nutshimit* –in the country. Innu colleagues, students and collaborators bring a wealth of stories, language and memories that significantly enhance archaeological practice and interpretations. Recognition of these perspectives is a poignant challenge to archaeologists, bound to perceptions predicated on material remains, in exploring the history of Innu/Iyu land use and occupancy.

Precontact sites located adjacent to the Mistinipi Narrows While research at Mistinipi was primarily focused on documenting the traces of the historic 19th-20th century Innu occupation and their specialized interior caribou hunting subsistence strategies we of course kept our eyes open for evidence of earlier "prehistoric" traces. During our fieldwork we identified four sites all of which were small scatterings of lithic remains that were found exposed on the surface, all were evidence of a short-lived occupation/visit presumably in anticipation of hunting caribou.

Archaic Period Quartz Battering Events (QBE): MIS-1(HaCw-5) and MIS-5 (GlCx-4) At both Indian House Lake (Samson 1978, 1983) and at Kamestastin (Arbour, Jenkinson and Loring 2013, Jenkinson 2011, Jenkinson and Arbour 2014, Loring, Jenkinson and Pastiwet 2009) the earliest cultural manifestations identified are sites characterized by extensive breaking of quartz nod-

In 1906 William Cabot photographed Ostinitsu and his companions observing migrating caribou from a shallow pit dug at the top of the hill above their camp (above). In 2014 Marcel Ashini and Richard Nuna (holding a print of the Cabot photograph) lounge in the same pit feature (below). Devoid of any artifacts the significance of the feature would elude recognition by most visitors.

ules. These "quartz battering events" which Samson terms the "High Quartz Complex" are activity areas that mostly appear bereft of any associated features that could be construed as hearths or structures. Finished tools, mostly ground slate, are rare (non-existent at most sites), rarely an occasional piece of Ramah chert or ground slate might be associated with the quartz debitage. These *Tshiash Innu* (old Innu from long, long time ago) sites conceivably date from as early as 6000 -7000 calibrated BP as small, highly mobile groups – perhaps originating from pioneering Maritime Archaic occupations along the central Labrador Coast— pursued caribou in the lee of the last remnant of the Wisconsin glaciation. MIS-1 was found in a blow-out near the eastern end of the esker 8 kms east of the main body of the lake, and MIS-5 which was a thin but persistent scatter of broken quartz pieces and flakes that stretched along the top and south side of the esker for about 25 meters at the narrows opposite the 1906 camp.

Another probable *Tshiash Innu* site (MIS-11 [GlCx-7]), albeit not as old as the ones dominated by quartz, is evidenced by a pair of distal Ramah chert biface fragments found eroding out of the caribou paths ascending the hill just west of the 1906 Innu camp. Another biface fragment was recovered from the beach where the caribou trails originate. It is impossible to conclusively assign these artifacts to one culture/period as they lack diagnostic features.

Late Precontact Period/Ancestral Innu sites: MIS-4 (GlCx-3) Rising above the cove at the western-end of the esker paralleling the south shore of the river-like arm of Mistinipi are a series of poorly defined outwash features that abut the prominent esker.

MIS-1 (HaCw-5): in the blowout was a deflated hearth surrounded by approximately 50 pieces of broken quartz, another 50 pieces were scattered about the blowout. The view is to the north over the narrow river-like easternmost extension of Mistinipi. The site is about a half kilometer east of the tundra-esker landing strip adjacent to a ruined and abandoned commercial caribou hunting camp.

Probable *Tshiash Innu* (Archaic) distal biface fragments from MIS-11.

These kame terraces are partially blown out along the top and sides exposing pockets of sand devoid of vegetation. In one blow out, the proximal portion of a small, very well made, very thin, side-notched biface made of a very fine-grained crystalline quartz was recovered. A close inspection of the exposed terrace in the vicinity of the biface revealed a pair of small, deflated hearths (evidenced by small fire-cracked rocks) along with a single flake of Ramah chert and a small tabular grinding stone/whetstone. Of indeterminate age, the biface bears some similarities to specimens recovered from Indian House Lake that Gilles Samson assigns to his Late Prehistoric Period ca.2300-1600 BP (Samson 1978).

Additional Ancestral Innu sites identified include MIS-12 (GlCx-8) and MIS-13 (GlCx-9) MIS-12 was in the swale between the hill just west of the 1906 Innu camp and the camp itself. The hill is deeply incised with the paths made by migrating caribou.

The pair of deflated hearths on top of the kame terrace at MIS-4 (GlCx-3)

A close-up of one of the hearth features.

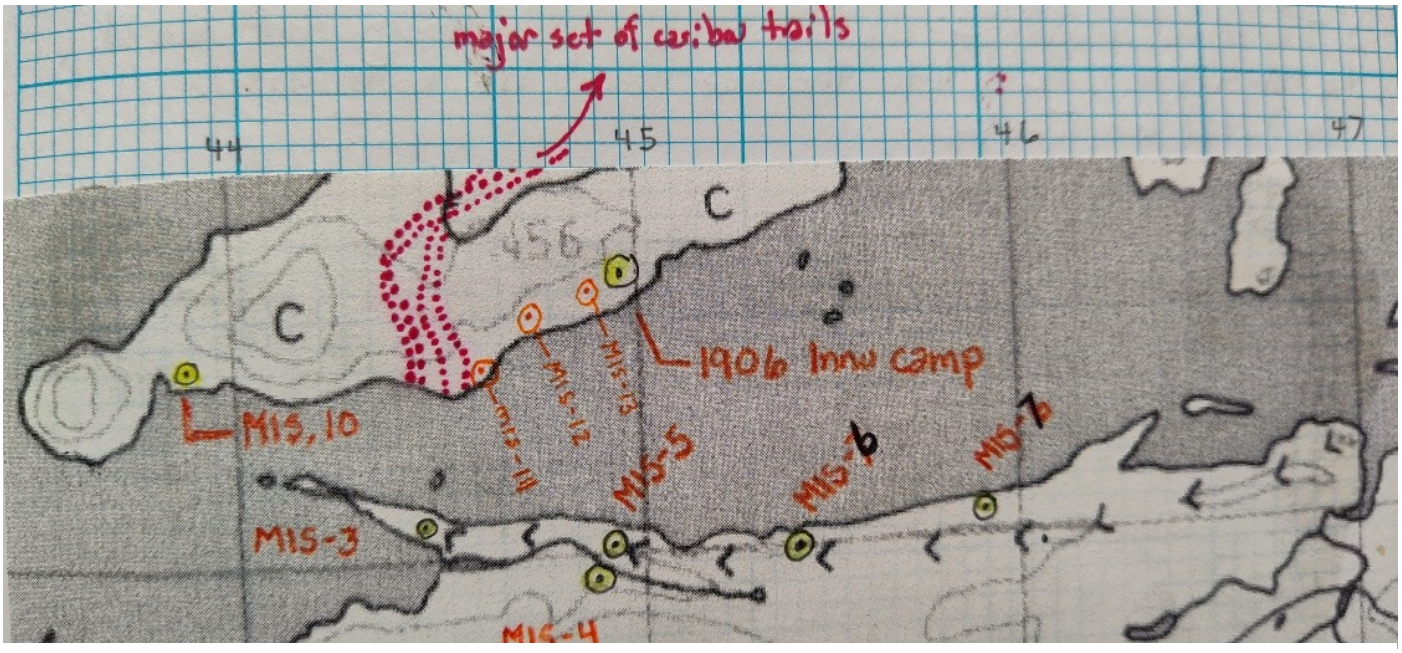
Artifact assemblage from MIS-4 (GlCx-3): tabular whetstone, side-notched biface, Ramah chert flake.

Found eroding out of the side of one of the caribou trails was a small cluster of a dozen or so tiny Ramah chert retouched flakes and a portion of a unifacial side scraper. The site appears to be a discrete activity area where caribou were butchered.

A surface scatter of quartz flakes found exposed along the western margin of the terrace on which the 1906 Innu camp was situated encouraged us to open a 1x1 meter test-pit. Immediately under the thick moss and crowberry vegetation we encountered some calcined and burned bone. The original test-unit was expanded to a 2-meter square which revealed the presence of an informal hearth associated with burned caribou bones and quartz and Ramah chert debitage. No formal tools were recovered but calcined bone from the feature was subsequently submitted to Beta Analytic and produced a C14 date of 860±30 BP/ AD 1165-1265 (Beta-395998).

Retrospection

While somewhat curtailed by autumnal storms our short sojourn at the Mistinipi Narrows nevertheless significantly contributed to an evolving understanding of the history, social dynamics, and resource constraints of Innu/Iyu and Ancestral Innu groups that lived in the northern barrenlands of *Nitassinan*– Arctic Quebec and interior Labrador. The camaraderie and knowledge of the project's Innu colleagues contributed substantially to an awareness and apprecia-



Detail of the Mistinipi Narrows showing the prominent esker along the south shore of the eastern arm of Mistinipi and the cluster of small hunting and butchering loci between the caribou trails and the 1906 Innu camp on the north side.

MIS-12 (GlCx-8) assemblage of Ramah chert debitage –left and center– and an edge fragment from a large unifacial scraper. Such scrapers are diagnostic of Ancestral Innu Daniel's Rattle sites on the Labrador coast.

MIS-13 (GlCx-9) quartz debitage found adjacent to the hearth.

tion of the country and to the interpretation of both the physical traces –the archaeological remains— and the intangible dimension of stories, anecdotes, and memories of ancestors, animals, the animal masters, and the spirits/other-than-human-beings (call them what you will) that inhabit the world shared by the Innu and the caribou. If historic 19th/20th-century Innu and Ancestral Innu have one predominant feature it is the apparent paucity of material remains that characterizes their sites. Not only has this contributed to the difficulty of locating sites but it has contributed to a perception that they never existed. The success of the Innu specialized caribou predation livelihood is predicated in part on the flexibility and mobility that enabled them to maintain an elaborate social network and move easily throughout the country unburdened by an expansive array of material goods. Much, nearly all, of the tools, clothing and shelter used by the Innu was derived from the land and could be replicated as needed. Little of it would survive the ravages of time. The fact that we have yet to discern a precontact manifestation that appears to signal a presence as conspicuous as that of the historic 19th-20th century Innu is a matter for future fieldwork to address. One consideration is whether the paucity of older sites reflects the presence/absence of large herds of caribou and whether the dramatic fluctuations seen in

Old caribou trail ascending the hill west of the 1906 Innu camp. Broken bits of quartz and Ramah chert flakes found exposed in such trails often provide the first clues as to the presence of an archaeological site.

Marcel Ashini and Richard Nuna conducting a metal-detector survey at the Innu camp that William Brooks Cabot visited in 1906.

"The first snow always melts." The autumnal storm of 23 September put a crimp in our excavation plans and worries about the prospect of getting picked up but conditions ameliorated and we spent another week of archaeological fieldwork. However, the frozen ground and lingering snow cover made it apparent that the field season must soon come to a close.

herd demography is part of an age-long cyclical process or a modern phenomenon. It is interesting to think of the deeply incised caribou trails that cover the approaches to Mistinipi as long linear test-pits as such trails through the tundra vegetation often reveal the first glimpse of previous human occupations in the region.

Caribou House Peregrinations Redux – September 2015

To quote from William Brooks Cabot, "To take one to a far country, year in and out, even though its people are well worthwhile, something of a mission is needed…I had always thought I should like to work out the remaining part of the Indian route to the George, from Mistinipi on" (Cabot 1912: 263). A central tenet of the Tshikapisk Foundation (an Innu experiential educational initiative centered at Kamestastin just east of and adjacent to the Quebec-Labrador provincial boundary) has been to situate knowledge and exposure to "traditional" heritage practices in the country away from the deleterious influences of village life (see Loring and Ashini 2000, C. Samson 2003). It was with the intention of broadening our awareness of the breadth and variability of the cultural patterning learned from the ASC/ Tshikapisk survey work done at Kamestastin and at the Mistinipi Narrows and by Gilles Samson at Indian House Lake that we took the opportunity afforded in a canoe-based survey of a north-south lake system that paralleling the George River valley to the west drains into Mistinipi and eventually into Indian House Lake.

Canoe survey narrative On the 28th of August, Sam Paquet, Norpaq's chief pilot, carefully nudged his Turbo-Otter ashore at the western-end of Lac Brisson in northern Quebec. "Here you go boys, looks like a nice day, see-you in about a month." With the plane's departure back to Schefferville, Tony Jenkinson (Tshikapisk Foundation) and I surveyed the pile of food and equipment that, theoretically at least, was to fit into the canoe and sustain the journey ahead. The silence that descends and the stillness of

the lake are in stark contrast to the hustle and hassle of preceding weeks that characterize departures to the North.

The broad valley in which the George River (*Mushuau-shipu*) flows to the north, is a long-forested oasis backed by barren ground plateaus. Providing shelter and resources and facilitating access and communications to groups throughout the region, the valley provides the center stage for examining the mingled relationships of human beings and caribou over time. There are an intriguing series of oddly shaped irregular lakes (Brisson, Napeu Kainiut, Canannée), connected by short stretches of rivers and rapids that flow to the south, to Mistinipi, which discharges into the George at Indian House Lake (*Mushuaunipi*). This lake and river system is approximately 30-35 kms east and parallel to the George River valley. Today, the route is sometimes traversed by skidoo borne Innu hunters from Natuashish who travel over the lake ice to hunt geese that are attracted to the open water of the rapids in the early spring. Mobility is a key factor in barren land survival for both humans and caribou and we suspected that such natural north-south corridors as offered by the lakes

Esker bordered cove at the western end of Lac Brisson. When observed from above the dramatic large oval structure –lower right– appeared to be an Innu shaputuan or a Late Dorset longhouse (!) but on closer inspection proved to be the remains of an old commercial caribou hunting camp, ca. 1980.

Large boulder cache beside the Rapides Kautanikuskants

draining into Mistinipi would likely have served as a prominent travel route in the past. In traversing this region, we hoped to facilitate a broader regional appreciation of past land-usage expanding upon and connecting the "islands" of research represented by Samson's work at Indian House Lake and our work at Kamestastin and Mistinipi. Furthermore, this whole portion of the northern Quebec-Labrador boundary region is the territory traversed each year by the migrating George River caribou herd. We were keen to observe and document the physical traces of caribou paths to determine their direction, their lay on the land, their use and abandonment, and their relationship to cultural features.

A canoe-based survey affords an opportunity to experience the nuances of a place with an intimacy and appreciation not readily observed when traveling by mechanical conveyances, be they motor-boats or helicopters. The immediate concerns of wind and weather, shelter and wood, and an awareness of the creatures in the countryside, birds, fish and animals– the obstacles to travel, and certain advantages afforded by both travel-routes and choices for sites (access to resources, viewscapes, etc.) afford researchers a perception and appreciation of past lifeways than might not otherwise be obtained. This practice of experiential archaeology has always been a component of the Smithsonian-Tshikapisk archaeology work with Innu. Unfortunately, a proposed rendezvous with a group of Innu colleagues who were interested in documenting former Innu burial places in the country did not transpire so that the autumn 2015 fieldwork was limited to the one canoe.

For four weeks, we surveyed the country about the western end of Lac Brisson/ Kapimitshikupitats whose drainage we subsequently followed through the lakes down to Mistinipi according to the dictates of weather, wind and waves, and the constraints imposed in documenting the sites discovered. We were successful in identifying several small *Tshiash Innu* (a.k.a. Maritime Archaic) and ancestral Innu hunting camps and boulder cache features in addition to the numerous remains of raised earthen -wall tent-rings that are a hallmark of 19th (and early-20th) century Innu occupations. Perhaps the most interesting of these historic Innu sites were a cluster of tent-rings that occurred on an island at the debouchment of Lac Cananée into Mistinipi. This site, *Mistanipi Eshatshiut*, contained the remains of at least four prominent tent-ring structures that overlooked the rapids separating the two lakes. Off to one side of the habitation area, in a secluded spot surrounded by large boulders, was a caribou bone bed, approximately 2 x 3 meters in breadth, consisting of a layer of shattered long-bone fragments overlaying a 20 cm thick deposit of caribou bone mash. The bone mash results from the crushing and pounding of the epiphyseal ends of long bones that are rich in fat that is rendered out when the bone mash is boiled. The fat and marrow extracted from the bones is the central feature of the *mukushan* a ceremonial thanksgiving feast that figures prominently in Innu social and spiritual practices.

Having mapped and photographed the features at *Mistanipi Eshatshiut* we portaged our canoe and equipment through a series of small ponds to emerge on the north shore of Mistinipi Lake proper. Mistinipi –literally "big lake" in Innu-aimun— (but some Innu say it has been rendered incorrectly in modern usage and should be *Matshanipi* –meaning bad or ugly lake) proved a formidable adversary. With the prevailing autumnal winds, a 25 km fetch, rock-bound shores and a thunderous surf, it took all our skill, patience and luck to cover the last portion of the survey arriving, gratefully, at our old campsite from the prior year where tent-poles and firewood awaited us. Two days later, as promised, Sam and Pierre Paquet braved snow squalls and gales to pluck us from our beach and carry us back to town.

Archaeological Observations

While the primary objective of the canoe trip was to deepen an understanding of the extent and variability of historic Innu land-use and experience something of the consequences and contingencies that the land and animals evoked as a means to move beyond the strictly material constraints of archaeological practice, we nevertheless did endeavor to record evidence of the archaeological features we chanced across.

Lac Brisson/Kapimitshikupitats The south side of Lac Brisson, from its west end east about 15 kms to the outlet of the lake is a low jumbled kame-and-kettle topography with a prominent esker running parallel to the lake shore. A pair of *Tshiash Innu* (Maritime Archaic related) components were discovered exposed on the surface in sandy blowouts. On the side of a wind eroded knoll halfway along the

Eroding bank of esker where slate celt was found, view to west towards the western end of Lac Brisson

Tshiash Innu (Maritime Archaic) ground slate celt with battered distal end in situ.

shore to the lake's outlet a polished slate celt was found exposed on the surface. The whole hillside adjacent to the find-spot had been deflated by the wind yet no additional traces of cultural materials or fire-cracked rocks suggestive of a brief encampment were present. On several occasions along the way a few flakes of Ramah chert were found along the shore or exposed in caribou trails, but as with the celt, devoid of any additional cultural traces.

Maritime Archaic component at Lac Brisson-5, Brisson atikumeu (Brisson caribou path) (HbDb-6)

Three kilometers to the west of the outlet of Lac Brisson a pair of small peninsulas face each other from opposite shores creating the narrowest point at which to cross the lake. Deeply incised caribou trails, especially on the north shore, indicate that this was a favored crossing place. On the south shore caribou trails converged to cross over to the north side of the lake. A few large biface thinning flakes of Ramah chert were found in the caribou trail at the lake shore. Here, along with a moderate amount of Ramah chert debitage was found, a very nice Maritime Archaic assemblage that included the following: a ground slate gouge, a unifacial Ramah chert scraper, a portion of an expertly thinned large Ramah chert biface and two large, utilized flakes of Ramah chert. The lack of any ground-slate or quartz debitage suggests, along with the assemblage, that this is a later Rattler's Bight component, not an early Naksak component typical of those from Kamestastin. The Rattler's Bight phase of the Maritime Archaic tradition on the Labrador coast is dated between 4200-3500 BP (Fitzhugh 2006). The tools were scattered about the boulders of the penin-

Brisson atikumeu (HbDb-6) **view to north across Lac Brisson, the opposing rocky peninsulas form the narrowest part of the lake and served as a major caribou crossing place as indicated by the deeply incised trails leading to them (especially on the north side). The *Tshiash Innu* (Maritime Archaic) assemblage was found adjacent and beyond the small clump of trees left of center.**

Ground slate tools from Lac Brisson: on the left is the gouge from the Rattlers Bight component at HbDb-6, on the right is the battered celt found in a blowout near the western end of the lake.

The Rattlers Bight Maritime Archaic assemblage from HbDb-6

sula; we were unable to identify any habitation features or hearths with which they might be associated.

Historic and Ancestral Innu sites at the discharge of Lac Brisson The outlet of Lac Brisson has proved a favored camping spot for Innu over the centuries. We found traces of both historic Innu camps dating to the late-19th/early-20th centuries as well as indeterminate precontact occupations on both shores of the river outlet just above the first fast water. We later learned that the archaeologist Eric Phaneuf had visited this site as part of an environmental impact assessment for a mining concern in 2011-2012 (Phaneuf 2013).

HbDb-2 The east shore of the outlet provided the most direct route to portage around the rapids. Here, just above the Brisson shoreline were found a few flakes of calcined bone clustered about what appeared to be a possible hearth. In partially exposing this feature several flakes of red quartzite and one flake of Ramah chert were found clearly associated with the calcined bone fragments. A sample of calcined bone was subsequently sent to Beta Analytic and returned a date of 550±30 BP, AD 1315-1355 (Beta-424285). While there didn't appear to be any visible traces of a structure associated with the presumed hearth, nor any additional artifactual material beyond the few bits of debitage, this is an important site as one of few to attest to an interior caribou hunting component to a late precontact Ancestral Innu presence in the George River country.

Historic Innu presence at the Lac Brisson outlet Circular raised earthen wall tent rings were found on both sides of the outlet. On the west side of the outlet was a three meter in diameter tent ring that in lieu of a central oval hearth built of closely fitted rocks, as seen with the raised-earthen wall tent rings at the sites about the Mistinipi Narrows, were a pair of large flat

View to north overlooking the outlet of Lac Brisson. Phaneuf's HbDb-1 is on the spit of land on the west side of the river, HbDb-2 (our Lac Brisson -7) is situated on the east side to the right of the small stand of spruce.

slabs that would have supported a tin stove. The advent of tin stoves occurs around 1920 at Northwest River. An older tent-ring (probably dating ca. 1900) is on the east side of the river on a slight knoll that overlooks the first set of rapids at the Brisson outflow. It lies completely exposed; no associated artifacts were apparent. The rapids and the open water below would be an excellent place for hunting geese in the spring when the lakes and ponds would still be ice-covered. Evidence that this is still the practice can be inferred by the scars left by skidoo tracks on the ridge top (that would be blown free of snow in the early spring) and by some trash (beverage cans and 12ga. shotgun shells) scattered about. This area is an easy one to access by Natuashish hunters coming in from Kamestastin.

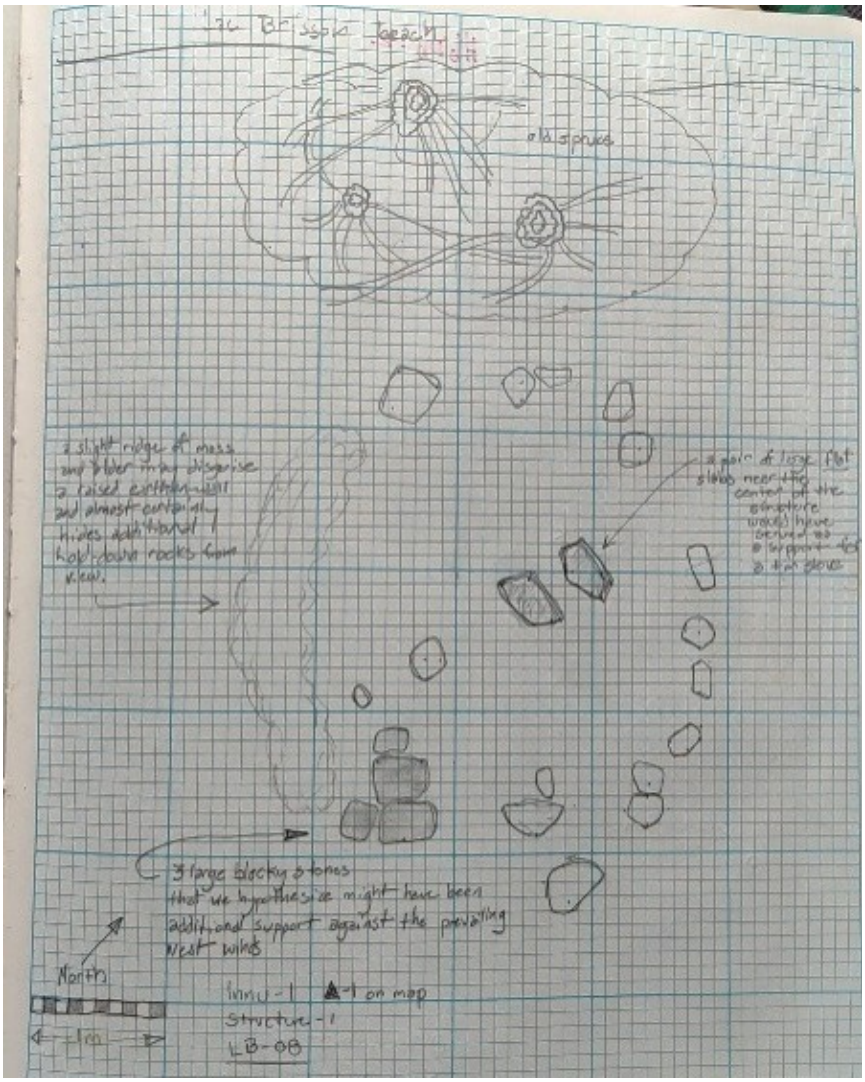
The partially excavated hearth at the Lac Brisson outlet (HbDb-2). A cluster of small fire-cracked rocks piled up and around a large hearth stone. While no charcoal was present, a small amount of calcined bone fragments and a few pieces of debitage attest to its cultural origins. It lay directly on top of the beach surface, partially covered by moss and lichen vegetation (as seen in the unexcavated upper right corner).

From Lac Brisson we followed the drainage south through a succession of lakes each connected by a short rapid-filled river section: Lac Brisson into Napeu Kainiut into Lac Cananée which in turn drained into Mistinipi. The remains of Innu tent-structures were seen and documented at a number of sites most of which appeared to be later (ca. 1920-1940) having stove support rocks instead of a central stone hearth and some with tent poles still standing and firewood. Perhaps the most interesting, certainly the most poignant, feature we discovered was a lonely grave on a sheltered cove overlooking the southerly expanse of Napeu Kainiut. It was reminiscent of a similar grave site that Mina Hubbard encountered in her 1905 crossing of Michikamau (Hubbard 1908).

Mistinipi Eshatshiut (HaDb-1) There are two channels at the outflow of Lac Cananée where the water drops three meters in a boisterous rapid into Mistinipi. The island formed by the two channels was found to be a favored camping place of considerable intensity and antiquity. Although heavily forested quite a few features pertaining to historic Innu occupations were located and doubtless many more lie obscured by the surface vegetation. This proved to be the most significant site revealed during our travels.

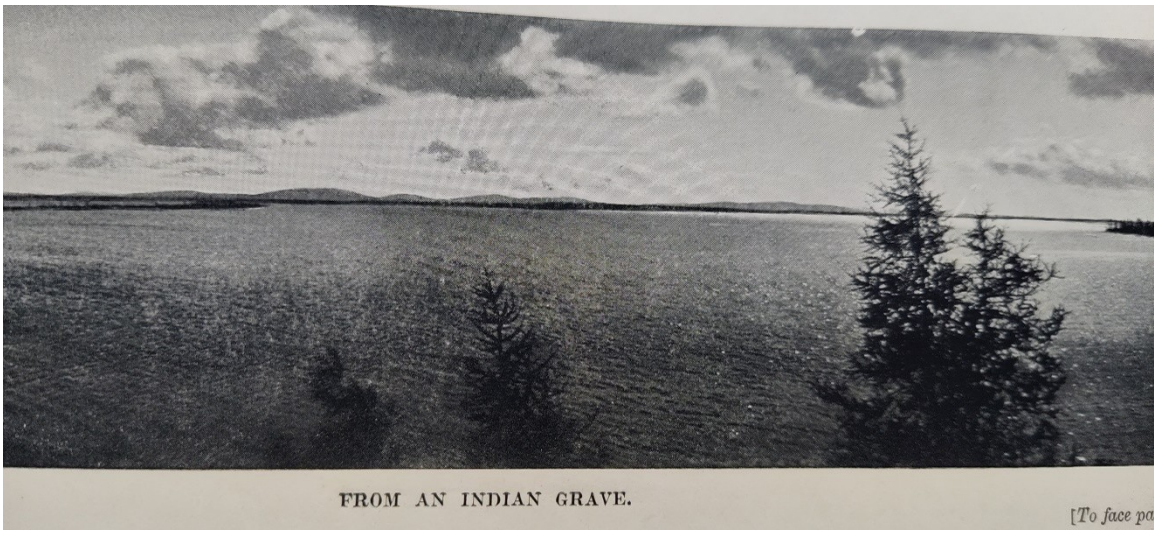
Precontact components at Mistinipi Eshatshiut (HaDb-1) The occasional flake of Ramah chert and isolated pieces of quartz debitage were encountered at various spots about the island where they were exposed on the surface. There is a small conical knoll at the north end of the island that affords a commanding view to the north over Lac Cananée. The barren knoll is without vegetation and in walking over its summit we found a scattering of small, calcined bone fragments which upon inspection were found to be associated with a small assemblage of Ramah chert, slate, and quartzite debitage (MIS.15-13).

On close inspection we determined that the calcined bone and debitage were found to surround two formal arrangements of small boulders set about seven meters apart, the intervening space being a mix



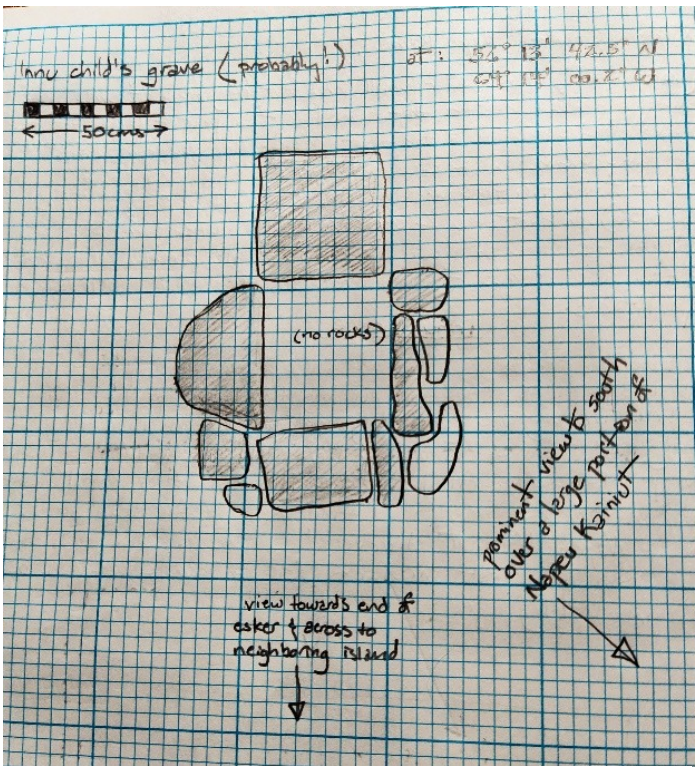
Map of the Innu tent-ring on the west side of the Lac Brisson/Kapimitshikupitats outlet

Raised earthen-wall tent ring with a central cobble hearth on the east side of the Lac Brisson outlet, view to southwest over the first set of rapids draining the lake.


FROM AN INDIAN GRAVE.

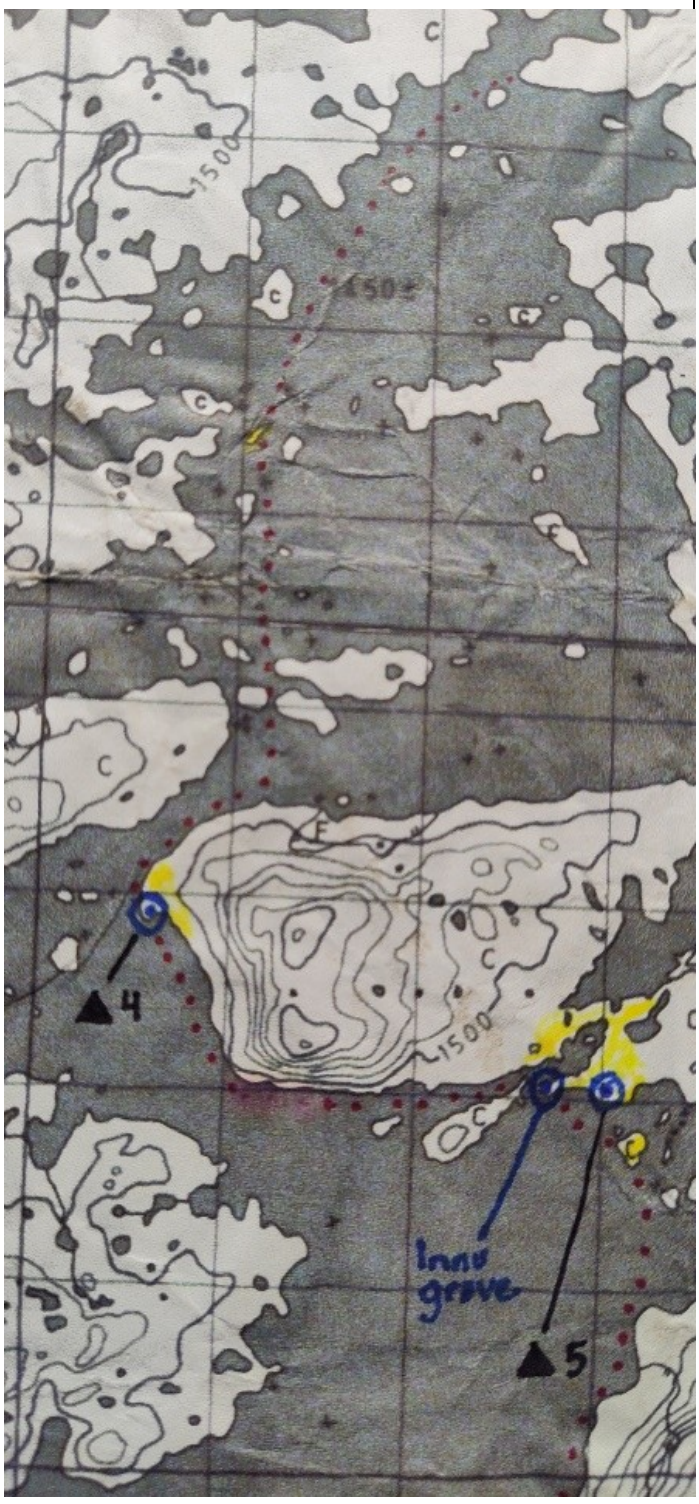
[To face pa

The view from the Innu burial place on Michikamats which Hubbard found deeply moving (Hubbard 1908:159)



Probable lonely grave of an Innu/Iyu child (HbDb-5).

Maps showing portions of the route across Napeu Kainiut. Old Innu tent sites are marked with black triangles. The yellow portion indicates where terrestrial surveys were conducted.



Historic Innu camps.

▲-1. Lac Brisson outlet (HbDb-1).
Tent-ring with central stone slabs for stove support, ca. 1920-1930.

▲-2. Lac Brisson, cove west of outlet.
Two parallel rows of hold-down rocks 5 meters apart for rectangular tent.

▲-3. Lac Brisson outlet, east shore adjacent HbDb-2
Raised earthen-wall tent ring with central rock hearth, ca. 1900.

▲-4. Island in Napeu Kainiut, 56∘14'10.3"N/64∘16'51.1"W
Tent-ring with central stone slabs for stove support, ca. 1920-1930.

▲-5. East shore of Napeu Kainiut, cove southeast of Innu child's grave. Mostly dismantled tent-ring and fire place.

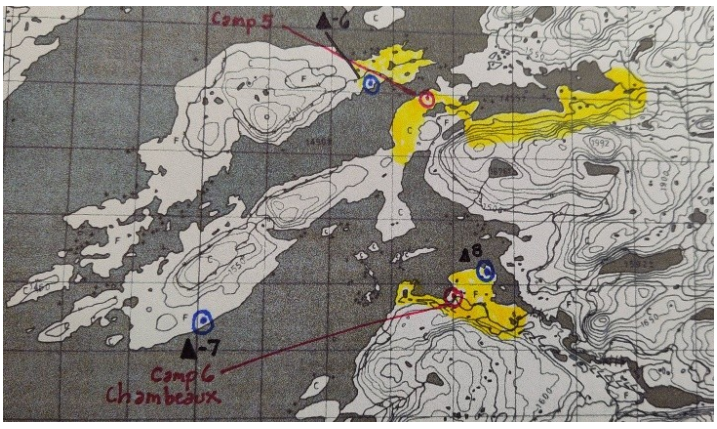
▲-6. Island in Napeu Kainiut north of the outlet.
Two adjacent Innu raised earthen-wall tent rings with central cobble hearths.

▲-7. Western end of peninsula on east shore opposite outlet to Napeu Kainiut Two Innu raised earthen-wall tent rings and associated features, ca.1910.

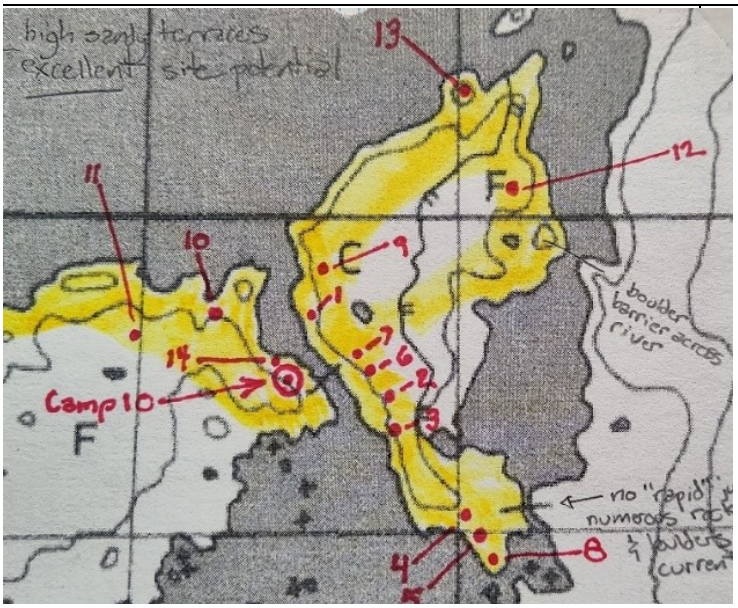
▲-8 and ▲-9. West shore at the beginning of the outlet of Napeu Kainiut. Poorly demarked tent structures in heavy alder vegetation, ca. 1920-1950. Axe-cut trees, bear-skull offering.

▲-10. West shore of Lac Cananée Tent ring with central cobble hearth strewn with old tent poles, ca.1920.

The tent sites, ▲-3,▲-6 and ▲-10, which had raised earthen walls and central cobble hearths that are analogous to the structures at GlCx-5 and GlCx-6 at the Mistanipi Narrows are thought to date to the late-19th/early-20th centuries. Most of the other sites appear to be later but all these suggested dates are conjectural based primarily on whether the tents were heated by central cobble hearths or by tin tent stoves and by the condition of tent poles and cut wood when present.



At Mistinipi Eshatshiut (HaDb-1) Loci-3 view northwest over the rapids draining Lac Cananée



Mistinipi Eshatshiut (HaDb-1)

Mistinipi Eshatshiut (HaDb-1) loci

MIS.15-01 undetermined precontact
MIS.15-02 Innu tent structure
MIS.15-03 Innu tent structure
MIS.15-04 bed of mashed caribou bones
MIS.15-05 pair of Innu tent structures
MIS.15-06 projectile point find spot
MIS.15-07 boulder bivouac
MIS.15-08 Innu tent structure
MIS.15-09 quartzite flakes
MIS.15-10 undetermined precontact
MIS.15-11 quartz battering event
MIS.15-12 Innu tent structure
MIS.15-13 precontact linear hearth
MIS.15-14 quartz battering event

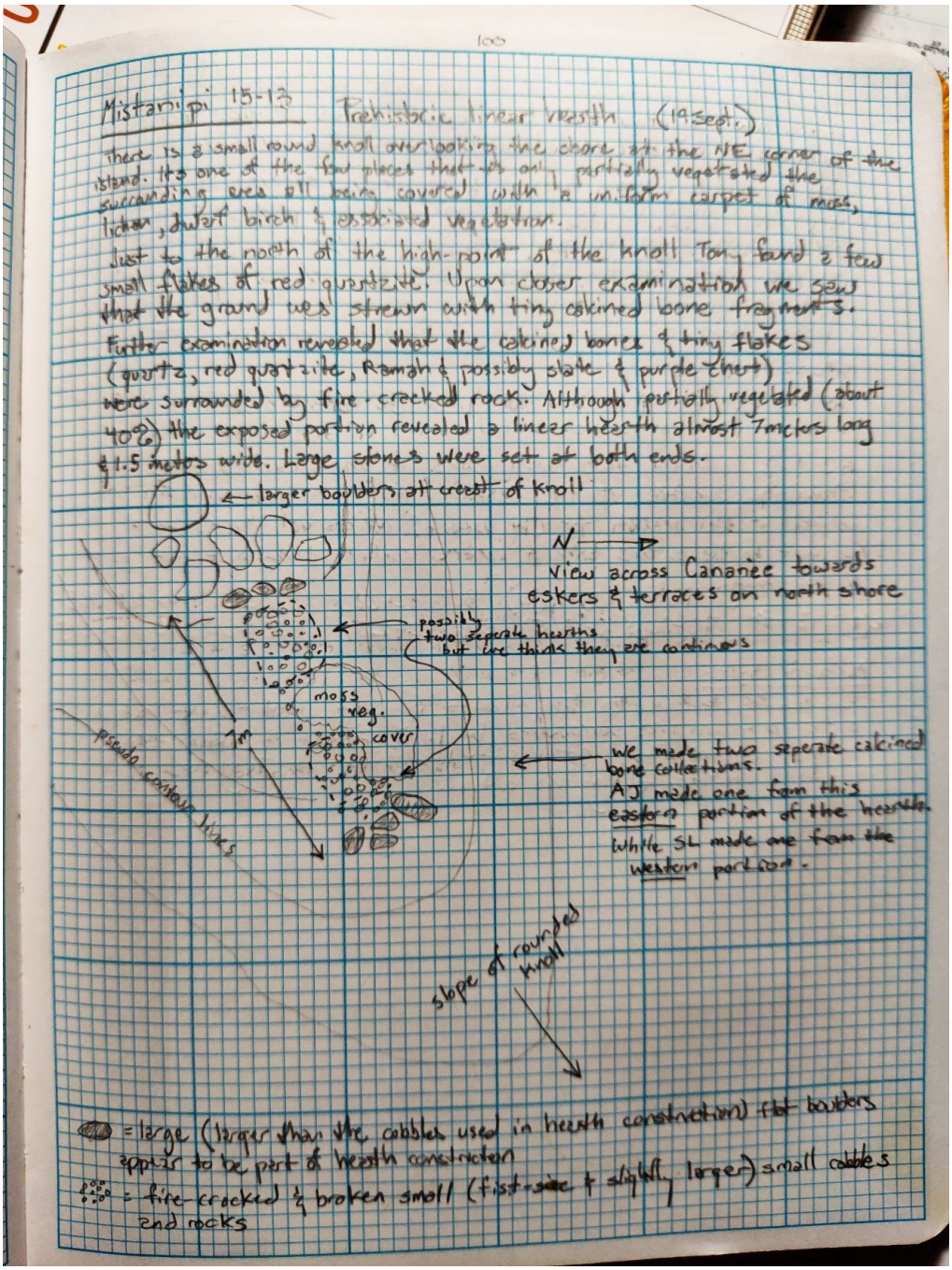
of small fire-cracked rocks intermingled with the debitage and calcined bone. When we stepped back and looked at the relationship between the sets of small boulders and the distribution of calcined bone fragments and lithic debitage we realized that the feature was a linear hearth whose western end was anchored by the large boulders at the very crest of the hill. This would be a lovely feature to excavate, between soil fluctuation, erosion and vegetation cover it's quite likely that there is unexposed material associated with it. (However, no additional artifactual material was found in the vicinity on top of the exposed knoll.) We limited our investigation to making a surface collection of debitage: all tiny pressure flakes resulting from biface rejuvenation. Raw materials present included quartz, red quartzite, Ramah chert, purple chert and slate. We carefully collected calcined bone fragments from each end of the hearth. No charcoal pieces were apparent on the surface, where doubtless they would have been washed or blown away. The calcined bone, submitted to Beta Analytic for C14 dating produced the following results:

Mistinipi 15-13(W) Beta-424288 830±30 AD 1160-1265

Mistinipi 15-13(E) Beta-424287 800±30 AD 1190-1275

Even though it lacks a formal tool assemblage this is an important addition to the small corpus of dated sites attributable to the Late Precontact (Ancestral Innu) Period in the Quebec-Labrador interior. The long linear hearth is suggestive of a shaputuan (an elongated multi-family tent) such as are present

The barren hilltop at MIS.15-13 view to north over Lac Cananée and associated debitage.



Field notes on the linear hearth (MIS.15-13) at *Mistinipi Eshatshiut (HaDb-1)*


Ramah chert stemmed point (MIS.15-06) and hunter's bivouac (or cache) with a partially dismantled stone wall (MIS.15-07)

at some Ancestral Innu (Daniel's Rattle) sites on the Labrador coast (Holly 2013: 92-97).

The presence of several QBEs (quartz bashing events) and the occasional piece of broken quartz found scattered about hint at the presence of earlier *Tshiash Innu* (Archaic) components but the only diagnostic trace of such was a single Rattlers Bight-style stemmed Ramah chert projectile point lying exposed on the side of the hill. The point was found adjacent to a large boulder that had been partially undermined and walled up to create a hunter's bivouac. It is difficult, probably impossible, to infer whether the bivouac afforded shelter to the person who lost the projectile point or if the bivouac is related to the prolific historic Innu occupations. The point however is from the same culture and time period as the small assemblage found at HbDb-1, the caribou crossing place on Lac Brisson.

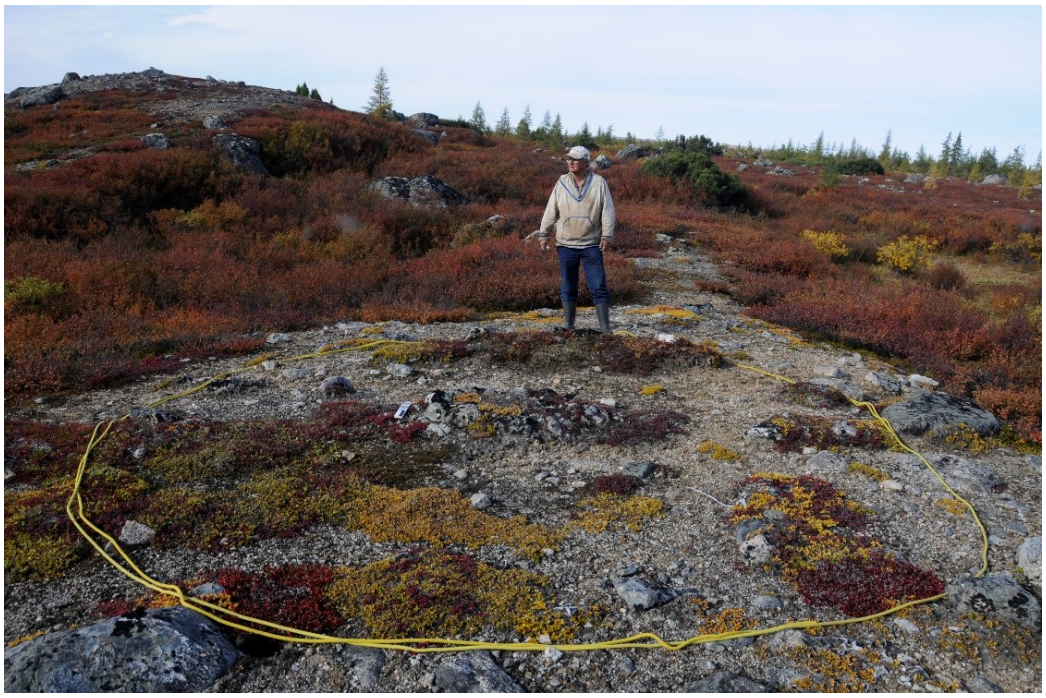
Historic Innu components at Mistinipi Eshatshiut (HaDb-1) This was a favored locality for late-19th/early 20th century Innu groups. Several very nice raised earthen-walled tent rings, with central cobble hearths analogous to the structures at GlCx-05 and -06 at the Mistinipi Narrows were mapped and photographed. Other than several 44-40 rifle cartridge cases, a few nails, and a 40cm long strip of heavy metal with screw holes at each end (thought to be a guard strip for the exterior bow of a canoe) no cultural materials were apparent on the surface.

The most impressive feature of the Innu camps at Mistinipi Eshatshiut was a 20 cm thick deposit of crushed and broken caribou bones that was found enclosed by large boulders off to one side of the tent-structures at the south end of the island. The boulders can be considered something of a ceremonial precinct for the ritual disposal of the broken and crushed caribou bones. The mash of broken bones results from the crushing of caribou leg bones that are subsequently boiled to extract their fat content. The fat skimmed off the boiled bone mash is called *atikupimin* which is then mixed with chunks of uncooked marrow from the long bones to be consumed during the *mukushan* —a ceremonial feast of thanksgiving. As with most animal remains, the Innu observed protocols about the proper way to dispose of them to demonstrate respect for the animals and their guardians. While not as large as the similar feature at the 1906 Innu camp at Mistinipi the caribou bone pile represents the remains of dozens if not hundreds of animals.

For the Innu, as for all northern hunting peoples, the act of killing and butchering animals is fraught with supernatural peril, and these activities necessitate a suite of behaviors pertaining to the disposal of animal remains. Caribou, it is believed, give

themselves to the devout hunter and the hunter in turn respects the gift of the caribou by ritual practices especially pertaining to the discard of animal remains (Friesen and Stewart 2017). Archaeologists rarely, if ever, address this fundamental tenet of northern peoples.

One of our primary research agendas is to learn how an understanding and appreciation of the character and constraints of the 19th-century Innu adaptation might correlate with earlier archaeologically derived cultural manifestations. Specifically, can we deduce anything about the nature and duration of caribou populations and fluctuations over time from archaeological-derived insights? What correlates of the archaeological record— the location and density of sites from different time periods, the evidence of intra- and inter-regional patterning, tool use and acquisition, ritual and ceremonialism— might serve as proxy indicators of caribou demography?



Raised earthen-wall tent ring at MIS.15-02.

(lower) tent-ring with central cobble hearth at MIS.15-5, view to north with Lac Cananée in the distance.

Concluding thoughts

When I was younger, I was much moved by a poem "North Labrador" by Hart Crane:

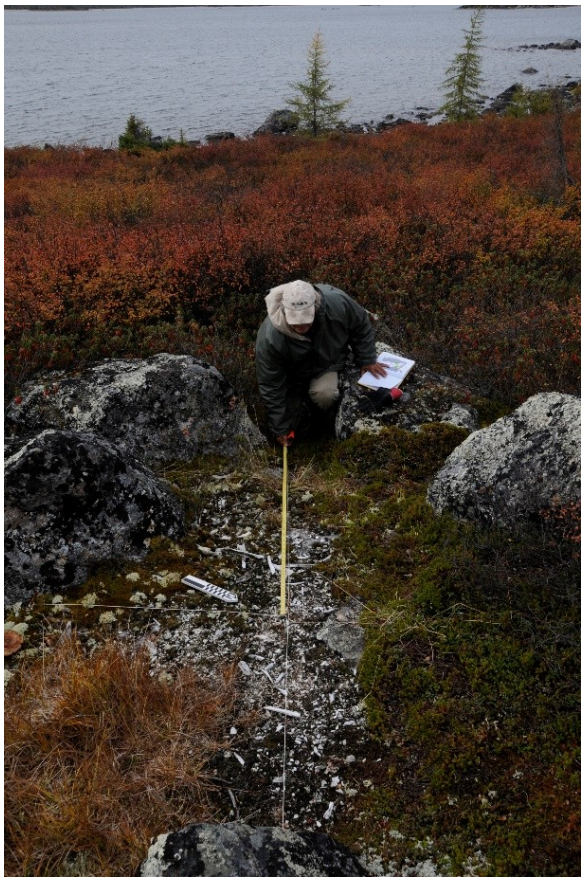
A land of leaning ice
Hugged by plaster-grey arches of the sky,
Flings itself silently
Into eternity.

"Has no one come here to win you,
Or left you with the faintest blush
Upon your glittering breasts?
Have you no memories, O Darkly Bright?"

Cold-hushed, there is only the shifting of moments

MIS.15-04. The caribou bone pile at Mistinipi Eshatshiut (HaBd-1). View to south over the northern portion of Mistinipi Lake.

Mapping the caribou bone mash feature.



Close-up of test-excavation to determine depth of deposit.

That journey towards no Spring—
No birth, no death, no time nor sun
In answer.

To stand out on the exposed barren land plateau adjacent to the height-of-land provincial border with only the silent witness of erratic boulders for company one keenly feels a sense of eternity. With the onset of cold weather there is a silence that is almost palpable. The country is etched with caribou trails but even these have begun to revegetate as the great herds of 20-30 years ago have declined almost to the vanishing point. As with the caribou, so too with the people who once upon a time journeyed across the landscape leaving traces almost as faint as memories. For the past thirty years it has been my exceptional good fortune to be able to travel, often (but not nearly as often as might be desired) with Innu companions and colleagues along caribou trails however faint and former glacial lake strand lines exploring by various means, of which archaeology is one, ways to situate an understanding of the relationships –past and present— that the Innu/Iyu and their ancestors experienced with the land and with the animals. The research as described in this report addresses several mandates: it has a historical mandate, in seeking to reveal the settlement-subsistence strategies of recent caribou hunting specialists with a nod to better understanding ancient adaptations at the core of humanity's common hunting heritage (Loring 1997b); a socio-political mandate in its engagement with Innu identity politics and land-claim negotiations; and finally a philosophical mandate that posits the values and practices of the *Tsheniu Mantushiu* (the old Innu hunters with special powers and arts) towards stewardship of the environment predicated on reciprocity and respect.

Acknowledgements

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Marcel Ashini, Chelsee Arbour, Anthony Jenkinson and Tutu at the fall 1906 Innu camp.

View to the east over the eastern reaches of Mistinipi as viewed from the highest hill on Mistinipi's northern shore. The beginning of the Mistinipi Narrows and the esker that defines its southern shore can be made out in the upper right corner.

Citations

Arbour, Chelsee, Anthony Jenkinson and Stephen Loring

2013 Caribou Paths and Stone Hearths: Archaeological Fieldwork at Kamestastan, Spring 2012, in Stephen. Hull (eds), *Provincial Archaeology Office of Newfoundland and Labrador Annual Reports* 11: 7-23.

Birk, Douglas A.

2004 *From Things Left Behind: a Study of Selected Fur Trade Sites and Artifacts*. Midwestern Archaeological Center Technical Report No. 84.

Cabot, William Brooks

1912 *In Northern Labrador*. Gorham Press: Boston.

1920 *Labrador*. Small, Maynard & Co.: Boston

Easton, Clifford

1908 Indian tribes of Labrador. *Canadian Magazine* 31: 291-299.

Fitzhugh, William

2006 Settlement, social and ceremonial change in the Labrador Maritime Archaic. In, *The Archaic of the Far Northeast*, edited by David Sanger and M.A.P. Renouf, Orono, Maine: University of Maine Press, pp. 47 -81.

Friesen, T. Max and Andrew Stewart

2017 Covering bones: the archaeology of respect on the Kazan River, Nunavut. *Etudes Inuit Studies* 14 (1-2): 151-178

Funk, Robert E.

1972 Early Man in the NE and the Late Glacial Environment. *Man in the Northeast* 4:7-39.

1978 Post-Pleistocene Adaptations. In, Handbook of the North American Indians 15, *Northeast,* pp.16-27. Washington: Smithsonian Institution Press.

Holly, Donald

2013 *History in the Making. The Archaeology of the Eastern Subarctic*. AltaMira: Lanham, MD

Jenkinson, Anthony

2011 Summary of Tshikapisk Excavations at Kamestastin 2008 to 2010. In, Stephen Hull (ed), *Provincial Archaeology Office of Newfoundland and Labrador Annual Reports* 9: 89-102.

Jenkinson, Anthony and Chelsee Arbour

2014 The Year of Slate: Archaeological fieldwork at Kamestastin, spring 2013. In, Stephen Hull (ed), *Provincial Archaeology Office of Newfoundland and Labrador Annual Reports* 12: 67-82.

Loring, Stephen

1985 *O Darkly Bright: the Labrador Journeys of William Brooks Cabot, 1899-1910*. Exhibition catalogue, Johnson Memorial Gallery, Middlebury College, Middlebury, Vt.

1997a William Brooks Cabot (1858-1949). In, *Lobsticks and Stone Cairns, Human Landmarks in the Arctic*, edited by Richard C. Davis, Univ. of Calgary Press: Calgary, pp.276-279.

1997b On the trail to the Caribou House: some reflections on Innu Caribou hunters in northern Ntessinan (Quebec/Labrador). In, *Caribou and Reindeer Hunters of the Northern Hemisphere*, edited by Lawrence Jackson and Paul Thacker. Avebury: Aldershot (Great Britan). pp. 185-220.

1998 Stubborn independence: an essay on the Innu and archaeology. In, *Bringing Back The Past: Historical Perspectives on Canadian Archaeology*, edited by P. J. Smith and D. Mitchell, pp.259-276. Archaeological Survey of Canada, Paper 158.

1999 Labrador Community Archaeology. *Arctic Studies Center Newsletter* 7:9-11.

2001 Archaeology with the Innu at Kamestastin. *Arctic Studies Center Newsletter* 9:10-11.

2002 'And they took away the stones from Ramah': lithic raw material sourcing and Eastern Arctic Archaeology". In, *Honoring Our Elders: A History of Eastern Arctic Archaeology*., edited by William Fitzhugh, Stephen Loring and Daniel Odess, Contributions to Circumpolar Anthropology, volume 2. Arctic Studies Center, Smithsonian Institution, Washington, D.C., pp. 163-185.

2006 Smithsonian research in Labrador, Summer 2005. *Prov. Arch. Office Newsletter* 4: 55-60.

2007a *Searching for the Caribou House: Innu archaeology at Kamestastin*. Paper presented at the 40th Annual Meeting of the Canadian Archaeological Association, St. John's, Newfoundland.

2007b Further documentation supporting the former existence of grizzly bears (Ursus arctos) in northern Quebec-Labrador. (co-authored with Arthur Spiess). *Arctic 60(1):7-16*.

2008a At home in the wilderness: the Mushuau Innu and caribou. In, *The Return of Caribou to Ungava*, A.T. Bergerud and S. Luttich, McGill/Queen's University Press: Montreal.

2008b The Wind Blows Everything Off the Ground: New Provisions and New Directions in Archaeological Research in the North. In, *Opening Archaeology: Repatriation's Impact on Contemporary Research and Practice*, T. Killion, ed. Santa Fe: School for Advanced Research: Santa Fe. Pp. 181-194.

2011 Chance favors the prepared mind: the identification of a new lithic source from the interior of northern Labrador. *PAO 2010 Archaeological review* 9:85-94.

2017 To the uttermost ends of the earth…Ramah chert in time and space. In, *Ramah chert: a Lithic Odyssey*, edited by Jenneth E. Curtis and Pierre M. Desrosiers. Nunavik Archaeological Monograph Series No.4. Avataq Cultural Institute: Inukjuak, Quebec. Pp. 169-220.

Loring, Stephen and Daniel Ashini

2000 Past and future pathways: Innu cultural heritage in the twenty-first century. In, *Indigenous Cultures in an Interconnected World*, edited by Claire Smith and Graeme Ward, Allen and Unwin: St. Leonards, Australia. Pp. 167-189.

Loring, Stephen, Anthony Jenkinson, and Etienne Pastiwet
2009 Caribou Country Archaeology: Tshikapisk sponsored Research in Nitassinan, fall 2004, in Stephen Hull and Delphina Mercer (eds), *Provincial Archaeology Office of Newfoundland and Labrador Annual Reports 9*: 105 -116.

Loring, Stephen and Moira T. McCaffrey, Peter Armitage and Daniel Ashini
2003 "The archaeology and ethnohistory of a drowned land: Innu Nation research along the former Michikamats lake shore in Nitassinan (interior Labrador)." *Archaeology of Eastern North America* 31:45-72.

MacDonald, George
1968 Debert: a Palaeo-Indian Site in Central Nova Scotia. *National Museum of Man, Anthropology Papers, no. 16*.

Meltzer, David
1988 Late Pleistocene Human Adaptations in Eastern North America. *Journal of World Prehistory* 2:1-52.

Meltzer, D.J., Smith, B.D.
1986 Paleo-Indian and early Archaic subsistence strategies in eastern North America. In: Neusius, S.W. (Ed.), *Foraging, Collecting and Harvesting: Archaic Period Subsistence and Settlement in the Eastern Woodlands*. Occasional Paper 6. Center for Archaeological Investigation, Southern Illinois Univ. at Carbondale, pp. 1–30.

Pilon, Jean-Luc
1982 Le site Neskuteu au Mushuau Nipi (Nouveau-Québec): maifestation de la période archaïque. *Collection Nordicana* 46, Centre d'études nordiques, Université Laval, Québec. pp. 3-38.

Phaneuf, Erik
2013 *Strange Lake B-Zone Human Environment Baseline Surveys. Archaeological Inventory, September 2011 and 2012. Preliminary Report* 60290419, AECOM Canada Ltd.

Samson, Colin
2003 *A Way of Life That Does Not Exist*. Verso Press:London.

Samson, Gilles
1975 *Contribution to the study of the Mushuau Innuts and their territory, Nouveau- Quebec*. MA thesis, Department of Anthropology, Laval University, Quebec.
1978 Preliminary cultural sequence and palaeo-environmental reconstruction of the Indian House Lake region, Nouveau-Quebec. *Arctic Anthropology* 15(2):186-205.
1983 *Préhistoire du Mushuau Nipi, Nouveau-Québec: Étude de mode d'adaptation a l'intérieur des terres hémi-arctiques*. Ph.D. dissertation, Department of Anthropology, University of Toronto.

Tuck, James
1975 The Northeastern Maritime Continuum: 8000 Years of cultural development in the Far Northeast. *Arctic Anthropology* 7(2):139-147.

Wallace, Dillon
1919 *The Long Labrador Trail*. A.C. McClurg: Chicago.

Turpin's Island, Little St. Lawrence, CfAu-05
Scaling up data collection
Memorial University Field School 2025

Catherine Losier, Memorial University
Kassandra L. Drake, Memorial University
Neil Burgess, Shipwreck Preservation Society of Newfoundland & Labrador
Maria Lear, Memorial University

Figure 1: Extract from an Anonymous world map held at the Vatican Library (Urb.lat.274) dating from 1530 showing *Terra delosa Bacalaos* (Newfoundland) and *P.S. Lorenzo*

After the 2024 survey, which enabled the identification of several features on the site of Turpin's Island (ChAu-05), historical and archaeological analysis continued, and several aspects of the site's past were documented in greater detail. Much of this new historical information emerged from research conducted by Kassandra Drake (2025) in the context of her Master's thesis entitled *An Investigation of Human Activity and Environmental Change at Turpin's Island through Palaeoenvironmental and Historical Archives*. It must first be mentioned that Kassandra Drake (2025: 69) discovered a new map bearing the toponym *P.S Lorenzo,* which probably means "Puerto San Lorenzo" (figure 1). This map was made in 1530, making it one of the oldest known maps of Newfoundland. The first mention of the Chapeau Rouge, the mountain that sits at the entrance of St. Lawrence harbour, is visible on a map made by Gaspar Viegas in 1534. On this map we read the toponym *C. do Piloto* which is a direct reference to the importance the Chapeau Rouge as a navigation landmark (Drake 2025: 69). Other new information regarding a possible interruption in the site occupation after the signing of the Treaty of Utrecht (Drake 2025: 137-139) and the occupation of the site by the Thorne family was also discovered (Drake 2025: 77-80). This new knowledge will be described in greater detail in later sections of the report.

During the 2025 fieldwork, we continued the test-pitting survey initiated in 2024 and focused on two larger sectors in order to gather additional data on both the French occupation of the site, and the Newman & Co. fishing premises. In total, 12 test pits were excavated (bringing the number to 54 since 2023). Two larger units (1B and 3A) were excavated, and four additional features were identified and described during the campaign, which took place between June 24 and July 18, 2025. As in 2024, the

Figure 2: The 2025 Memorial Archaeology field school crew (from Left to right): Brendan Ryan, Clarke Simonsen, James Foss, Kassandra Drake (MA student and teaching assistant), Sanaa Mrad, Kayla Low (MA student and research assistant), Anna Pugh (MA student and teaching assistant), Valentin De Filippo (PhD student and research assistant), Adam Farrell, Mark Stephenson, Samuel Gregory, Raphaëlle Gascon, Rosalie Collette, Maya Loredo, Dr. Catherine Losier

fieldwork was devoted to research and student training. Ten undergrad students and four teaching assistants (three MA and one PhD student) took part in the project (figure 2). In addition to the excavations, we conducted a georadar survey in targeted areas of the site and an underwater survey of the harbour.

New Insights into the Historical Context of Turpin's Island

Our current objective is to produce a biography of the site from the earliest human occupation to the twentieth century, and to link the occupants of Turpin's Island, including their continuity and change, to the evolving geopolitics of the Atlantic world, particularly in relation to European expansion from the sixteenth century onward. This project is part of the *Transforming Climate Action* initiative, through which our research team aims to document adaptation to coastal life on the South Coast of Newfoundland, mitigate the loss of heritage caused by climate change, and preserve data that are crucial for enhancing tourism opportunities in the *Chapeau Rouge* region (https://www.ofi.ca/fr/tca-projects/the-future-of-coastal-communities).

Considering the results of the 2024 survey, our objectives for the 2025 fieldwork were as such: 1) to continue the test pit campaign in discrete locations, 2) to open larger excavation units in selected sectors: in Feature 3 associated with Newman & Co. and in the sector of stage 1 where numerous French artifacts were recovered during previous excavation (figure 3).

Once again, Turpin's Island did not disappoint. We had our share of surprises during the 2025 excavations: additional features were identified, and we gathered more precise information on the site's occupation (table 1). During the field season of 2025, activities were concentrated on the west side of the site, where most discoveries have been made to date. Interestingly, the discovery of some features occurred simply because the team happened to walk along different paths while moving across the site.

As in the paper presented in the 2024 Provincial Archaeology Office Review, the results of the 2025 season will be discussed according to the different periods of the site occupation. This approach represents the most meaningful way to interpret the various archaeological discoveries. The historical context, however, will be addressed only briefly in this report. We invite readers to consult last year's Provincial Archaeology Office 2024 Archaeology Review (Losier 2025: 188–201) or Kassandra Drake's MA thesis (Drake 2025) for further information.

From the initial occupation of the site to 1713

As noted in the introduction, the earliest known reference to the St. Lawrence area currently appears on a map dating to 1530 (figure 1). This indicates that the area of St. Lawrence was known in the early days of exploitation of the marine resources of Newfoundland by European fishing crews. The specific mention *P.S. Lorenzo* is an Iberic toponym suggesting a Basque presence in the area. This is supported by a few archival discoveries relating to the Basque presence in

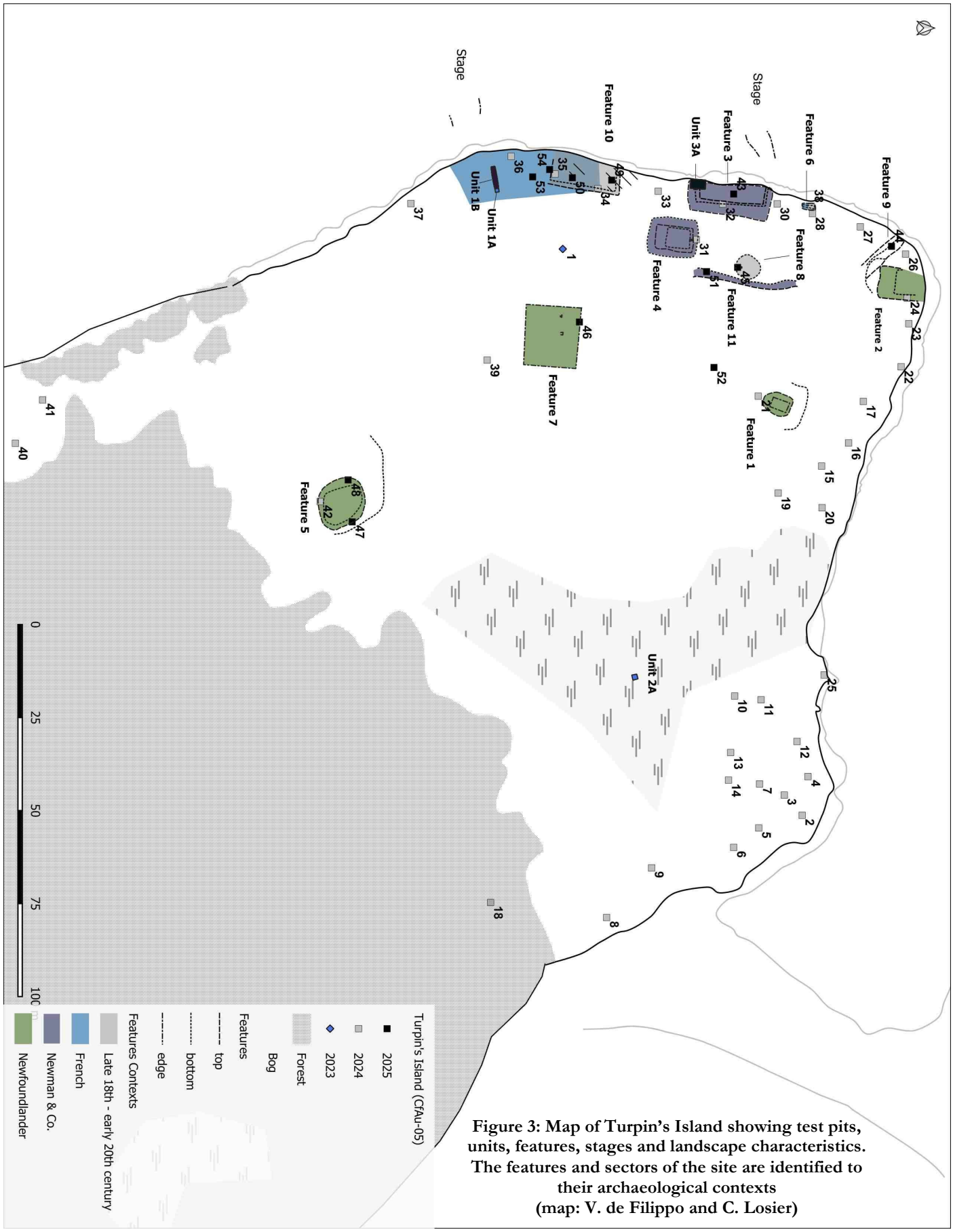


Figure 3: Map of Turpin's Island showing test pits, units, features, stages and landscape characteristics. The features and sectors of the site are identified to their archaeological contexts (map: V. de Filippo and C. Losier)

Table 1: Description of the features identified at Turpin's Island, 2023-2025

	Identification	Elevation of feature top (m)	Diagnostic artefacts	Size of Feature (m) (NS X EW)	Context	Description
1	Stone cellar?	6,767	Dark green glass bottle, cut nail	8.00m X 5.50m	19th-20th century	A large feature, approximately 1.5 m deep and rectangular in shape, is excavated into a small hill. The base of the feature is filled with large rounded and sub-rounded stones. It appears to be a structure that collapsed inward, with remnants of "walls" visible on all four sides. This feature may represent a stone cellar. Mortar is abundant throughout the soil, and cement mortar is affixed to many of the large stones and bricks at the base. The feature is possibly associated with families who lived on the Island, such as the Thornes (mid-19th century) and the Turpins (early to mid-20th century). It also seems to correspond to the Orlebar survey conducted in 1860–1861.
2	Foundation	3,877	Pearlware, Metal, Nail, Fresh bones (big mammal)	12.60m X 7.90m	19th-20th century	Rectangular stone foundation, the interior as been excavated. On the south side, there is a large accumulation of rounded stones ranging from 15–35 cm in size. In TP#24, the foundation of the feature is represented by a line of large stones, approximately 30 cm in diameter. This feature is located near the shoreline and may be associated with a fishing stage. Artefacts and ecofacts (particularly fresh large mammal bones) suggest an occupation during the 20th century. Local community members have reported that a fishing stage once stood north of Feature 2.
3	Platform surrounded by a drain	2,551	Pearlware. Pipe stem, English stoneware, glass	20.10m X 7.90m	18th-19th century	This feature is the most intriguing on the site. It consists of a wall enclosing the northern, eastern, and southern sides, forming the exterior limit of the feature. Immediately inside this wall is a drain approximately 0.50 m wide, defined by another line of stones identified in TP#29. We are not certain if it was present in TP#32, as the position of that test pit may not have allowed us to locate it. Excavation in TP#29 suggests there is no constructed "floor" or built base on the platform in the center of the feature; however, we were working at the edge of the platform, and more extensive excavation will be needed to better understand its middle section. The western side, which faces the shoreline, appears to be a retaining wall made of large stones. In 2025, TP#43 was excavated to document the interior of the feature; however, it did not reveal any built elements or evidence of disturbance within the matrix. This feature is most likely associated with the Newman & Co. occupation of the site. Its elevation corresponds to the surface of the terrace. In 2025, unit 3A was excavated to better document this feature.
4	House	4,681	Whiteware, Pipe stem, Nails, Window Glass, Wine bottle, Splitting wedge	9.15m X 12.00m	18th-19th century	Large 12.40m X 9.50m depression. Excavation in TP#31 on the north side of the feature revealed the exterior wall of a building and, on the interior side, a brick hearth in an excellent state of preservation. There is potentially a trench or drain running parallel to the exterior of the northern wall, which appears to align with the southern drain of Feature #3. It is possible that the wall collapsed inward on the south side of the feature. The building is constructed of stones joined with mortar, and the hearth is made of bricks also bonded with mortar. Current hypotheses suggest that this feature may be associated with either the Newman & Co. occupation of the site or the Thorne family.
5	House pit?	9,087	No artefacts	10.70m X 9.50m	?	A large depression measuring approximately 10.70 m by 9.50 m was identified in the landscape. No obvious walls or cultural remains were observed, and no artefacts were recovered. We initially believed this to be the location of a building. The feature slopes downward from south to north and from west to east, with the lowest point located at the northeast corner. In 2024, test pit #42 was excavated and in 2025, two test pits #47 and #48 were excavated to document this feature. It was impossible to determine its function.

6	Trench	3,106	Normandy stoneware, wine bottle, pipe stem	Estimation: 3.40m X 1.30m	18th century	A test pit was excavated on the western edge of a pit or trench. The west side of the test pit is higher, sloping toward the east, with a height difference of approximately 30 cm. Within the trench, almost exclusively Normandy stoneware was recovered, along with a piece of wood at its base. TP#38 was excavated on the western side of the trench. Based on these findings, it appears that this trench may be associated with the French occupation of the site.
7	House	5,5	Window glass, Nails, Ceramics	Estimation: 14.80m X 16.00m	20th century	The Turpin house is represented by two concrete blocks and a slight rise, likely marking the northern side of the structure. This feature was documented after the field season during lab work, using the GIS database and field observations. According to Leo Molloy, this is the location of the Turpin house, which he recalls visiting as a child. In 2025, TP#46 was excavated within the feature and revealed a significant quantity of window glass (consistent with the historic photograph of the house) as well as 20th-century artefacts.
8	Oven	5,98	Cut nails	7.00m X 5.5m	after 1790 - 20th century	A brick-and-stone oven, conical in shape, was identified. Test Pit 45 (1 m × 0.50 m) was excavated on the south-facing side of the feature. The stones are joined with mortar, and the foundation of the oven is constructed of red bricks that have been darkened by exposure to fire. On the west side of the feature, there appears to be a built section still in place. A charcoal layer was present directly above the brick foundation. The exact purpose of the oven is unknown; however, no metalworking refuse was found, suggesting it may have been used for food preparation rather than industrial purposes.
9	Trench	3,44	Pearlware, Mineral Coal	3,42m X 14,34	18th-20th century	A trench oriented at approximately 330 degrees was identified. Its purpose remains unclear. The most significant observation is the large quantity of mineral coal found in association with Pearlware in Test Pit #44, which was excavated on the northern side of the trench. The proximity of Feature 2 raises the possibility of a functional or spatial link between the two features.
10	Building?	2,34	20th century artefacts, French Normandy stoneware	19,20m X 9,25	18th-20th century	A large rectangular feature runs parallel to the shoreline, situated between Stage 1 and Stage 2. The feature follows the slope rising from south to north and west to east, with the lowest point at the southwest corner (1.68 m) and the highest point at the northeast corner (3.24 m). The structure is built using dry masonry. Only the southwest wall was documented through excavation (TP#54). A line of stones was traced on the ground, and GPR detected contrasts on the north side of the feature, although the grid did not fully cover it. Dating this feature is challenging: modern artefacts were found near the surface of TP#54, while French 17th- and 18th-century artefacts were recovered from deeper layers. Inside the feature, TP#49 and TP#50 were excavated; in both, a dark brown (almost black) silty layer was identified above the natural substrate. The presence of this layer is consistent with 17th and 18th century occupation. Perhaps a posthole is present in TP#50. *It is possible that what we currently identify as Feature 10 actually consists of two separate features. One may represent a 20th-century store/stage, potentially associated with a circular pile of rocks observed in the water near the shoreline in front of the southern part of Feature 10. This hypothesis requires further investigation.*

11	Stone Wall	5,53	Pearlware	27,98m X n/a	18th-19th century	A stone wall, oriented north–south, is located on the eastern side of the oven (Feature 8). The wall appears to support a terrace, and future investigations should verify whether a building once stood on this terrace. TP#51 was excavated to document the wall, revealing that it is constructed using dry masonry. Artefacts associated with the Newman & Co. occupation were found in association with this feature.
	Stage 1	-	-	8.50m X ?	16th-20th century	Remains of a fishing stage are located on the western side of Turpin's Island. This is the southern stage, constructed of large stones measuring approximately 30–60 cm. Archival sources suggest that this stage is quite old, likely dating back to the 16th century. It is associated with the sector where evidence of French occupation—and potentially Basque activity—has been identified.
	Stage 2	-	-	6.00m X ?	16th-20th century	Remains of the fishing stage on the west of Turpin's island. This is the northern stage. It is made of large stones approximately 30-60 centimeter. Some pieces of wood pare present in the stones they are leaying east to west. Archives are suggesting this stage to be old, probably already there in the 16th century. It is associated to the sector where the Newman and co features are located, but it could be older.

Little St. Lawrence during the 16th century (Losier 2025: 191) and the Basque roof tiles found at the site. In 2025, more Basque tile sherds were found at the site, but no feature or archaeological contexts were associated directly with a Basque occupation at the site. According to archives and historians, Basque cod fishers were replaced by French crews around 1640 (Losier 2025: 191).

The French occupation of the site was again documented during the 2025 field season. A new building was identified (Feature 10), which seems to be a large rectangular stone structure (figure 3). A line of stones was traced on the ground on the north, east and south sides of the presumed feature, and GPR detected contrasts on the north side of the feature, although the grid did not fully cover this area (this will be discussed later in the report). Feature 10 (or at least part of it) is running parallel to the shoreline and situated between Stage 1 and Stage 2. It is interesting to note that cow parsley and stinging needles have been identified in what we think is the interior of Feature 10. This is the only location in the site where these species have been identified which might reflect a difference in the nature of the soil. The feature follows the natural topography of the land, rising from south to north and west to east, with the lowest point at the southwest corner (1.68 m above sea level) and the highest point at the northeast corner (3.24 m above sea level). The foundation of the structure is built using dry masonry. Only the southwest wall was documented through excavation (Test Pit 54) (figure 4).

Dating this feature is challenging. Modern artifacts were recovered near the surface of Test Pit

Figure 4: Part of Feature 10 in Test Pit 54 and artifacts found in layer 6, Most relate to the French occupation of the site

Figure 5: Location of rust stain on the stones of the feature in unit 1B.

54, while French 17th and 18th century artifacts were found in deeper layers. Within the feature, Test Pits 49 and 50 were excavated, and in both cases a dark brown (almost black) silty layer was identified above the natural substrate, matching what was documented in Test Pit 36 during the 2024 season. The presence of this layer is consistent with the 17th or 18th century occupation of the site. It is also important to note that a possible posthole may be present in Test Pit 50.

If an association with the French occupation of the site is hypothesized, it remains possible that Feature 10, as currently defined, represents two distinct features. One may be associated with a 19th to early 20th century small stage visible on the 1861 *Map of Burin Harbours* (Losier 2025:198), potentially corresponding to a circular pile of rocks observed in the water near the shoreline in front of the southern portion of Feature 10. This could explain the important number of 20th century artifacts found in the first few layers of Test Pit 54. This hypothesis will require further investigation.

In addition to the test pits excavated in what we identify as the "French sector" of the site, a 1 x 6 meter trench (Unit 1B) was opened just east of the remains of Stage 1 (figure 3). This trench was placed immediately west of, and contiguous with, Unit 1A excavated in 2023. The objective was to further document the area associated with Stage 1, where a significant quantity of French ceramics was recovered in 2023. Alongside a substantial assemblage of French artifacts, the stone foundation of a structure was identified between 1.20 m and 1.40 m above sea level. It should be noted that this feature was not identified in the 1 by 1 meter unit (1A) excavated in 2023, and we believe that the limited area investigated at that time prevented us from recognizing the structure.

It must also be said that the feature was not easy to recognize even in the bigger trench. Indeed, the feature slopes down toward the shoreline (west) which logically follows the topography. The matrix accumulations in the west side of the trench were different and thicker than in the east, most probably cause by the events affecting the shoreline of the harbour (important winter storms, ice pushing on the shore, the 1929 tsunami or the burst of the damn of Little St. Lawrence in 1941) generating important accumulation of sediments.

In the end, the feature was identified thanks to the many rusted nails found directly on top of it and rust from nails staining the stones (figure 5). This is most probably an indication that a wooden structure was standing on the stone foundation. It fell into disrepair and eventually decayed on top of the stone foundation. The chronological association to the French occupation of the site was done thanks to the artifacts found on top of the stones feature, the vast majority of them being French (Normandy stoneware, Saintonge and Breton coarse earthenware) and

dating from the 17th century to the beginning of the 18th century (most probably from before 1713, the signing of the Treaty of Utrecht).

It is also necessary to try to determine the function of the feature. Its location suggests an association with stage 1, which we suspect was present during the French occupation of the site. In his 1713 survey, William Taverner recorded that a French planter fished from Little St. Lawrence during his visit to the harbour and that two stages were present there (Losier 2025: 192). We also realised that the trench is most probably a very small section of the feature as according to the pictures of French *chafaud* (stage) in the Petit Nord taken by Paul-Émile Miot these features were most probably 25-35 meters long by 10-15 meters wide (figure 6). These dimensions could match the remains of the stages. Additionally, the cod bone layer – most likely deposited during the French occupation of the site, as indicated by the artifacts recovered within it in Test Pit 36 – may be located outside the feature, the cod remains being discarded outside of the stage (Losier 2025:193–195). If so, this would suggest that the northern limit of the feature lies between Unit 1B and Test Pit 36. More investigation will be needed to fully document this sector of the site, but the data are so far really interesting.

The French fished in *Petit St. Laurent* until the signing of the Treaty of Utrecht. Taverner reports that when he surveyed the harbour two fishing rooms where present and that the French inhabitant he met did not take the Oath to the British crown. It is therefore presumed that he had to leave his fishing premises. When James Cook drew his chart of the Burin Peninsula, he mentions that the harbour of Little St. Lawrence was not occupied, at the difference of the one of St. Lawrence (Losier et al. 2024: 97). It is presumed that Turpin's Island remained unoccupied from the treaty of Utrecht until Newman & Co. settled a fishing station on the island in 1784.

The pollen analysis performed by Kassandra Drake suggests that between in the 16th-17th century (cal. 1470-1685 AD) there was a shift from a primarily forested landscape to a heath-shrub dominant community due to deforestation, along with an abrupt increase in charcoal due to fire activity. This episode of deforestation is associated with the initial Basque and French occupation of the site. The second phase of occupation (cal. 1675-1815) reflected in the paleoenvironmental data is a continued opening of the landscape followed by an apparent rebound in vegetation (Drake 2025: 138). This seems to suggest that the site was abandoned at some point during this period and it would make sense that the abandonment coincided with the departure of the French fisherfolks around 1713 and the settlement of Turpin's Island as a base for the Newman & Co.

Newman & Co. 1784 to 1810

It is in 1784 that Little St. Lawrence was established as a base for the Newman & Co. fishing enterprise (Matthews 2003). The Newman & Co. fishing settlement was captured in drawing by James S. Meres a member of the crew of the HMS Pegasus which brought Prince William Henry (future King William IV, 1830-1837) to Newfoundland (Losier et al. 2024: 98). In 2024, two features (3, a platform and 4, a house) were associated with the Newman & Co. fishing premises (Losier 2025: 194-197).

In 2025, a new feature (Feature 11) was associated to the Newman & Co. occupation of the site. It is a stone wall-oriented north–south, this wall is located on the eastern side of the oven (Feature 8). It appears to support a terrace, and future investigations should verify whether a building once stood on this terrace. Test Pit 51 was excavated to document the wall, revealing that it is constructed using dry masonry. Artifacts associated with the Newman & Co. occupation were found in association with this feature.

Feature 3 already documented in 2024 was at the heart of the project this year. A big unit of 4 meters x 2.5 meters was partially excavated at the southwest corner of the structure. The unit 3A was placed so the exterior of the feature, the drain and stones bordering it and the interior of the features was captured. This was an ambitious endeavour as we have begun the excavation at the end of the second week of fieldwork. The result was that after removing the sod (3A1) and the layer representing the abandonment of the site 3A2, only the interior of the drain 3A3 was excavated. This unit will need to be reopen in 2026 to finish the excavation, and perhaps gain a better understanding of the purpose of this feature (figure 7).

The excavation of the drain was extremely interesting in terms of material culture recovered and it confirmed its construction method. The drain was

a)

b)

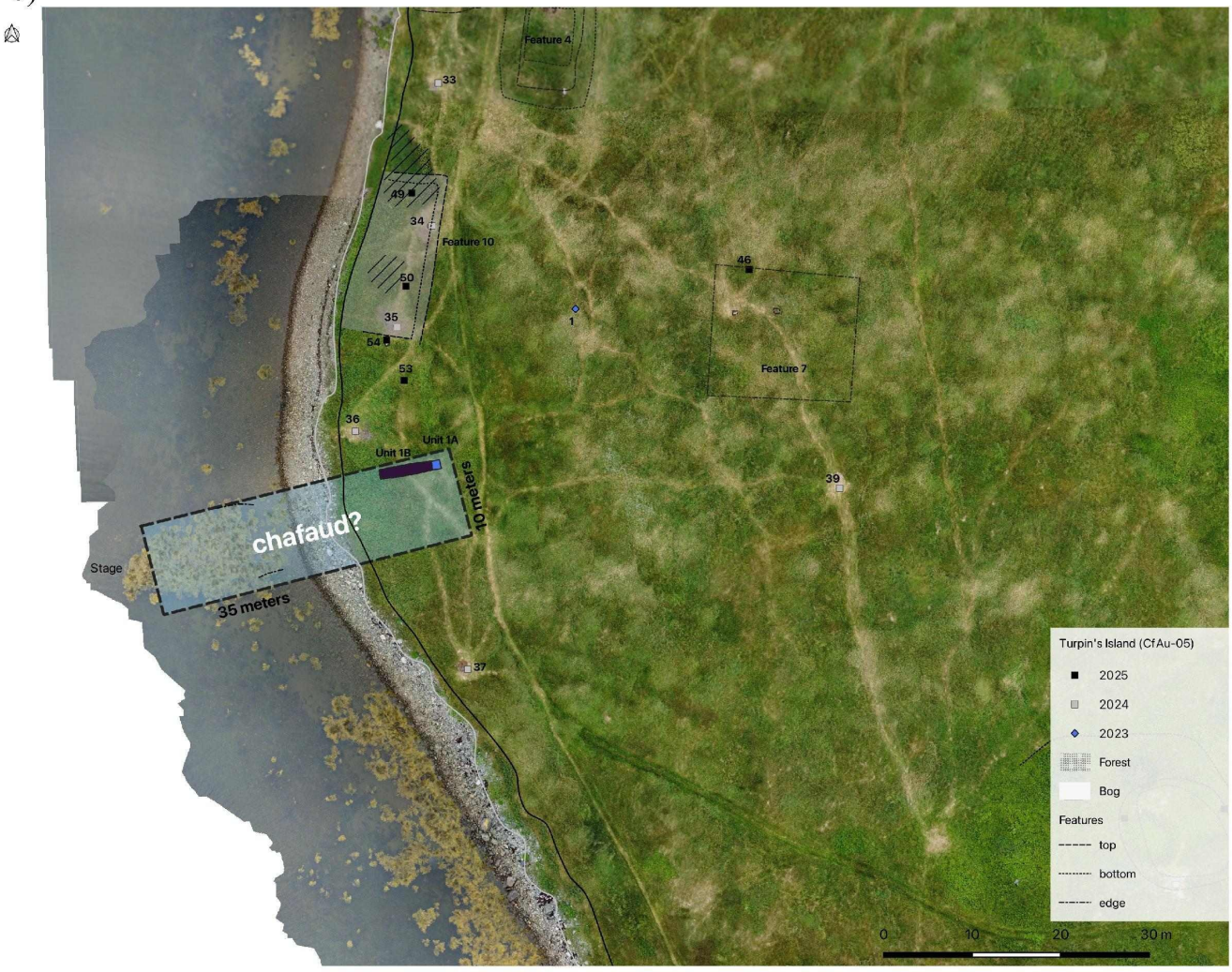


Figure 6: a) Chafaud in a French fishing station, Petit Nord (credit : Paul-Émile Miot (1857-1859) / Bibliothèque et Archives Canada/PA-202292) and b) hypothesis regarding the location of the chafaud in relation to stage 1

Figure 7: Drain in 3A excavated

simply excavated in the natural soil, and its bottom is covered with small 10-15 centimeters rocks not evenly distributed. The drain was bordered by a row of stones on each site most of them being 25-30 centimeters in diameter but other being as big as 60 centimeters (on the south side of the drain). The most interesting aspect of this feature is that a lot of objects were collected in it. The artifacts are undoubtedly associated with the occupation of the site by the workers of Newman & Co. The analysis is on going, but the material world of the people living at Turpin's Island between 1783 and 1810 is represented by the assemblage, and the connection between Newfoundland and England is also reflected.

The Thorne and Turpin occupation in the 20th century

In 2024 we reported that, between October 12th and 16th, 1839, Joseph Jukes (a geologist) "was hospitably entertained by Mr. J. T [horne]—and his lady, who reside at Little St. Lawrence together with two younger brothers" (Jukes 1842:203 in Losier 2025: 199). Kassandra Drake found that "the remains of Newman & Co.'s premises at St. Lawrence, were […] occupied by Mr. Thorn, son of the late Mr. Thorn, who was forty-nine years agent of Newman & Co., and on his retirement from the trade, was allowed by them a pension of £40 per annum, in consideration of his services" (Tocque 1877: 178 in Drake 2025: 77). This indicates that there was a direct link between the Newman & Co. premises and the subsequent occupation by the Thorne family. Beside Feature 1 that is on the map of Burin Harbour from 1860-1861, no features are directly associated with the Thorne family. However, it must also be considered that some buildings of the Newman & Co. premises may have been used by the Thorne family between 1810s (?) and 1860 (when the Burin harbour map was made).

The Turpin's house (Feature 7) is marked by two concrete blocks and a slight rise in the north of the feature was formally identified as the location of the 20th century house of the Turpin family thanks to the help of our friend Leo Mulloy. In 2025, Test Pit 46 was excavated within the feature and revealed a significant quantity of window glass (consistent with the historic photograph of the house) as well as 20th

Figure 8: Artifacts associated with the Turpin's house found in Test Pit 46. Of note is the overwhelming quantity of window glass

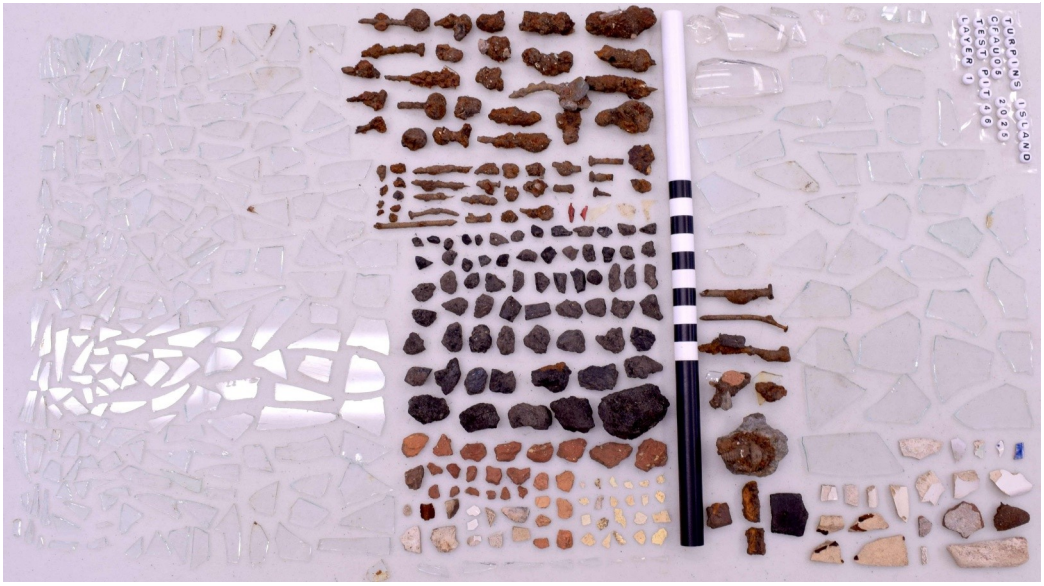


Figure 9: Views of the brick-and-stone oven

century artifacts (figure 8). It was also our intention to document the foundation of the house, but the 0.50 meters by 0.50 meters test pit did not allow us to fulfill this objective.

Features and contexts without dating

Feature 8 was by far the biggest surprise of the 2025 field season. The feature is, in fact, familiar to all visitors of Turpin's Island – a conical mound located north of Feature 4 and east of Feature 3. Its identification, however, was not straightforward. Because the structure was not indented, it was unlikely to be a root cellar, which often collapse inward when abandoned. It was therefore assumed to be a simple pile of stones cleared from fields to facilitate agriculture. We know that the Turpin family grew hay, making this interpretation plausible, but Test Pit 45 (1 m × 0.50 m) excavated on the south-facing side of the feature revealed otherwise.

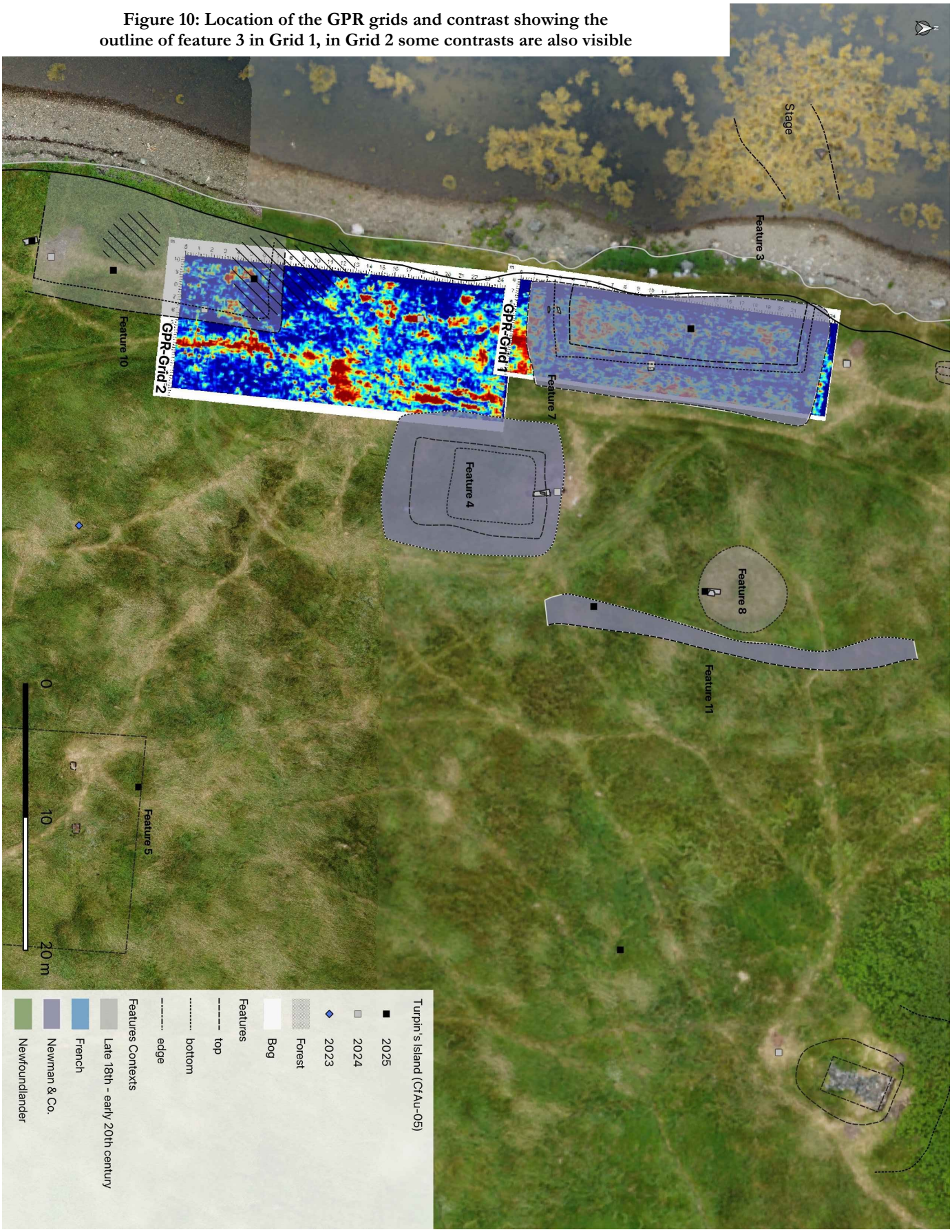
To our surprise, we uncovered a brick-and-stone oven (figure 9). The feature measures 7.00 m x 5.50 m. The stones forming the oven are bonded with mortar, and the foundation consists of red bricks that have been darkened by exposure to heat and fire. On the east side of the feature, a built section still appears to be intact. A charcoal layer was present directly above the brick foundation.

The exact purpose of the oven remains unknown; however, no metalworking refuse was recovered, suggesting it was likely used for food preparation rather than metal working activities. No artifacts other than cut nails were found in association with the structure. This was somewhat disappointing, as the lack of diagnostic material makes the feature difficult to date. Nevertheless, the presence of cut nails indicates that the oven was likely built after 1790, when cut nail technology first became available.

Feature 9 is a trench oriented at approximately 330 degrees north, and its purpose remains unclear. The most notable finding is the substantial amount of mineral coal recovered alongside pearlware in Test Pit 44, which was excavated on the northern side of the trench. The presence of these materials raises questions about activity in this area. The proximity of Feature 2 also suggests the possibility of a functional or spatial relationship between the two features, though further investigation is needed to clarify this connection.

In 2024, we excavated Test Pit 42 to better document a large depression measuring 10.70 m by 9.50 m in the south area of the site, which we identified as Feature 5. The excavation did not provide any indication of the feature's function, and no artifacts were recovered. In 2025, we opened two additional test pits (Test Pits 47 and 48) on the east and west sides of the feature. Once again, we were unable to determine its purpose. Only a single sherd of blue decorated porcelain was recovered, found in Test Pit 47. This feature is not easy to document.

Figure 10: Location of the GPR grids and contrast showing the outline of feature 3 in Grid 1, in Grid 2 some contrasts are also visible



Scaling up data collection effort

To better understand the site, we conducted a Ground Penetrating Radar (GPR) survey led by Maria Lear, as well as an underwater survey with Neil Burgess. Maria arrived in St. Lawrence on June 30th, 2025. On Canada Day, we began setting up a grid to document Feature 3 with the GPR. The grid measured 24 meters north south and 7 meters east west. Because the feature is visible in the landscape and is surrounded by a drain, our goal was to document its interior. Unfortunately, the scan revealed very little. The rocky nature of the terrain on Turpin's Island (and, truthfully, much of Newfoundland) often makes GPR data difficult to interpret. However, ground truthing the site frequently helps clarify the results. It took a day and a half to complete the scan of the first grid.

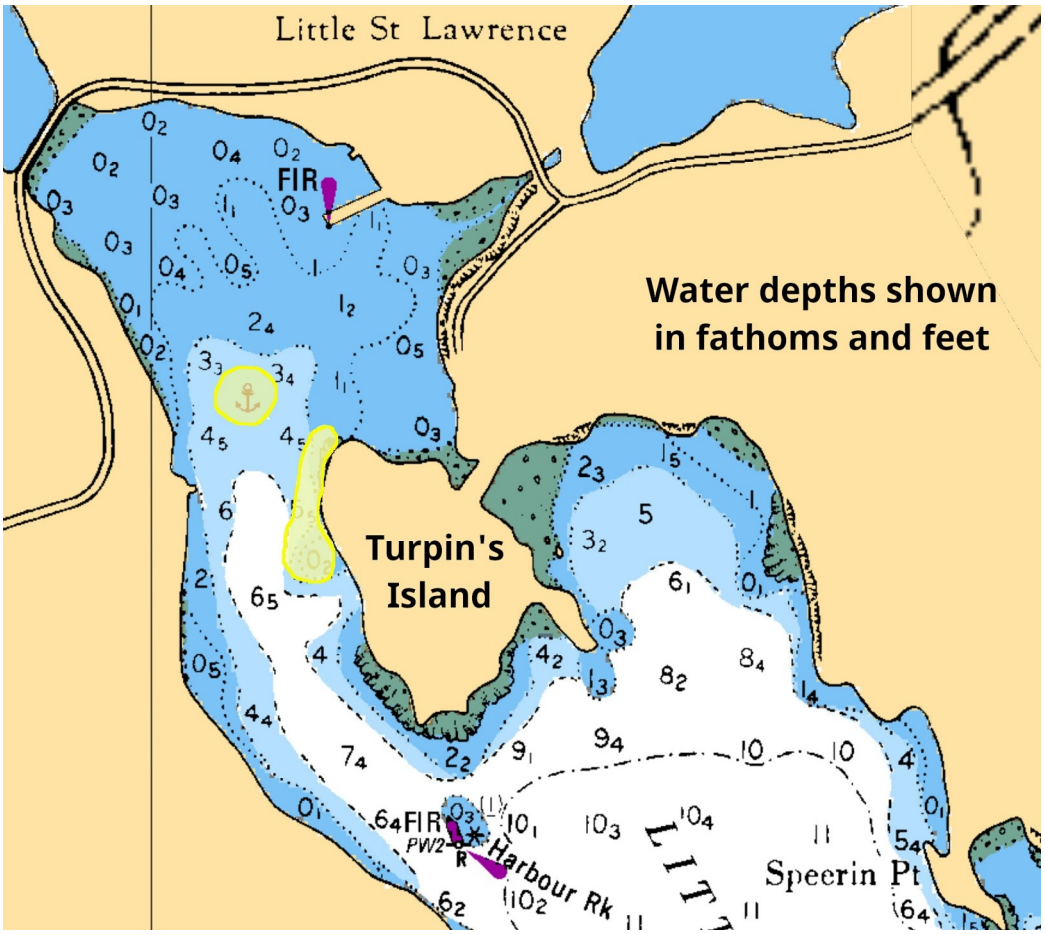


Figure 11: Map of the area (in yellow) surveyed by Neil Burgess and Brendan Ryan during their dives

On July 3rd, Maria set up a second grid contiguous to the first one. This grid measured 25 meters north-south and 10 meters east-west. The goal was to better understand the sector of the site where cow parsley and stinging nettles grow, as this vegetation is peculiar to that specific area of the site. It was also at this point that we began to suspect a feature associated with Test Pit 54 that would intersect the second GPR grid to the north. Unfortunately, the grid does not cover the entire extent of the feature, and we will need to rescan the area in full in 2026. The data is quite difficult to interpret, but since we have the opportunity to excavate the site, we can gain a better understanding of the data (figure 10).

On July 4th, 2025, Shipwreck Preservation Society of Newfoundland & Labrador diver Neil Burgess arrived in St. Lawrence with his boat, the *Wreckfinder*. Sidescan sonar surveys were conducted around the entire shoreline of Turpin's Island and the anchorage using a Humminbird Solix 10 fishfinder. These sonar surveys revealed no visible archaeological remains on the seafloor. The sonar allowed us to record the stages at CfAu-05 and a possible post/tree south of the isthmus leading to Turpin's Peninsula. Nothing was found at the buoy that indicates a very shallow area directly southwest of Turpin's Island.

In the afternoon, Neil Burgess and Brendan Ryan performed two dives. First, they swam slowly south for 19 minutes along the northwest shoreline of Turpin's Island at depths between 0 and 2.5 m (figure 11). They then swam back north along the same shoreline for 10 minutes, this time at depths between 3 and 6 m. They conducted a visual survey for archaeological remains and took *in situ* photographs of anything observed along the rocky bottom. During the shallow transect, we encountered six ceramic vessel fragments, including pieces of a recently

broken teacup and a jar. No artifacts were found along the deeper transect. They also swam around two shoreline rock piles that may represent the remains of old wharves, but no wooden timbers were observed.

The same divers also conducted a 12-minute visual inspection of an area labelled as an anchorage on Canadian Hydrographic Service nautical chart 4642 (Great St. Lawrence Harbour) at depths between 8 and 10 m. This area is located 180 m northwest of the northern tip of Turpin's Island, in the middle of Little St. Lawrence Harbour. The bottom in this area consisted of soft sediment with few rocks, and no archaeological remains were observed. These surveys were carried out under PAO permit 25.19 issued to Neil Burgess and the Shipwreck Preservation Society of Newfoundland & Labrador.

Community engagement

To enhance local awareness and engagement, the team developed a set of outreach materials – including a storyboard, road sign, and 300 printed brochures, distributed at several community locations – to inform residents about the project. These initiatives were very well received, generating numerous positive comments and noticeably increased visits to the site; several residents noted that they had not realized the site was open to visitors during the 2024 excavation, and the road sign served as a clear invitation to the public. At least 41 individuals visited the site while the team was present, with many more likely stopping by after work hours or on weekends.

Building on growing community interest, the team continued its tradition of presenting fieldwork results through public events, hosting two engagement sessions on July 17th, 2025: an afternoon workshop with the St. Lawrence Community Youth Network, where 18 participants aged 7 to 16 attended a presentation by Dr. Catherine Losier and took part in an artifact workshop with the crew, and an evening Community Night at the St. Lawrence Recreation Center, which drew 56 attendees for a public lecture and artifacts display. Throughout their stay, team members actively participated in community life interactions that proved essential for fostering dialogue, answering questions, and strengthening relationships. During fieldwork, the students wrote blog posts, that acted as weekly reports. We invite readers to consult them to get further detail regarding this project (https://www.thecodroad.com/blog).

Acknowledgement

The 2025 field school was extraordinary. A heartfelt thank you to the entire field crew for being so wonderful. Your positive attitudes, hard work, and dedication made the season both productive and enjoyable, and we created countless memories along the way. Many thanks as well to the team at the Provincial Archaeology Office for their support, trust, and time. We are deeply grateful for support from SSHRC, TCA and Memorial University's Faculty of Humanities and Social Sciences, all of which made the fieldwork possible. A huge thank you to the communities of Little St. Lawrence and St. Lawrence for welcoming us so warmly and for sharing in our excitement about the project. We also extend our sincere appreciation to Karen Lundrigan of the Little St. Lawrence Service District and the St. Lawrence Historical Advisory Committee for their invaluable assistance. Finally, we are beyond grateful to the Town of St. Lawrence and Amanda Reeves for providing us with the lab space that supported so much of our work.

References

Drake, Kassandra. 2025. *An Investigation of Human Activity and Environmental Change at Turpin's Island through Palaeoenvironmental and Historical Archives*, Master thesis, Memorial University, St. John's.

Losier, Catherine 2025. "Turpin's Island, Little St. Lawrence, CfAu-05. Survey and Identification of Features". *Provincial Archaeology Office 2024, Archaeology Review*, Vol. 23, p.188-201.

Losier, Catherine, Ledger, Paul, Whitridge, Pete 2024. "Turpin's Island, Little St. Lawrence, CfAu-05. Small Scale Archaeological and Paleoenvironmental Excavation". *Provincial Archaeology Office 2023, Archaeology Review 22,* p. 95-109.

Research into Possible Influence of Athabascan People on the Beothuk

Dr. Ingeborg Marshall
Independent Scholar

Research into all aspects of the Beothuk, one of the native inhabitants of Newfoundland, has been the focus of my study for more than 25 years. During this time, I did not come across any references to the Great White River Ash volcanic eruption of A.D. 846-48 in North-Western Canada. This eruption was massive in scale and deposited ash and other debris in an area covering hundreds of thousands of square kilometers (1) and disrupted the livelihood of local inhabitants, notably the Athabascan people. Although this eruption was too far from Newfoundland to have had a direct effect on the Beothuk, I believe that it might have impacted them indirectly through the migration and assimilation of some of the Athabascan migrants. This theory answers a question that has disturbed me since the writing of my Master's thesis "Beothuk Bark Canoes: An Analysis and Comparative Study" in which I noticed that the Beothuk canoe was built largely after an Athabascan pattern with a keelson at the center of the bottom and was thereby entirely different from other East Coast canoe designs which had a flat bottom (2). An assimilation of cultures in this manner would explain how the transfer of such knowledge could have taken place.

I now believe that the Athabascan influence on Beothuk culture and technology may have been due to the Northern Athabascan migrants who had fled from the effects of the White River Ash eruption that had blanketed portions of Subarctic Yukon and Northwest Territories in volcanic debris (3).

According to Kristensen (4), small groups of the Athabascan population from the area fled in a southeastern direction. Hence some of them could have reached Newfoundland, and I would suggest that those which reached Newfoundland would have been accepted by the Beothuk either because the Beothuk were too small a group to defend themselves successfully or they were willing to increase their numbers by way of the migrants.

Kristensen observed that "southwest Yukon populations were temporarily displaced in directions where they could make a relatively rapid return to the impact zone as conditions ameliorated. However, in a landscape with oscillating social and political dynamics, a volcano's eruption may have severed contact significantly enough to permanently dislocate a group of people. If ideology, ecology, or political relationships impeded a return to former territories, this initial dislocation may have prompted a southward search for a home. Some groups returned but others may have begun a series of relocations that led them too far from home to come back." (5). I suggest, therefore, that a group of Northern Athabascans that made it to Newfoundland were among those that ventured too far from home to go back.

In addition to the commonality of the canoe design, I have found more Athabascan features in Beothuk culture such as their semisubterranean houses whose design had similar features to the Athabascan design. The hexagonal mamateek investigated by Helen Deveraux at Red Indian Lake (now Beothuk Lake) had the floor excavated to 1.5 m and a berm placed around the wall which created a semi-subterranean appearance (6). The carbon sample from the upper occupation layer of the mamateek at Red Indian Lake was dated to ca. AD 1595. Discrete but well-represented features at the same level contained Little Passage-type tools (7).

Two house pits on the Beothuk site at Boyd's Cove were also roughly hexagonal in outline (8)

Beothuk burial structures: Chief Nonosabasut and his wife Demasduit were interred in a well-built burial structure, the only one recorded from the Beo-

A brief word of explanation from the Provincial Archaeology Office. This submission is comprised of thoughts about the Beothuk that Dr. Marshall hopes to see examined further in the future. At 96 years old, these are thing she has flagged over decades of work on the Beothuk. Some of these ideas may seem far-fetched at first glance, but they remain unexplained, and she has hopes that someone will pick up the research baton.

thuk. Burial structures were used by Ethnic groups in northwestern Canada but not normally by the Beothuk (9)(10).

Beothuk snowshoes were unusually narrow and long, and both the toe and tail ends were curved upwards which are typical Athabascan features (11) (12).

A Beothuk pant in which a child had been wrapped before burial was waist-high. The custom among neighboring groups such as the Mi'kmaq and Montagnais was to have their pants the length of the leg to be fastened with a tie to a belt around the waist. It is assumed that the Beothuk originally used this type of pants as well (13).

Beothuk bark containers: The cup-like bark vessel in the collection of the British Museum appears to be identical to one in the collection of Athabascan bark containers in that museum. The Beothuk "meat dish", also in the British Museum, looks in shape and design like one of the Athabascan string bags. (This might sound contrived, but when I visited the University Museum of British Columbia and saw such a string bag it struck me that the design and decoration appeared to be identical to that of the Beothuk meat dish (14), though on this sample just the shape is comparable.)

Beothuk-carved pendants compare well with those produced by Athabascans (15).

Language: Shanawdithit recorded that her people represented their descent from Labrador First Nations (16). In his discussion of the origin of the Beothuk, Howley referenced several linguists of the day, among them the well-respected Dawson, who believed that the Beothuk language derived from that of the Tinne (Athabascans). The Northern Athabascan language will be treated here as an assemblage of 23 languages which are part of the Proto-Athabascan sound system. It is based on the ease or difficulty with which speakers from different communities mutually understand or have learned to understand each other's speech and the existence of some symbol of a common linguistic tradition, including a name for the language.

I am aware of the fact that recent linguists consider the Beothuk language to be derived from Proto-Algonquians but most likely, in my opinion, there has been some Athabascan influence that rendered the Beothuk language different from other Proto-Algonquian-derived languages.

In the article "A Multiscalar Consideration of the Athabascan Migration" in *American Antiquity* researchers have found that "Northern Athabascans who have lived in the Subarctic for thousands of years began migrating to the American Southwest around 1000 years ago. Regional populations appear to have increased around the time of the volcanic eruption, a demographic shift that may have led to increased territoriality, resource stress, and specialization. Building on existing syntheses of cultural dynamics in the region this research shows that the Athabascan transition represented a gradual shift toward resource specialization in both salmon and caribou consistent with a gradual demographic change. Further, this behavioral shift was already in motion at the time of the volcanic eruption ca 1150 BP and suggests that the ultimate migration from the area was the result of demographic pressure. In sum, this research elaborates on the complex dynamics of resilience and adaptation in hunter-gatherer groups and provides a testable model for explaining past migration" (17).

Although additional research is needed to properly quantify the similarities, it has been noted that the Athabascans and the Beothuk both used man-made fences to direct caribou toward a site where they would be killed with bow and arrow or lances (18). These fences sometimes extended for distances of 30-40 kilometers. The adoption of this technique by the Beothuk may have come from Athabascans.

Considering these facts, it is not surprising that the comparison of Beothuk mitochondrial DNA with the DNA of Maritime Archaic indicated that there was no maternal relationship between the two. The Maritime Archaic were the earliest First Nation population in Newfoundland who lived here from about 3000 BC to around 1050 BC. A second First Nation population that migrated across the Strait of Belle Isle to Newfoundland were the "Recent First Nation" which are grouped into three complexes one of which, the most recent one, was the Little Passage complex, placed at ca. AD 1100 to 1200. The Beothuk were the direct cultural descendants of the Little Passage First Nations. For the purpose of classification, Beothuk denotes their historic phase in Newfoundland, beginning around AD 1500 (19).

Conclusion

The discovery of the White River Ash volcanic eruption and subsequent migration of Athabascan people provides a plausible explanation as to how the Beothuk came to have similarities in their technologies and culture. The potential genealogical and cultural impact of such an assimilation would significantly alter the current understanding of the history and development of the Beothuk.

Although further investigation is still needed, it is my opinion that further research into this line of reasoning, is warranted.

References

Wikipedia "White River Ash"
Ingeborg Constanze Luise Marshall, "Beothuk Bark Canoes: An Analysis and Comparative Study" Canadian Ethnology Service, paper# 102, A Diamond Jenness Memorial Volume, National Museum of Canada, 1985
Kristensen, Todd J, "The Late Holocene White River Ash Eruption and Precontact Culture Change in North-West North America", PhD Thesus, University of Alberta
Kristensen, Todd J, "The Late Holocene White River Ash Eruption and Precontact Culture Change in North-West North America", PhD Thesus, University of Alberta
Kristensen, Todd J, "The Late Holocene White River Ash Eruption and Precontact Culture Change in North-West North America", PhD Thesus, University of Alberta
Devereux Ms. 743:1970: by permission of H. Devereux, Govt of NL. Dept. of Tourism, Culture and Recreation
Marshall, Ingeborg, "A History and Ethnography of the Beothuk", McGill-Queen's University Press, Montreal, 1996, pg. 354
Marshall, 1996, pgs. 355, 356
Marshall, 1996, pg. 406
Helm, June, "Canadian Museum of Civilization, Handbook of North American Indians", Vol. 6, Subarctic, Smithsonian Institution, Washington, 1981, pgs. 405, 501
Marshall, 1996, pg. 376
Helm, June, 1981, pg. 382
Marshall, 1996, pg. 346
Helm, June, 1981, pg. 383
Marshall,1996, pg. 391
Howley, James P., "The Beothuk or Red Indians", Cambridge University Press, 1915, pg. 256
Eriana N Doering, Julie A Esdale, Jeshus Q Reuther and Senna D Caterscci., "American Antiquity", Vol. 90, No. 3, July 2025. "A Multiscalar Consideration of the Athabascan Migration"
Helm, June, 1981, pg. 377
Genetic discontinuity between the Maritime Archaic and Beothuk populations in Newfoundland. Authors: Ann T. Duggan, Alison J. T. Harris, Stephanie Marciniak, Ingeborg Marshall, Melanie Kuch, Andrew Kitchen, Gabriel Rewaud, John Southon, Ben Fuller, Janet Young, Stuart Fiedel, G. Brian Golding, Vaughan Grimes, and Hendrik Poinar. Published in: Current Biology, Volume 27, pp. 3149-3156

Material culture correlates of Viking Age pagan and Christian spiritual practice (Birka, Sweden - L'Anse aux Meadows, NL)

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Dept of History Graduate Student

L'Anse aux Meadows (LAM) may have been occupied both by Christian Europeans and by pagan ones. Although their spirituality may have played only a small role in how they lived at LAM, the relations they had with each other and with the Indigenous residents of Vinland would undoubtedly have been influenced by their spiritual practice.

In June 2025 as part of a MUN Master's Program in History (Medieval Studies), the author studied Viking Age artifact collections at the Historiska Museet, Stockholm. They were recovered from Birka, Sweden, a Viking Age site occupied from the late 8th c. to the 10th c. AD., a period that overlaps with some of the brief LAM occupation. Throughout this time Missionaries from Western Europe describe in various documents conversion of Viking Age (Medieval) pagans in Sweden to Christianity.

Birka's archaeological record is that of a fortified Swedish Viking trade centre and early Missionary station, and it contains thousands of artifacts recovered via funerary archaeology.

The author studied some of these objects in order to better understand how pagan Norse were converted to Christianity. These include steatite spindle whorls, metal ring-headed pins, gilded bronze decorative items, carved wood and bone domestic items, and cast metal items including forged iron nails and textile pieces. Many of these artifact categories are represented in the LAM site collection.

The documentary record for Birka, largely written by Christian Missionaries, describes conversion as inevitable. However, the site's material culture reflects long term practice of pagan ideologies.

Turning to LAM, its artifact collection has been assumed by many to represent Christian Viking Age people, given their 10th c. Greenlandic and Icelandic homelands. However, LAM may have been made and used by pagan Vikings as much or more than by Christian Norse Vikings. Conversion to Christianity in the Norse North Atlantic colonies has been described by many scholars as a slow process.

Therefore, LAM artifacts (some as referenced above) are valuable to this research in comparison with Birka funerary artifact studies. All those artifacts comprise an abundant research database of Viking Age material culture, both pagan vs. Christian

The spread of Medieval Christian belief to Scandinavia and then across the North Atlantic to 10th c. LAM, is a larger scale element of pagan-Christian colonization. That colonization is often described in the primary documentary accounts compiled by various Missionaries. In keeping with general historic archaeology research practice, those documents are being studied here, along with the Norse Sagas, written centuries later than the initial Norse North Atlantic colonization.

These two 9th c. whetstones from a probable female grave at Birka generally resemble the single whetstone recovered from L'Anse aux Meadows, dating to the late 10th c. Their drill holes were used for suspension or to tie onto clothing or a gear belt/ pouch. Chipped and ground from fine grained stone, some whetstones can be sourced through geo-chemical means. Iron scissors, small knives and needles, associated regularly with both pagan and Christian females, were iron tool types needing regular honing.

Tracing Shanawdithit Archaeological Project: Summary of Year 4 (2025): Permit 25.07

Laurie Mclean
Consulting Archaeologist

Shanawdithit, as many people know, was a Beothuk woman who was born around 1800 A.D. and died in St. John's, Newfoundland in June 1829 (Marshall 1996:219, 222). She lived in European-Newfoundland society from April 1823 until her death. Shanawdithit provided much information about the Beothuk to William Cormack while she resided in his St. John's home for at least six weeks in the fall of 1828 and possibly longer (Ibid:217). She drew 12 sketches that were annotated by Cormack, presumably incorporating information offered by Shanawdithit. One of the pictures was a map that shows, in considerable detail, the route Shanawdithit, accompanied by her stepsister, stepmother and possibly a male Beothuk, followed through the Badger Bay watershed to the coast of Badger Bay in April 1823. The three Beothuk women met European-Newfoundland furriers along the east side of that bay and were brought to John Peyton Jr. who was living on Exploits Island in the Bay of Exploits.

The author, in 2022, was contacted by Perry Moulton, a retired teacher living on Pilley's Island, regarding the possibility of archaeologically assessing Shanawdithit's epic journey through the Badger Bay watershed to the coast. Perry had studied archaeology, as well as education, at Memorial University and, during his student days, had worked on a number of MUN's archaeological research projects. Perry also played a lead role in archaeological research affiliated with First Nations reserves in Alberta. He had compared Shanawdithit's illustration of her trip with modern topographic maps and aerial photos which facilitated determining the archaeological potential of selected portions of her suggested route. The author and Perry, assisted by others when feasible, began archaeologically checking these areas in 2022. This research has been privately funded, other than contributions from the PAO in 2022 and 2023.

Tracing Shanawdithit archaeological surveys conducted from 2022-2024 identified 13 new sites and re-visited 14 previously known locations. Some of the latter were checked in recurring seasons, resulting in 25 total re-visits during this period. The new sites include seven Newfoundland Settler components along with three precontact and four Beothuk designations. None of the new Beothuk sites can be directly associated with Shanawdithit, although this situation could change following larger scale excavations than have been implemented to date. The Oil Islands site (DjAw-15) was re-visited during 2023, which confirmed the continued erosion of this Pre-Inuit/Little Passage/Beothuk location (McLean 2024:42). Salvage excavation was recommended for this enigmatic site, and this activity was initiated in 2025. Surveying of designated high potential areas continued during this season, as did re-visiting previously identified sites that occurred in close proximity to the Oil Islands and other targeted locations.

Oil Island Salvage Work (DjAw-15)

Oil Island consists of three small, interconnected landmasses west of Long Island at the entrance to Halls Bay. All three sections are densely tree-covered and steeply rise from the ocean, implying limited archaeological potential except for a tombolo cobble beach and a number of small harbours. The western two sub-islands are joined by a 56 x 30 metre wide, tombolo cobble beach that rises two to three metres above sea level (Plates 1, 7). The tombolo is 56 metres wide at its northeast end and contracts to 28 metres in its mid-section before expanding to 30 metres at its southwest end. The western end of the island ascends to 60 metres while the middle section adjoining the tombolo's northeast border reaches 33 metres above sea level.

Archaeologists who were surveying western Notre Dame Bay in 1965 were informed of prior excavations that had recovered large portions of birch bark, up to five feet long, from pits on the Oil Island tombolo. The 1965 crew identified 30 cobble beach depressions that varied from two to five metres in diameter. The larger depressions were sufficiently sized to have been used as human habitations although there was no proof for this. Birch bark was

collected from some of the pits, but obvious artifacts were not found that year. Some of the cobble beach pits indicated prior disturbance, but eroding cultural deposits noted during subsequent archaeological appraisals were not mentioned (Devereux 1966:61, 64, 66).

Extensive erosion of soil at the tombolo's southeast corner, resulting in numerous artifacts on the site surface, was recorded by a private visitor in 1983. This local interest produced the first map of the tombolo depressions and showed where the individual had undertaken test excavations. The map has been utilized to a significant degree (Penney 1988:52; Stopp 1994:77, 80, 81, 83). Another 61 cobble beach depressions identified throughout western Notre Dame Bay were assigned a similar enigmatic distinction (Devereux 1966:61; Penney 1988:15, 51, 52; McLean 2019:9).

The Oil Island site was briefly re-visited in 2023, and significant erosion of cultural deposits was observed. A Little Passage projectile point, two Pre-Inuit microblade fragments and 29 flakes were recovered from the surface of disturbed humus in the site's southeast corner. There was also evidence for recent

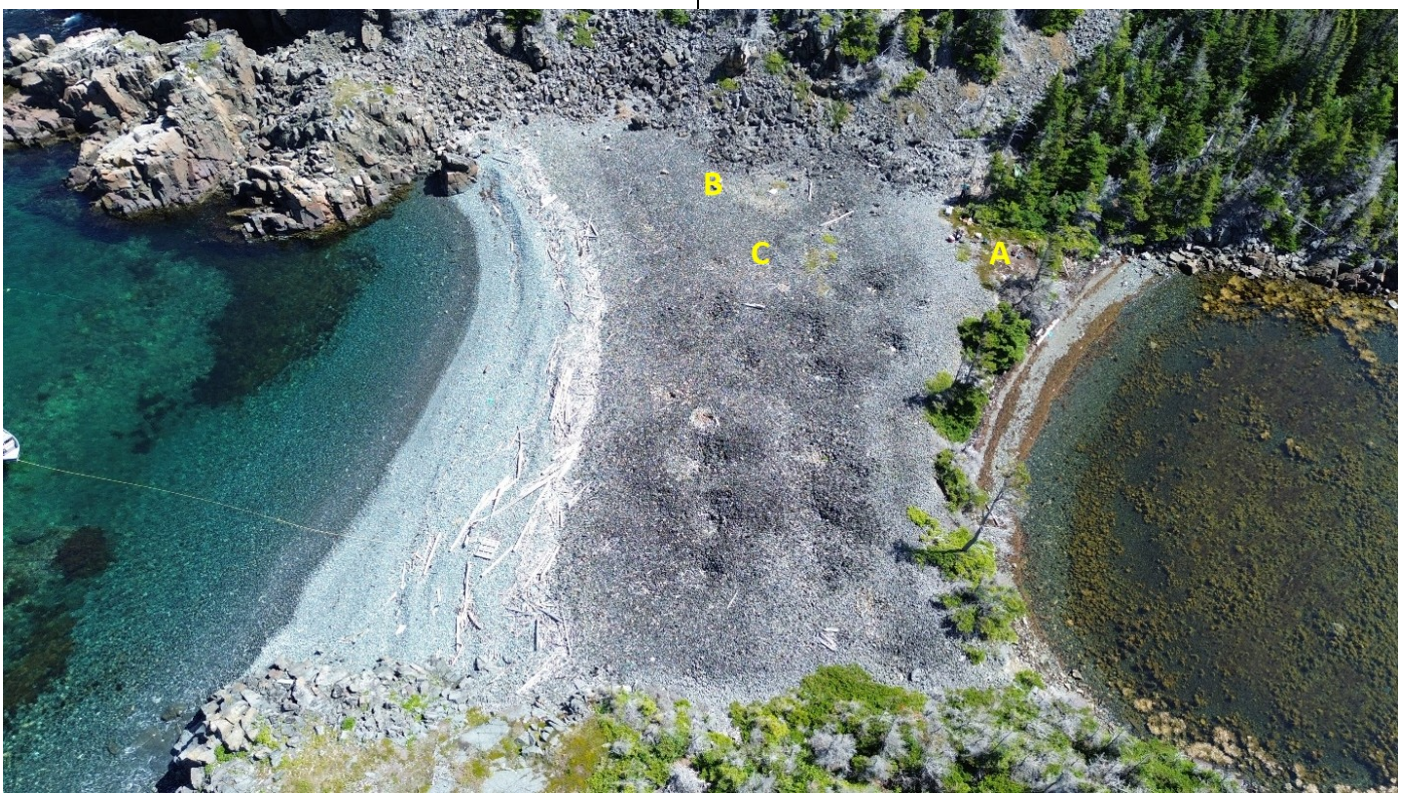

Plate 1: Oil Islands site (DjAw-15), looking east.
A – Location of salvage excavation; B – Feature 2/possible Beothuk housepit; C – Feature 3/possible Beothuk housepit.

preserved, but field notes and a report pertaining to this research cannot be found. The collected artifacts are in storage at the Rooms Provincial Museum (see below). The continued erosion of archaeological strata at Oil Island was confirmed by a 1987 archaeological survey which reported numerous stone artifacts on top of disturbed humus and peat. The 1987 team also recovered flakes from one of the 40 cobble beach depressions that were mapped that year, but concluded that there was insufficient evidence to prove that the large pits were man-made or had been fires and associated disturbance throughout the tombolo features (McLean 2024:44). Flakes were found between cobbles on the surface inside two of the depressions which, in consideration of previous reports of flakes from the features, raised the probability of their having cultural significance beyond incidental deposits. The author, following the 2023 season, examined previously collected artifacts from the site that are in storage at the Rooms. This sample consists of 76 privately obtained objects, including 69 made of stone, six lead fragments and one bird bone. Another

Plate 2: Grid established over eroding southeastern profile encompassed by S1 W2, S2 W1 and S3 W1 – pre-excavation.

eleven privately recovered stone artifacts from Oil Island that were donated to the Tracing Shanawdithit project have been catalogued and will be delivered to the Rooms along with the other results of the Tracing Shanawdithit surveys. The 1987 re-visit accumulated 131 stone artifacts and one red ochre sample. Diagnostic items within the total 252 stone artifacts from Oil Island endorse Pre-Inuit, Recent Period and Beothuk activities at the site (Schwarz 1984:51, 57, 61, 64; McLean 2022:31). The six small lead fragments that apparently were found with lithic items are tentatively evidence for a Beothuk presence as lead objects/fragments have been recovered from 11 other Beothuk sites (McLean 1994:13; 2024:28). The Beothuk familiarity with lead is also borne out by their language including a word, *goosheben*, to represent this material (Hewson 1978:7, 158).

A two-person crew spent five days excavating eroding sections of the Oil Island site, examining the tombolo surface and checking the small southwest meadow in 2025. A permanent datum was installed at the site's southeast corner, which was designated Area A, and a grid encompassing exposed, eroding cultural contexts was established (Plates 2, 3). Stone artifacts and fire-cracked rocks were visible over 10 m² missing its vegetation cover and 123 lithic items were collected from

Plate 3: Partly exposed southern and eastern profiles in S1 W2, S2 W1 and S3 W1.

Plate 4: Beaches complex projectile point from Oil Island excavation.

this surface in 2025. A path/drainage ditch running northwest from the southern pebble beach to the cobble tombolo had exposed humus/peat, cobbles, fire-cracked rocks and artifacts. Two squares encompassing a partly disturbed profile within this trench were selected for excavation. Erosion had already removed 47% of S1 W2 and 54% of S2 W1, leaving 0.99 m² of undisturbed soil in both units. A third excavated unit, S1 W4, near the edge of a separate eroding bank, was denuded of its vegetation cover and possibly some of its upper cultural strata, but appeared otherwise intact, meaning that a total 1.99 m² were salvaged in 2025.

Area A's proliferation of fire-cracked rocks, which suggested the former presence of a large hearth or a series of smaller fireplaces, was designated Feature 1 at the site. Seven layers of FCR, reaching a depth of 29 centimeters below surface, were mapped in S2 W1 while four levels were recorded in S1 W4 and one remaining in S1 W2 was drawn (Plate 3). Pre-Inuit artifacts are well-represented in S1 W4 and one endblade came from S2 W1. Diagnostic objects include five microblades, a tip flute spall, two endblades, two endblade preforms and an eared Groswater endscraper. S1 W4 also yielded a small blade core made on quartz crystal, a portion of a quartz crystal blade and other quartz crystal flakes. The 2025 assemblage also includes a quartz crystal endscraper along with a Ramah chert endblade, endscraper fragment and numerous Ramah flakes, providing evidence of exotic materials in addition to the predominant chert in the collection. One side-notched biface from S2 W1 is tentatively assigned to

Plate 5: Feature 2 (lower center) and most of Feature 3 (upper right corner), Oil Island.

the Beaches complex, indicating a Recent Period occupation preceding the Little Passage (Plate 4).

Salvage excavation of Area A was the primary objective of the 2025 field season, but the crew's brief analysis of the tombolo surface obtained evidence showing that Beothuk people occupied at least two of the depressions at its eastern end. A circular depression outlined by a raised wall perimeter, an attribute characteristic of Beothuk housepits, yielded 16 flakes, a rhyolite core, a small piece of lead, two iron fragments and three fire-cracked rocks from its interior (Marshall 1996:350; McLean 2020:2). This feature measures 4.3 x 4 metres (13.5 m^2) along the crest of its walls, representing a dwelling within the range of sizes utilized by Beothuk from the latter sixteenth century until their demise (Plate 5). One of the flakes was found in a small compartment built into the north wall, representing a storage pit similar to others found in Beothuk housepits in the Exploits Valley (McLean 2014a:25, 29; 2014b:43). In addition, two tightly rolled birch bark scrolls found on top of the feature's north wall potentially represent additional Beothuk artifacts (Plate 6). The weight of one of the scrolls suggests it contains a small piece of iron or other heavy material. Hopefully an x-ray or other non-invasive examination can identify what lies inside this item. Similar mixed assemblages, consisting of traditional materials along with European alternatives are characteristic of Beothuk housepit assemblages from Bonavista Bay that date from sixteenth century until the mid-eighteenth century as well as collections from Dildo Run, Notre Dame Bay that date from 1650 to 1730 (Pastore 1992:34, 40; McLean 2020:7, 9, 13, 15).

Plate 6: Birch bark scroll found on top of Feature 2's wall, Oil Island.

Feature 2's raised wall and sunken interior are also highlighted by their surface consisting of rounded cobbles that are lighter in colour than the majority of the tombolo. This clearly shows where Beothuk excavated into the cobble/shingle matrix in order to achieve the slightly sunken interior surrounded by raised walls. Lichenometry, which uses the size/age relationship of lichens to date stone surfaces, helps to derive a relative chronology for Beothuk activities at the eastern end of this tombolo. Lichenometry can provide absolute dates up to 500 years in temperate environments and is also applicable to relative dating through comparing size ranges of neighbouring lichen populations so as to distinguish between surfaces exposed at different times (Winchester 1988:57). The majority of the Oil Island tombolo is dark-coloured due to its thick lichen cover, meaning that these stones were undisturbed for a long period, conceivably hundreds of years, permitting this overgrowth. This is a minimal estimate, considering that the tombolo's cobbles had also probably remained stationary for a significant period preceding the lichen growth (Ibid). The tombolo's northern and southern borders are lighter coloured due to tidal action and wave energy constantly moving cobbles in these areas and prohibiting the growth of lichen. Similarly, Feature 2, the suggested Beothuk housepit at the tombolo's eastern end, is completely outlined in white cobbles, showing where Beothuk dug into the dark-coloured shingle, created the raised wall around the structure's interior and occupied it for an undetermined period pending further research.

A similar-sized depression, designated Feature 3, occupying approximately 15 m^2, lies seven metres southwest from Feature 2 (Plates 1, 5). Feature 3 is within the size range of smaller Beothuk housepits and has a number of other attributes that are also characteristic of housepits. It produced a mixed assemblage consisting of eight flakes, one small fire-cracked rock, and three iron fragments that is similar to Feature 2's collection. Feature 3 also incorporates a bermed perimeter that rises 20 centimeters above its exterior and 70 centimeters from its interior. Feature 3 is similarly outlined by lighter-coloured cobbles although its retention of darker-hued examples suggests that its construction involved less disturbance of the in situ dark-coloured stones. It is possible that the construction of Feature 3 utilized already existing mounds of cobbles in its berm. The Beothuk decision to incorporate existing natural features into housepit

construction has been identified in a number of examples (LeBlanc 1973:102; McLean 1994:8; 2014b:33; Pastore 1984:104).

The proposed relative timeline for Features 2 and 3 suggests that Beothuk built early versions of housepits at Oil Island between 350 and 220 years ago, or even earlier, which included digging into a tombolo surface that was covered in dark-coloured lichen growth. It is also noteworthy that Beothuk activity around Features 2 and 3 slightly compressed the cobble matrix and disturbed the latter, bringing lighter coloured stones to the surface. This activity area's slightly lower elevation and off-setting colour, relative to the rest of the tombolo, are apparent when viewed from the north and east (Plate 7). Furthermore, many of the cobble pits west of Features 2 and 3 are covered in black lichen indicating that these features were created a significant time ago before the innovation of Beothuk housepit construction there and have been undisturbed for a considerable period.

Plate 7: Oil Island (DjAw-15), view from the north; note the trampled area surrounding Features 2 and 3.

Feature 4 is a 2.5 x 1.5 metre ovate depression located on the northern edge of Feature 1. Feature 4 is 12 metres from Feature 3 and 15 metres from Feature 2, putting it just outside the previously described activity zone, but its mixed assemblage of 15 iron fragments and three flakes suggests a Beothuk deposit affiliated with those from Features 2 and 3. Feature 4's iron objects include an L-shaped fragment that resembles a bent shaft of a wrought iron nail undergoing de-lamination due to corrosion/deterioration. The 14 small thin fragments from Feature 4 and the five similar pieces from Features 2 and 3 appear to be debris from this deteriorating object. There is obviously much to learn through continued research at the Oil Island site.

2025 Survey Results

One day was invested in surveying Beaver Bight which is a small harbour on Badger Bay's western shoreline. A map drawn in 1820 by Lieutenant Waller, a member of David Buchan's crew, shows a wigwam in the cove's southeast corner (Marshall 1996:175; Waller 1820). Beaver Bight has a two to three metre high densely vegetated terrace that is backed by a steep, forest-covered hill leading to a number of ponds at its summit. The crew checked the southern part of the terrace and the southeastern slope that leads to two ponds. Surface analysis and excavated test pits were sterile, other than finding a

chert core fragment on a stream bank alongside a pool adjoining a low waterfall. This location is an enticing setting on a densely vegetated steep slope, suggesting a precontact brief resting station. A waterworn core of similar material was found downstream. A small island enroute from Badger Bay to Indian Beach (DjAx-04), Halls Bay was examined, including test pit excavation, with negative results.

Re-Visited Sites

A number of cobble beach depressions similar to those on the Oil Islands and elsewhere were previously reported on Indian Beach (DjAx-04). A small assemblage comprised of precontact and Newfoundland settler artifacts was collected at that time (Penney 1988:4, 24). This site was briefly re-visited in 2025. Colour gradation of the beach cobbles here is much more gradual compared to Oil Island, implying a less stable substrate at Indian Beach. Our surface examination re-identified a housepit-like depression in the beach's northern corner. This near circular feature measures 5.6 x 4.4 metres (19.3 m^2) which is within the range of smaller housepits built by Beothuk. The Indian Beach example is outlined by a raised berm perimeter with a central mound in the interior where Beothuk housepit hearths typically occur (Marshall 1996:350; McLean 2020:2). Brief examination of the depression's surface did not identify cultural material, but it is worthy of closer examination.

Our brief survey found only one other depression on the beach, but a thick retouched flake made on white quartz was recovered from the surface well away from the housepit-like depression. A quartz crystal blade and a chert flake occurred in a test pit dug into the grassy fringe along the beach's western flank. A rich artifact deposit that had been exposed by a large divot measuring 3.5 x 2.5 metres was found within a forested area a few metres northwest of the cultural test pit. Four mature conifers had been uprooted by wind, creating the disturbance. Surface examination and light trowelling of the underside of the uprooted sod, as well as the exposed beach, revealed scattered fire-cracked rock and stone artifacts, facilitating recovery of 79 lithic items. The presence of three microblades identified the deposit as Pre-Inuit. A dilapidated Newfoundland settler shack is located near the tree fall and a recent hearth occurred in vegetation at the south end of the beach.

The crew briefly re-visited the Price site (DjAx-09) and found a few jasper flakes in a previously recorded disturbed section, but otherwise this site is stable. Pre-Inuit and Archaic artifacts were unearthed in test excavations undertaken in 2024. The Price site is one of five occurring on private property on Sunday Cove where one was identified on currently unoccupied land. Robert's Arm-1 (DiAw-01), a site located on the southeast end of Pilley's Island also has archaeological resources on occupied property. This Groswater Pre-Inuit site was identified in 1981 and is currently eroding (Pastore 1981). This year's crew, under permission from the owner/occupants, collected 20 Pre-Inuit stone artifacts from the site surface. The crew also resumed its preliminary analysis of an intriguing loose stone foundation that measures 4.4 x 4 metres and is largely covered by vegetation. A test pit dug into the feature's interior this year was sterile, but this former structure remains an interesting topic for future research. The crew spent part of one day checking the surfaces of a number of small coves in northwestern Seal Bay for signs of a previously found Beothuk burial (DiAv-04). A small cave was found, but its context does not match the description of DiAv-04 and there was no evidence of cultural activity in the areas examined in Seal Bay this year.

Bibliography

Hewson, John. *Beothuk Vocabularies*. Technical papers of the Newfoundland Museum. No. 2. Historic
1978 Resources Division, Department of Tourism, Government of Newfoundland and Labrador.

Marshall, Ingeborg. *A History and Ethnography of the Beothuk*. McGill-Queen's University Press.
1996 Montreal and Kingston.

McLean, Laurie. *Burnside Heritage Project: 1992 Archaeological Report.* Document on file, Provincial
1994 Archaeology Office, Department of Tourism, Culture, Industry and Innovation, Government of Newfoundland and Labrador. St. John's.

2014a *An Archaeological Survey of Two Mile Island, Exploits River: Phase 1*. Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Industry and Innovation, Government of

Newfoundland and Labrador. St. John's.

2014b *Salvage Archaeology at Aspen Island-2 (DfAw-05), in Nimrod's Pool, Exploits River. Permit No. 14.26*. Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Industry and Innovation, Government of Newfoundland and Labrador. St. John's.

2019 *An Archaeological Survey of New World Island's West Coast from Valley Pond to Summerford Arm: Permit No. 19.23, 19.23.01*. Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Arts and Recreation, Government of Newfoundland and Labrador. St. John's.

2020 *Beothuk Housepits: Barometers of Historic Transition*. Academia.edu.

2022 *Final Report for an Archaeological Survey of Badger Bay, Newfoundland*. 22.25, 22.25.01. Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Arts and Recreation, Government of Newfoundland and Labrador. St. John's.

2024 *Tracing Shanawdithit – An Archaeological Survey of the Badger Bay Watershed and the Adjoining Coastline*. Permit No. 23.21. Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Arts and Recreation, Government of Newfoundland and Labrador. St. John's.

Pastore, Ralph T. *A Survey of the Pilley's Island Region, Fall, 1980*. Report on file, Provincial Archaeology
1981 Office, Department of Tourism, Culture, Arts and Recreation, Government of Newfoundland and Labrador. St. John's.

1984 *Excavations at Boyd's Cove – 1983*, in *Archaeology in Newfoundland and Labrador – 1983*. Annual Report No. 4. Jane Sproull Thomson, Callum Thomson (eds.). Historic Resources Division, Department of Culture, Recreation and Youth, Government of Newfoundland and Labrador. St. John's.

1992 *Shanawdithit's People*. Breakwater Books. St. John's.

Penney, Gerald and Associates. *An Archaeological Survey of Western Notre Dame Bay and Green Bay*.
1988 Report on file, Provincial Archaeology Office, Department of Tourism, Culture, Arts and Recreation, Government of Newfoundland and Labrador. St. John's.

Stopp, Marianne. *Cultural Utility of the Cobble Beach Formation in Coastal Newfoundland and Labrador*.
1994 Northeast Anthropology. 48.

Waller, Charles. *Captain Buchan's Track into the Interior of Newfoundland in the month of January, 1820*
1820 to Open a Communication with the Native Indians. CNS Maps 63435 1820 C3, Centre for Newfoundland Studies, Queen Elizabeth II Library, Memorial University of Newfoundland. St. John's.

Winchester, Vanessa. *An Assessment of Lichenometry as a Method for Dating Recent Stone Movements*
1988 *In Two Stone Circles in Cumbria and Oxfordshire*. Botanical Journal of the Linnean Society 96:57-68.

The Great Northern Trail Project

Pier-Ann Milliard
Era Nova Archaeological Services

Project overview

In July 2025, Era Nova Archaeological Services was retained by the Great Northern Trail Association (GNTA) to conduct a Historic Resources Impact Assessment (HRIA) for a proposed trail network extending from Little Brehat to Granchain Island. Fieldwork was carried out by Pier-Ann Milliard and Elsa Simms and involved surveying a proposed loop of approximately 20 km through rugged and undeveloped terrain.

Access to Little Brehat was achieved via an existing 5km trail previously developed by the GNTA. Given the high archaeological sensitivity of the region, a pedestrian survey was undertaken along the proposed trial alignment, with targeted test-pitting conducted in areas of elevated potential, notably in Little Brehat and around Persil Cove.

Photo 1: Striking landscape observed throughout the trek.

In addition to its archaeological significance, the project area is characterized by striking coastal landscape, which made the hard physical work and overall participation in this initiative particularly rewarding for the team!

Brief archaeological and historical context of the study area

The study area holds considerable archaeological significance, particularly in relation to early European fishing activities along the historic French Shore. The region encompassing Granchain Island and Great Brehat reflects centuries of seasonal exploitation tied primarily to the cod fisheries.

Numerous archaeological surveys and excavations have been conducted in the broader vicinity over several decades. Within a 5-km radius of the proposed trail alone, 18 archaeological sites have been officially recorded, including confirmed pre-contact Indigenous sites and others with high potential for pre-contact occupation (PAO Database). The historic archaeological record reflects a wide range of cultural influences and periods. While multiple cultural entities are represented, French fishing heritage remains the most prominent, with sites dating from the 17th century through the early 20th century (Pope 2003, 2008; Tapper 2014). These typically include remains of seasonal fishing stations, associated infrastructure and domestic activity areas.

Little Brehat

Little Brehat was a small coastal community that was resettled in 1956 following a devastating tsunami (Personal Communication). Archaeologically, the area remains significant due to its potential for both historic French material and earlier Indigenous occupation. The location is relatively sheltered and offers

Photo 2: Facing Little Brehat Bay. End of the trail between Great Brehat and Little Brehat.

Photo 3: Little Brehat cemetery.

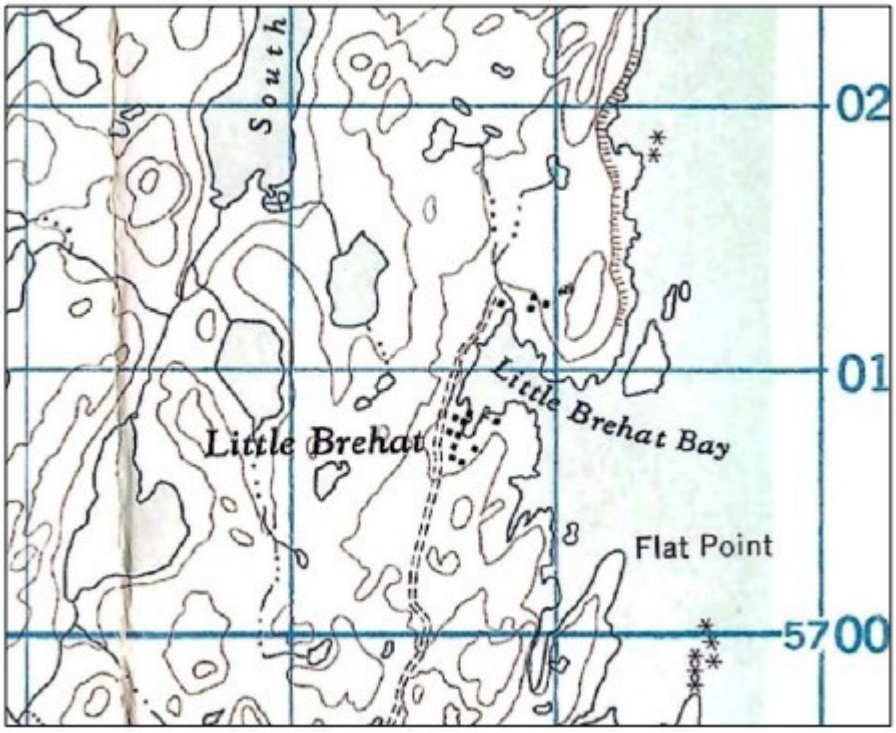

Figure 1: 1950 topographic map of Little Brehat, showing structures present circa 1948 and the historic route extending through the community to the cemetery.

easy access to Little Brehat Bay, factors that would have made it attractive for repeated use. Today, access to Little Brehat is exclusively via trail, as road access no longer exists.

The GNTA has already developed a well-maintained 5 km trail beginning in Great Brehat and terminating at the core of the former Little Brehat settlement. This trail is frequently used by local residents, particularly to access the well-kept cemetery. During the survey, community members provided valuable input regarding former building locations, landscape use, and settlement layout. This information, paired with a 1950-topographic map of Little Brehat (Figure 1) showing the historic route extending through the community to the cemetery, informed the placement and strategy of archaeological test-pitting.

Granchain Island

Located in St. Lunaire Bay, Granchain Island contains two significant registered archaeological sites: French Beach (EiAu-03) and French Beach North (EiAu-04). Both are multi-component sites with evidence of long-term and varied use. Site EiAu-04 contains both Pre-contact Indigenous material and historic French components, while EiAu-03 is considered a particularly rich historic site, with numerous structural remains still visible beneath overgrown vegetation. Previous research suggests that EiAu-03 also includes evidence of use by Recent First Nations, Inuit and French groups (Pope 2003).

Results from the present survey support the interpretation of Granchain Island as a broader, contiguous archaeological landscape rather than two discrete sites. The density and diversity of material remains across the island suggest sustained, and potentially overlapping, cultural use over time. Persil Cove, located just across the tidal zone and accessible at low

Photo 4: Existing trail crossing Little Brehat.

Figure 2: Map of Granchain Island and Little Brehat (1872) from a United States Hydrographic chart (copies from a U.K. chart based on an 1856 French survey. Document provided by the PAO (November 2024).

tide is likely associated with early French fishing activity, indicating that the area functioned as an integrated maritime cultural zone.

Granchain Island also holds historical significance through its association with Guillaume Liberge de Granchain, a 17th century French sailor and explorer. Historical records note that the island's main western beach was known as the "Grave de l'Amirauté". Supporting this interpretation, Pope's 2009 investigations documented evidence consistent with a French fishing room described in historical sources.

To minimize disturbance and preserve site integrity, test-pitting was not conducted on Granchain Island. Although structural remains are faint and partially obscured by tall herbaceous vegetation, they underscore both the archaeological potential and the ecological complexity of the site. Additionally, a freshwater pond located near the center of the island, bordered by boggy terrain rich in edible plants such as bakeapples and partridge berries, may have been an important resource for past occupants.

Persil Cove

The name "Persil Cove" was adopted for the purpose of this HRIA based on historical cartographic sources, although it is not formally recognized in local usage. Archaeologically, the area holds significant potential. It is characterized by flat beaches, sheltered coves, and a transition zone from open plateau to terrace-bog environments. Its proximity to Granchain Island, particularly given tidal access at low tide, further enhances its archaeological sensitivity.

The terrain surrounding Persil Cove and nearby Fish Cove exhibits several characteristics commonly associated with past cultural activity, including wide, flat plateaux, bog margins, and distinct shifts in vegetation. Such features are often early visible indicators of historic land use, including fishing-related structures such as drying racks, seasonal camps, or temporary settlements, par-

Photo 5: Elsa looking at Persil Cove.

Photo 6: Fish Cove Beach.

Photo 7: Fish Cove.

ticularly in regions known for sustained French colonial activity.

Concluding remarks

The trail corridor extending from Great Brehat to Granchain Island, including Little Brehat and Persil Cove, exhibits substantial archaeological and cultural potential. Evidence gathered through landscape observation, pedestrian analysis, oral history and limited subsurface testing strongly suggest the presence of resources across multiple locations within the study area. Continued careful planning and heritage-conscious trail development will be essential to ensuring the long-term protection and appreciation of these cultural landscapes and fragile ecosystems.

Acknowledgments

We would like to send our gratitude to Kier Knudsen for generously providing boat transportation to and from Granchain Island, often under challenging conditions.

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References

Le Tourneur, Clair-Desir (1821) "Manuscript Atlas of the French Cod Fisheries of Newfoundland" Partie Pêche de la Morue à l'Ile de Terre-Neuve. CNS, Coll. 4677.

Pope, Peter E.

(2003) Outport Economics: culture and agriculture in the Late 17th century Newfoundland. *Newfoundland Studies* 19(1): 153-186.

(2008) Field News from the Petit Nord – Summer 2008. *Provincial Archaeology Review* 7: 117-127.

Tapper, Bryn (2014) "An archaeological analysis of the distribution of French fishing rooms on the Petit Nord, Newfoundland. *MA thesis*, Department of Archaeology, Memorial University.

Palaeoenvironmental Sampling on the Great Northern Peninsula

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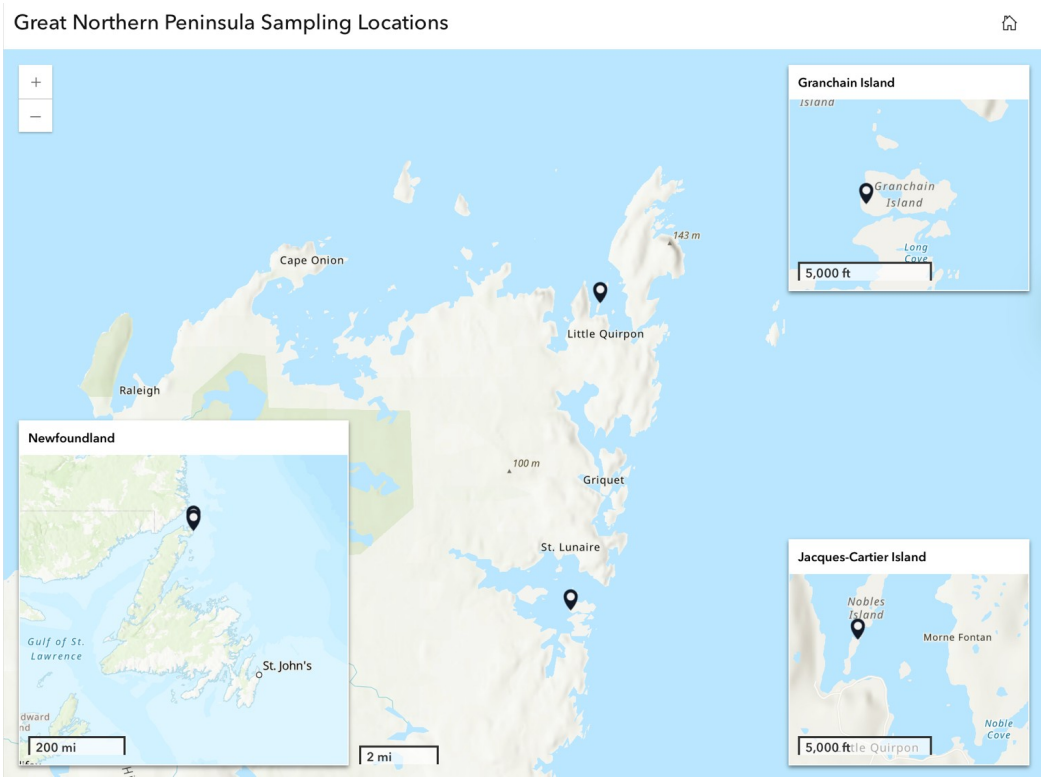
In July 2025, while much of Newfoundland was experiencing extreme wildfire activity, fieldwork was conducted on the Great Northern Peninsula under cold and persistently wet conditions. Peat sampling was undertaken to support pollen and insect (coleopteran) analyses as part of ongoing doctoral research. The primary goal of this field season was to identify and sample suitable palaeoenvironmental archives capable of capturing long-term environmental change associated with human occupation.

Two types of records were targeted: (1) peat sequences spanning the period of European, particularly French, occupation of the Northern Peninsula; and (2) deposits potentially predating human presence on the island. The latter would allow for the reconstruction of pre-anthropogenic ecological conditions and the establishment of a baseline against which subsequent environmental changes could be assessed. This baseline is critical for evaluating how different groups may have altered local ecosystems over time and whether distinct human activities produced identifiable ecological signatures.

Figure 1: Map of the Study Area



Historical and Archaeological Context

The Great Northern Peninsula of Newfoundland is archaeologically significant due to its long history of European fishing activity along what became known as the French Shore (Thompson 1961). From the 16th century onward, French fishermen, primarily from Britanny, Normandy, and the Basque country, made seasonal use of the region's rich cod fisheries, leaving behind a substantial archaeological footprint.

The Treaty of Utrecht (1713) formally granted France exclusive fishing rights along portions of Newfoundland's northwest coast, codifying long-standing practices rather than initiating them. Archaeological evidence across the Northern Peninsula reflects a range of cultural influences and time periods; however, French fishing heritage is particularly well-represented. Sites dating from the 17th through early 20th centuries commonly include remains of seasonal fishing stations, processing areas, infrastructures and associated domestic activities (cf. Pope 2008).

This long-term, repeated use of coastal landscapes provides an ideal context for examining cumulative human impacts on the local environment through palaeoecological proxies.

Study Area

Two sites were selected based on prior research and exploratory surveys conducted in 2023 and 2024 in the St. Lunaire and Quirpon areas. This earlier work included archival re-

Photo 1: Kassandra and Paul are testing the bog using the Russian core on Jacques-Cartier Island.

search and review of previous archaeological investigations.

Jacques-Cartier Island

Jacques-Cartier Island (also called Nobles Island by locals) is located in Quirpon Bay and is closely associated with well-documented French seasonal fishing activity. The island contains a peat bog situated in proximity to known archaeological sites (cf. Cloué 1854; Tapper 2014) making it a strong candidate for capturing environmental signals linked to historic occupation. The bog's depth and stratigraphy suggest palaeoenvironmental record spanning multiple centuries.

Granchain Island

Granchain Island, similarly, contains peat deposits in close association with archaeological remains linked to historic French activities. A well-preserved peat bog on the northern side of the lake and close to the

Photo 2: Kassandra and Paul are looking at the core collected. The peat sample is in the chamber.

Photo 3: Pier-Ann is driving the Russian core in the ground.

Figure 2: Map of Granchain Island, showing the locations of recorded archaeological sites. From the PAO's ArcGIS Database.

main archaeological site (French Beach, EiAu-03/04) and its many cultural features makes the site suitable for reconstructing both environmental conditions and potential anthropogenic impacts over time.

Research Objectives

The overarching objectives of both research projects is to examine how environments and landscapes on the Great Northern Peninsula have changed through time in response to human occupation. Understanding these changes is critical for documenting the long-term (*longue-durée*) human-environment interactions, including both subtle ecological shifts and more pronounced transformations.

Palaeoenvironmental proxies such as pollen, plant macrofossils and beetle remains provide valuable insight into past vegetation, climate, and habitat conditions. As humans are widely recognized as significant ecosystem engineers, identifying changes in these proxies can help illuminate cultural practices, land-use strategies, and differences between groups occupying the landscape at different times.

Materials & Methods

Peat cores and monolith samples were collected from bog deposits on both Jacques-Cartier Island and Granchain Island. Sampling locations were selected to maximize stratigraphic depth and minimize disturbance while remaining spatially relevant to nearby archaeological sites.

Collected peat samples are being processed for pollen and insect analysis. Subsamples have also been prepared for radiocarbon dating to establish the chronological framework of the peat sequences and to identify potential correlations between environmental changes and known periods of human activity.

Preliminary Observations and Ongoing Analyses

Laboratory analyses are currently underway. Lithological characteristics of the peat sequences will be documented using loss-on-ignition (LOI) testing, with charcoal analysis conducted where applicable to identify evidence of burning. Chemical pre-treatment of peat samples is required prior to pollen and insect analysis in order to remove humic acids and allow for the proper identification of preserved remains.

Once pollen and coleopteran analyses are completed, the datasets will be integrated to provide a more comprehensive reconstruction of past environmental conditions at both sites.

Photo 4:
Granchain Island. Kassandra and Pier-Ann are walking over the bog toward the main beach with its associated archaeological features.

Photo 5:
We found a suitable location to dig a small trench to insert a monolith tin in the peat profile. The tin is great to conduct various types of analyses as it contains more volume than the core.

Photo 6: On Granchain Island. Pier-Ann and Paul are inserting the tin in the profile.

Photo 7: Beautiful Sphagnum moss found throughout Granchain Island's peat bog. This type of moss is an excellent material for radiocarbon dating because it is short-lived and dies on the spot. The chronological ranges provided by c14 are usually more precise with a smaller chronological window than other material like wood or bones.

Photos 8-9: Pier-Ann and Kassandra are celebrating their hard labour! Collecting peat samples is challenging as it requires hard physical work.

What's next?

Future stages of the project will focus on refining chronologies through radiocarbon dating and interpreting environmental changes in relation to archaeological and historical data. By combining multiple palaeoenvironmental proxies, this research aims to identify potential human signals within the environmental record and contribute to a broader understanding of long-term impacts on the landscapes of the Great Northern Peninsula.

Acknowledgments

Cheers to Kier Knudsen and his colleagues at the Dark Tickle Expeditions Boat Tour for generously bringing us to Granchain Island.

Thanks to Paul Ledger for helping us pushing in and pulling out the Russian core.

Sources cited

Cloué, G.-C. (1854)
Plan des havres de Kirpon et de la Baie aux Mauves, situé au nord de l'île de Terre-Neuve. Levé en 1850. France, Dépôt général de la marine. In CNS, Microfiche 151.
Carte particulière de la côte nord de Terre-Neuve. Comprise entre Le Cap d'Oignon et les Îles Blanches. Levé en 1850 et 1851. France, Dépôt général de la marine. In CNS, Microfiche 152.
Pope, P. (2008)
Field News from the Petit Nord – Summer 2008. Provincial Archaeology Review 7: 117-127.
Tapper, B. (2014)
An archaeological analysis of the distribution of French fishing rooms on the Petit Nord, Newfoundland. Master's Thesis, Memorial University of Newfoundland.
Thompson, F.F. (1961)
The French Shore problem in Newfoundland: an imperial study. Toronto: University Press of Toronto, pp. 3-24.

The Lamage Point Trail in St. Anthony

Pier-Ann Milliard & Elsa Simms
Era Nova Archaeological Services

Project overview

Era Nova Archaeological Services was retained by Curtis Richard from St. Anthony to conduct a Historic Resources Impact Assessment (HRIA) for a proposed trail extension on Lamage Point, located between St. Anthony Harbour and St. Anthony Bight.

Figure 1: U.K. hydrographic chart (c. 1872), showing the Project Area. Based on a 1850-58 French survey.

The PAO has identified archaeological potential in the direct vicinity (~350 m radius from the proposed trail), and therefore we conducted a field assessment which included a pedestrian survey and test-pitting of the area. The trail includes previously developed sections, disturbed zones, and a proposed extension where archaeological potential is the highest.

Archaeology in the area

The project area lies within the *Petit Nord*, a historically defined section of the French Shore extending from the Strait of Belle Isle to Quirpon Island. This zone was heavily used by the French migratory fishery from the 1500s until the early 1900s (Pope 2008; Tapper 2014; Tapper and Pope 2014). The *Petit Nord* is characterized by dozens of known archaeological sites, including temporary fishing stations, shore installations, and drying ground features (*graves* or *vigneaux*), many of which have been systematically documented by archaeologists over the past decades (eg. Pope 2008, 2009, 2013; Skanes 2000; Thomson 2008).

One of the most relevant sites is *Le Dos de Cheval* (EiAv-05), located approximately 340 metres from the current project area. This site, first recorded by Peter Pope (2008), dates to around 1680 and offers clear evidence of shore-based French fishing activity. Its proximity to Lamage Point Trail makes it a strong comparative reference and highlights the potential for similar features or structures in the immediate vicinity.

Several historically significant fishing stations are located in close proximity, including *Crémaillère* Harbour, St. Anthony Harbour, and St. Anthony Bight, together forming a dense cluster of French and broader European activity. Across the bay, site EiAu-06 (also recorded by Pope) contains evidence of fishing-related occupation. In the surrounding area, Cal-

Figure 2: Project location map

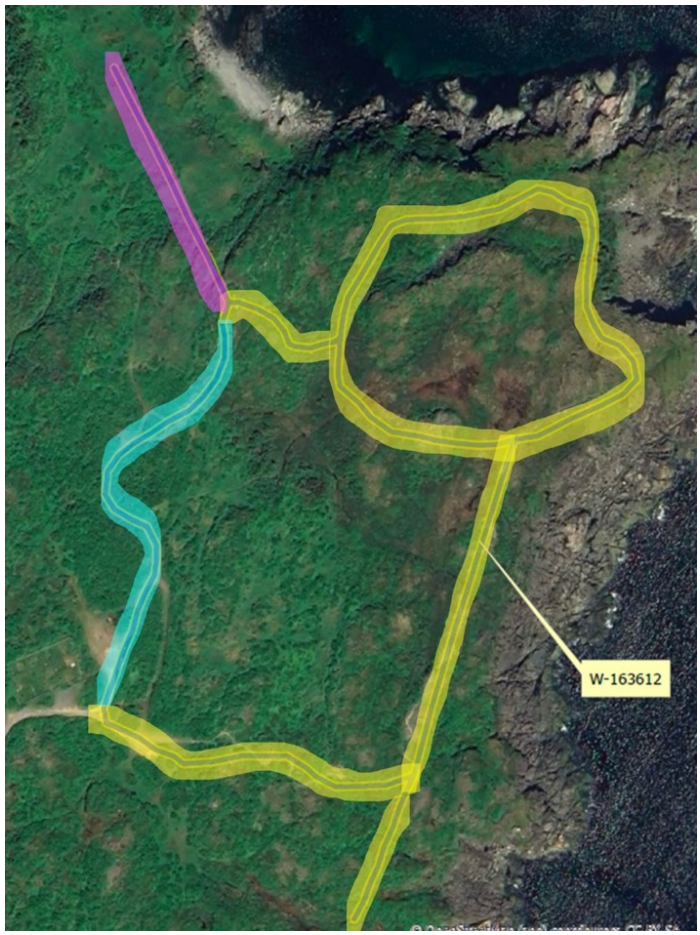


Figure 3: Map showing three distinct zones identified during the archaeological assessment. Yellow: Existing developed trail featuring a gravel bed placed directly on exposed bedrock. Blue: Mechanically disturbed section widened using heavy equipment and subject to ATV traffic. Pink: Undeveloped trail extension located in an area of high archaeological potential.

lum Thomson (2008) documented a black chert flake, suggesting possible Indigenous activity, although no confirmed Pre-contact habitation site was identified at that location.

The town of St. Anthony represents a complex, historically layered landscape, surrounded by registered archaeological sites of both Indigenous and European origin. Within one kilometre of the proposed trail extension, multiple sites have been recorded, including four documented by Skanes (2000), Thomson (2008), and Pope (2008, 2009, 2013). These sites contain evidence of fishing rooms, drying installations, and early settlement patterns (cf. Figures 4-5).

The Lamage Point Trail runs immediately adjacent to a historic cemetery, underscoring the multi-component cultural significance of this corridor. The presence of French and later colonial features, as well as 19th and 20th century historic elements, heightens the landscape's sensitivity to disturbances. The density and diversity of known resources emphasize the need for well-documented development.

Development context for the Lamage Point Trail

The town of St. Anthony has already developed portions of the Lamage Point Trail for pedestrian use. The existing constructed segment (highlighted in yellow in Figure 3) consists of a narrow gravel footpath built directly on exposed bedrock. This section crosses a rugged landscape characterized by rock outcrops, shallow soils, and vegetation typical of such environments, including Labrador tea (*Ledum* spp.), fireweed (*Chamerion angustifolium*), stinging nettle (*Urtica* spp.), raspberry (*Rubus* spp.) and other low-growing shrubs and herbaceous species.

In contrast, the adjacent segment marked in blue (Figure 3) exhibits substantial mechanical disturbance. Field observations indicate that this section was widened using heavy equipment, likely to facili-

tate ATV access. No gravel base is present, instead the surface consists of exposed soils, uneven terrain, and extensive rutting and compaction resulting from ATV use. Low-lying areas are waterlogged and subject to seasonal erosion and surface runoff.

This disturbed section transitions into an undeveloped portion of the trail (pink in Figure 3), which formed the primary focus of the archaeological assessment. Owing to its relatively intact surface condition, proximity to known heritage resources, and landscape features indicative of past human activity, this segment was prioritized for test-pitting.

Field methods and survey results

The primary objective of the HRIA was to assess whether the proposed trail extension intersects archaeological resources or traverses terrain with elevated potential for past occupation. Particular attention was given to identifying any heritage resources that could be impacted by future development.

Pier-Ann and Elsa conducted a systematic pedestrian survey along the full trail corridor, from the trailhead to Partridge Cove, where expansion is proposed. No visible archaeological features were identified along the existing trail segments, which are either bedrock-exposed or previously disturbed.

Approaching the undeveloped extension, changes in topography and vegetation suggested increased archaeological potential. Near Partridge Cove, the terrain forms a terrace-like plateau characterized by taller grasses and apophyte vegetation, indicating localized disturbance. Combined with the proximity of historically documented French fishing rooms depicted on archival maps, this context warranted further investigation.

Within this area, a square, juniper-covered clearing measuring approximately 10 by 12 m was identified. The clearing is visually distinct from surrounding vegetation and contains a small, recently installed memorial structure at its centre (Photo 1). The configuration and vegetation pattern suggested the possibility of an underlying cultural feature.

Targeted test-pitting was undertaken within the clearing. An informal footpath leading to the feature indicates frequent local use. Although no diagnostic artifacts were recovered, a distinct cultural horizon was observed: a compact layer of decomposed wood overlying rounded, cobble-sized stones (Photo 2-3). These stones differ from the local geology and appear to have been intentionally placed, likely sourced from the nearby beach.

Aerial imagery supports the anthropogenic origin of the feature, revealing a discernible perimeter consistent with a constructed surface. When compared with historical French cartographic sources, the feature's size, layout, and materials are consistent with either a *grave-à-poisson* (fish-drying bed) or a *Vigneau* (elevated wooden drying rack), both central to French migratory fishing operations from the 16th to the 19th centuries (Figure 4).

While definitive identification is not possible on limited testing, several observations favour

Photo 1: Memorial and trail visible in the archaeological feature identified.

Photo 2: Example of cobble stones (galets) encountered in each of the excavated test-pits. Note the uniform size, rounded shape, and consistent orientation (flat), which suggest intentional placement as part of a cultural feature.

Photo 3: Close up of the *galets* found in each test-pit under a layer of wood.

Photo 4: Pier-Ann is holding pieces of degraded wood placed atop the *galet*.

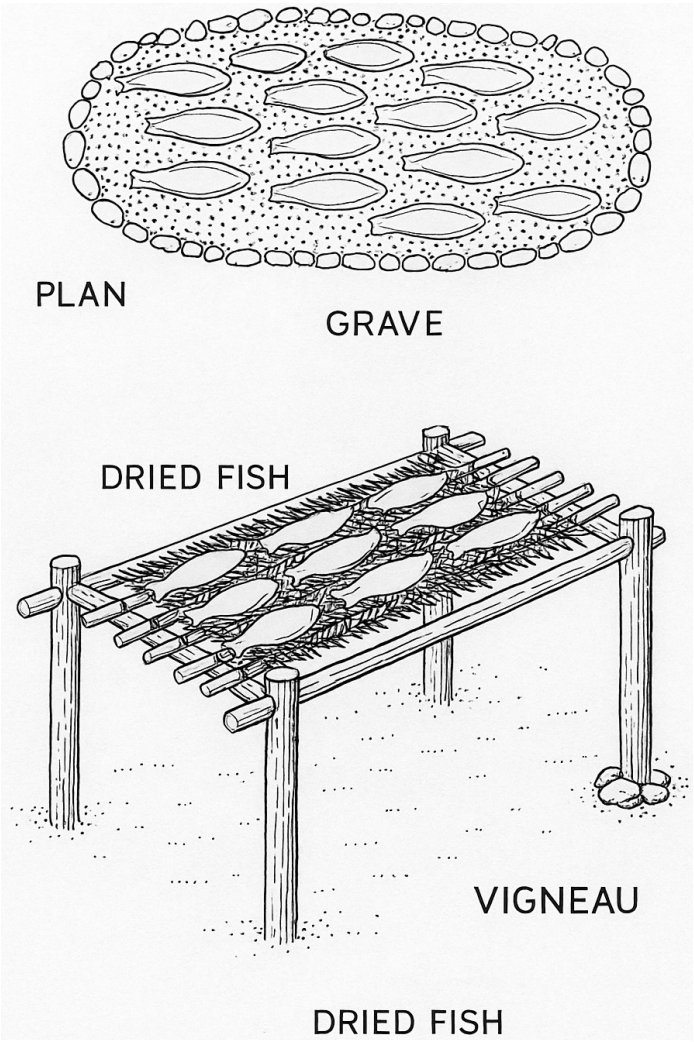


Figure 4: Plan view of a *Grave*, showing a cobble border and a 3-D side view showing a *Vigneau*.

interpretation as a *grave-à-poisson*: (1) a level, cobble-laid surface with consistent stone morphology; (2) a layer of decomposed organic material likely representing former wooden elements; and (3) the feature's size, shape, and placement near a cliff edge, which would have facilitated drainage during the fish drying process. These characteristics align with documented archaeological examples of fish-drying graves (Tapper 2014).

By contrast, *vigneaux*, typically exhibit postholes, substantial wooden structural elements, and occasionally iron fastenings. None of these indicators were identified, making this interpretation less likely. The absence of diagnostic artifacts does not preclude identification, as preservation conditions may have degraded organic materials over time.

Based on available evidence, the feature is interpreted as a probable fish-drying *grave* associated with French migratory fishing activity. Chronological and cultural attribution remains tentative in the absence of datable materials. Broader excavation and radiocarbon analysis of preserved wood or sediments may refine this interpretation.

Conclusion

The Lamage Point Trail corridor exhibits high archaeological potential, particularly within the undeveloped extension near Partridge Cove. Surface morphology, vegetation patterns, and historic cartographic sources support interpretation of a feature identified during the assessment as a probable *grave-à-poisson*, associated with French fisheries dating from 17th to the 19th centuries.

Even though no diagnostic artifacts were recovered, the combination of intentionally placed cobbles, decomposed wood, and favourable topography strongly indicates past fishing-related activities. The feature's proximity to known historic fishing stations further supports this. However, without material culture or datable organic remains, chronological attribution remains provisional.

Acknowledgment

Thank you to Curtis Richards for this opportunity and collaboration throughout this project.

References

Le Tourneur, Clair-Desiré (1821). "Manuscript Atlas of the French Cod Fisheries of Newfoundland" (*Partie Pêche de la Morue à l'île de Terre-Neuve).* CNS Collection 4677.

Pope, Peter (2008). Field News from the Petit Nord – Summer 2008. Provincial Archaeology Review 7: 117-127.

Pope, Peter (2009). Site Record Form (SRF) under Permit No. 09.12.01 for EiAv-05 St. Anthony Northeast.

Pope, Peter (2013). Site Record Form (SRF) under Permit No. 13.08 for EiAv-06 Pointe aux Renards,

Skanes, Roy. (2000) Site Record Form (SRF) under Permit No. 99.36 and 00.01 for EiAv-02 St. Anthony 1.

Tapper, Bryn (2014). An Archaeological Analysis of the Distribution of French Fishing Rooms on the Petit Nord, Newfoundland. Memorial University of Newfoundland and Labrador. MA thesis in Archaeology.

Tapper, Bryn and Peter E. Pope (2014). An Archaeology of the Petit Nord – Supp Survey 2013, Preliminary Report. (cross-ref).

Thompson, Callum (2008) Site Record Form (SRF) under Permit No. [?] for EiAv-04 Fishing Point Light Beacon.

Thompson, Frederic F. (1961). The French Shore Problem in Newfoundland: An Imperial Study. *Toronto: University Press of Toronto* (1961), pp. 3-24.

U.K. Hydrographic Office (1872) North-East Coast of Newfoundland: Cape Onion to Hare Bay. No. 271.

Department of Archaeology 2025

Lisa Rankin
Memorial University

The Department of Archaeology had another busy year in 2025. Faculty, staff and graduate students presented papers at the Canadian Archaeological Association Annual Meeting, the Centre for the World in the Viking Age (Upsalla, Sweden), the Canadian Association for Conservation of Cultural Property Annual Conference and the Council for Northeast Historical Archaeology Conference. We hosted presentations at the Department by Dr. Charlotta Hillerdal (University of Aberdeen), Canada Research Chair Dr. Karine Taché (Université Laval), and Dr. Allison Bain (Université Laval). Our graduate students organized the very successful *Cultural Explorations: An Interdisciplinary Symposium on the Humanities* in November, and of course the Department stepped in to host the Canadian Archaeological Association's 57th Annual Meeting (with help from the PAO and the Rooms) when the national event was nearly cancelled. In the spring Catherine Losier, Mario Blaser, Barry Gaulton, Lisa Rankin, Peter Whitridge (Department of Archaeology), and Isabelle Côté (Department of Political Science) received funding from the Transforming Climate Action (CFREF) for a multi-year initiative. With colleagues from Univsersité du Québec à Rimouski, they will work on a project entitled *The Future of Coastal Communities: Experiences, Adaptations, and Heritage Perspectives*. This project aims to promote a fair, sustainable, and equitable adaptation to climate change by conducting research on heritage perspectives that take into account the experiences and emotional relationships of coastal communities with their past and present environments. Véronique Forbes and Paul Ledger spent the spring in Sweden as visiting researchers at the Centre for the World in the Viking Age at Uppsala University. Barry Gaulton and Lisa Rankin ran the very first archaeology program at Harlow campus to a full class of students aged 18-84. And, saving the best things for last, we learned on December 31st that Roger Lewis, MUN Archaeology MA (2006) received the Order of Canada, and Dr. Bryn Tapper officially became the Department's newest faculty member after the successful defense of his dissertation!

Fieldwork Highlights from the Department of Archaeology Collections and Curation Team

During 2025, both the Archaeological Conservator Donna Teasdale and Archaeological Curator/ Geophysical Technician Maria Lear were involved in several archaeological fieldwork projects throughout Newfoundland Labrador as well as a collaborative initiative located in Saint Pierre et Miquelon. Donna worked at the Colony of Avalon, Ferryland, NL continuing with summer field conservation work at the onsite Conservation Lab, associated with Dr. Gaulton's archaeological research. Maria completed a Ground Penetrating Radar (GPR) survey as part of the annual Department of Archaeology Field school, headed by Dr. Catherine Losier in Little St. Lawrence, NL as well as travelling to Saint Pierre Island to complete a geophysical survey in collaboration with the Department of Archaeology and Archéologie des Amériques, Paris, France.

Books

Dieulefet, G. and Losier, C. 2025. *The Archaeology of Connectivity and Complementarity Reflected through Salt, Cod and Sugar*. Contributions to Global Historical Archaeology, Springer.

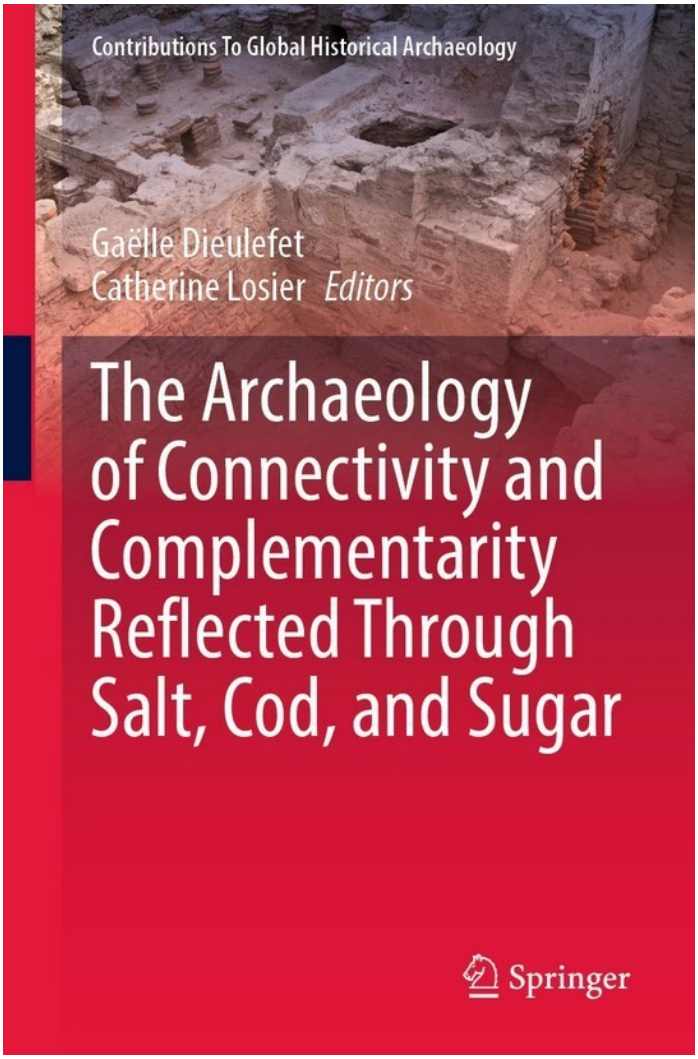
Papers/Chapters

Champagne, M. 2025. The Cod Era. In: Dieulefet, G., Losier, C. (eds) The Archaeology of Connectivity and Complementarity Reflected Through Salt, Cod, and Sugar. Contributions To Global Historical Archaeology. Springer, Cham. https://doi.org/10.1007/978-3-031-92769-0_8

Dieulefet, G., Losier, C. 2025. Connectivity and Complementarity in the Atlantic World: Toward a Global Oceanic Perspective. In: Dieulefet, G., Losier, C. (eds) The Archaeology of Connectivity and Complementarity Reflected Through Salt, Cod, and Sugar. Contributions To Global Historical Archaeology. Springer,

Cham. https://doi.org/10.1007/978-3-031-92769-0_14
Liew, C. 2025. Landscape Transformation: Bay Bulls, Cod, and Warfare in the *Longue Durée*. In: Dieulefet, G., Losier, C. (eds) The Archaeology of Connectivity and Complementarity Reflected Through Salt, Cod, and Sugar. Contributions To Global Historical Archaeology. Springer, Cham. https://doi.org/10.1007/978-3-031-92769-0_6
Losier, C., Dieulefet, G. 2025. Salt, Cod and Sugar: Trade, Mobility, Circular Navigation, and Foodways in the Atlantic World. In: Dieulefet, G., Losier, C. (eds) The Archaeology of Connectivity and Complementarity Reflected Through Salt, Cod, and Sugar. Contributions To Global Historical Archaeology. Springer, Cham. https://doi.org/10.1007/978-3-031-92769-0_1
O'Toole, A. 2025. The Sweet Spot: Engaging with Cultural Identity, Sugar, and Trade Relationships in Seventeenth-Century Dutch and English North America. In: Dieulefet, G., Losier, C. (eds) The Archaeology of Connectivity and Complementarity Reflected Through Salt, Cod, and Sugar. Contributions To Global Historical Archaeology. Springer, Cham. https://doi.org/10.1007/978-3-031-92769-0_12
Whitridge, Peter 2025. Precontact Inuit watercraft and the hunter-prey actantial hinge. In *The Archaeology of Seafaring in Small-Scale Societies: Negotiating Watery Worlds*, edited by Albert Garcia-Piquer, Mikael Fauvelle and Colin Grier, pp. 172-198. University Press of Florida, Gainesville.
Whitridge, Peter 2025. Graffiti, atmosphere, and the structure of feeling of marginal places. Journal of Archaeological Method and Theory 33(17):1-32.
Whitridge, Peter 2025. Did the vilca/tobacco snuff combination at Chavín aim for an "ayahuasca effect"? *Proceedings of the National Academy of Sciences* 122 (38) e2521671122

Dieulefet, G. and Losier, C. 2025. *The Archaeology of Connectivity and Complementarity Reflected through Salt, Cod and Sugar.*



Blog Posts

2025 Foss, J., Collette, R., Loredo, M., Losier, C., Blue Skies and Blue Goodbyes: Digging, Backfilling and Farewells – July 28, 2025, https://www.thecodroad.com/post/blue-skies-and-blue-goodbyes-digging-backfilling-and-farewells
2025 Mrad, S., Stephenson, M., Losier, C., Sunshine, Surfing, and Sifting: A Synopsis of Week Three – July 16, 2025, https://www.thecodroad.com/post/sunshine-surfing-and-sifting-a-synopsis-of-week-three
2025 Farrell, A., Ryan, B., Losier, C., Soggy Field and New Perspectives: Despite the Weather, Excavations Continue… – July 9, 2025, https://www.thecodroad.com/post/soggy-field-and-new-perspectives-despite-the-weather-excavations-continue-and-new-methods-of-inves
2025 Simonsen, C., Gascon, R., Gregory, S., Losier, C., Exploring the Past, One Layer at a Time: Memorial Archaeology Returns to Turpin's Island! – July 1, 2025, https://www.thecodroad.com/post/exploring-the-past-one-layer-at-a-time-memorial-archaeology-returns-to-turpin-s-island
2025 Dejong, A., Farrell, A., Gregory, S., Kett, G., Mrad, S., Paull, D., Philips, L., Ryan, B., Simonsen, C., Stephenson, M., Losier, C., Back to the Bay: Turpin's Island Excavations Begin June 24th, 2025 – June 13,

2025, https://www.thecodroad.com/post/back-to-the-bay-turpin-s-island-excavations-begin-june-24th-2025

Presentations

Forbes, V. and P. Ledger. Viking Age Peatland and Turf Archaeology at L'Anse aux Meadows. Centre for the World in the Viking Age Workshop, Uppsala University, Uppsala, Sweden.

Forbes, V. and P. Ledger. Viking Age Peatland and Turf Archaeology at L'Anse aux Meadows. Public Talk at Café Nymphe, Saint-Lunaire Griquet, NL.

Forbes, V. (on behalf of the PEAT Lab), Environmental Archaeology at L'Anse aux Meadows. Community Update at the L'Anse aux Meadows Interpretation Centre, L'Anse aux Meadows, Port Saunders Town Centre, the Polar Centre and Shirley's Haven, St. Anthony, NL.

Forbes, V. and P. Ledger. L'Anse aux Meadows: A Viking Age settlement in Newfoundland, Canada. Public Lecture, Gamla Uppsala Museum, Sweden.

Gaulton, B. Save your drill bits for something useful: a commentary on clay pipe stem dating techniques. 57th Annual Meeting of the Canadian Archaeological Association, St. John's, NL

Gaulton, B. Archaeology Report 2025. Presented at the 26th Annual General Meeting of the Colony of Avalon Foundation. Ferryland, NL.

Gaulton B. Annual Public Tour and Open House of the archaeological site, interpretation centre and laboratory at Ferryland, NL (in conjunction with the Colony of Avalon Foundation).

Gaulton B. Archaeology at Ferryland, Newfoundland: The 2024 Field Season. Public presentation given to the Rotary Club, St. John's Northwest.

Lear, M. Technology, Traditional Recording Techniques & Local Cultural Advocacy: What we can do Together! 57th Annual Meeting of the Canadian Archaeological Association, St. John's, NL.

Ledger, P. and V. Forbes. Vínland, or Berryland? Exploring the possibilities of the Strait of Belle Isle in the late Viking Age. The Global Viking Age and the Higher Seminar in Archaeology. Centre for the World in the Viking Age, Department of Archaeology, Ancient History and Conservation, Uppsala University, Sweden.

Losier, C. Coastal Heritage and Climate Change: Action for Resilient Communities, 57th Annual Meeting of the Canadian Archaeological Association, St. John's, NL.

Losier, C. Excavating 500 Years of Fishing Stories at Turpin's Island. Science on the Rock, Quidi Vidi Brewery.

Losier, C. 500 ans d'hitoires de pêche à Turpin's Island. Conférences Quoi de Neuf? Nexus Center.

Losier C. Public presentation of the results of MUN archaeology field school at Turpin's Island. Little St. Lawrence community center.

Rankin, L. and B. Gaulton. Empire and the Colonial Process. 57th Annual Meeting of the Canadian Archaeological Association, St. John's, NL.

Rankin, L. A Round Table Discussion on Community- Engaged Archaeology. Nexus Centre

Teasdale, Donna, Barclay, Robert, Logan, Judith A, Newton, Charlotte. (2025, October 20-25). *The Ferryland Cross: Forty Years of Conservation and Community Involvement.* [Poster abstract]. The Canadian Association for Conservation of Cultural Property (CAC) 50th Annual Conference and Workshops, "Surveying the Past, Treatments for the Future", Gatineau, Quebec. https://www.cac-accr.ca/our-conferences/conference-program/

Workshops

Losier, C. Workshop with St. Lawrence Youth Network kids from 8 to 12 years old. Little St. Lawrence community center.

Teasdale, D. and Maria Lear hosted pre-conference *Curation and Conservation Workshop* on archaeological conservation and collections management at the 57th Annual Meeting of the Canadian Archaeological Association, St. John's, NL.

Lear, M. and Donna Teasdale presented an Introduction to Archaeological Conservation and Collections and led lab tours in partnership with Museums Association of NL. Cultural Explorations: An Interdisciplinary Symposium on Humanity, St. John's NL.

Honour's Theses

Bryan Branton. 2025. A Micro-excavation and Insect Fossil Analysis of Monolith 4A804B10-74, L'Anse aux Meadows, Newfoundland.

Jessica Reid. 2025. Little St. Lawrence 20th century Whaling Station.

MA Theses

Calum Brydon. 2025 "Where the Old Fort Was": Archaeological Mapping and Metal Detector Survey of the Vieux Fort (ChAl-4) in Placentia (Plaisance), NL.

Mallory Champagne. 2025. Economy of Cod: Trade, Connection and Cultural Resilience in the French Atlantic.

Kassandra Drake. 2025. An Investigation of Human Activity and Environmental Change at Turpin's Island through Palaeoenvironmental and Historical Archives

Emma Lewis Sing. 2025 The Palaeoethnobotany of 16th-century Ferryland (CgAf-02): an Entanglement of Beothuk and European migratory fishers.

Kayla Low. 2025. Ceramics of the Fisheries: An Analysis of Breton Coarse Earthenwares in the North Atlantic between the 16th and 19th Centuries

Alyshia Reesor. 2025. Fleas on the Run: A Re-examination of Pulex irritans Biogeography through an Interdisciplinary Framework

Hope Tidman. 2025. A study of pre-Etruscan and Etruscan human diets through analysis of stable carbon and nitrogen isotopes from San Giuliano, Italy

PhD Dissertations

Julia Brennan. 2025. The Archaeology of Toxic Heritage: Novel Approaches to Understanding Contamination and Heritage in Labrador, Canada.

Kirstine Eiby Møller. 2025. Colonial Encounters: Inuit Agency and Colonial Narratives in the Eastern Arctic.

Bryn Tapper. 2025. Petroglyphs on the periphery: the landscapes of rock art in the Canadian Maritimes.

Recognitions

Carlos Salazar Guerra received the inaugural Jeffrey Speller Memorial Scholarship

Jordan Hollahan received the Dr. Peter E. Pope Graduate Scholarship

Jared Hogan received the Dean's Award for Teaching Excellence (non-tenure)

Jesse Reid received the Undergrad Student Prize from the Canadian Archaeological Association.

Zoe Helleiner won the Graduate Student Prize from the Canadian Archaeological Association.

2025 Report on The Rooms Archaeology and Indigenous Peoples Collections

Lori Temple, Collections Manager, The Rooms

Above and Right. The Rooms Conservator Miki Lee assisting Parks Conservator Historical and Industrial Objects, Antoine Pelletier in the mounting of a 16th century flensing knife at the new Parks Canada Red Bay Interpretation Centre in Labrador

Throughout 2025 The Rooms Archaeology Unit continued to support researchers, artists and members of the province's Indigenous communities by providing access to the collections. Work continues on adding data to our collections management program to improve our ability to manage our collections overall.

Highlights of 2025

The Rooms assisted the Innu Nation as they develop an exhibition celebrating their language and culture. This project included a trip to the Canadian Museum of History to review their collections and identify potential items for the exhibition and then make arrangements to have those items shipped to The Rooms. This exhibition is scheduled to open at the Labrador Interpretation Centre in the summer of 2026.

In May 2025, Lori Temple and Miki Lee traveled to the Parks Canada Red Bay National Historic site to transport artifacts and assist Parks Canada Staff to install exhibits in the new Interpretation Centre.

In September 2025 Miki Lee and Lori Temple travelled to Fleur de Lys to deinstall artifacts at the Fleur

de Lys Interpretation Centre in preparation for a new exhibition to be installed in the summer of 2026.

Statistics for Archaeology and Indigenous Peoples Collection in 2025 include:

- 147 requests received for information, loans, research visits, tours and photograph use.
- 69 researchers/visitors used the collections and archaeology lab.
- Over 20 museums throughout the province displayed archaeological artifacts from our collections through our Community Loans program. The Rooms also continues to support exhibitions internationally and across the country at The Poole Museum, Poole U.K., The Canadian Museum of History, the National Gallery of Canada and several Parks Canada locations.
- Archaeology artifacts were transferred to The Rooms via the Provincial Archaeology Office through 7 submissions from archaeologists and members of the public representing 2653 artifacts and samples from 150 sites.

The Rooms Conservator Miki Lee and Parks Canada Conservator Alyson Tang installing a 16th century harpoon at the new Parks Canada Red Bay Interpretation Centre in Labrador

Anyone wishing to access our collections for research can contact Lori Temple, Collections Manager for the Archaeology & Indigenous Peoples Collections, at (709) 757-8076 or by email at LoriTemple@therooms.ca

RECENT PUBLICATIONS & THESIS

Brenan, Julia. 2025. The Archaeology of Toxic Heritage: Novel Approaches to Understanding Contamination and Heritage in Labrador, Canada. PhD dissertation, Department of Archaeology, Memorial University of Newfoundland and Labrador, St. John's, NL.

Dieulefet, Gaelle, Brad Loewen & Bernard Allaire
2025 Following the Fish, Mapping the Way: Cod Routes, Fisher-Pilots and Early Maps of the Grand Banks, 16th–19th Centuries. Terrae Incognitae, Vol. 00, No. 00, 1–30

Gray, Kirstine Møller
2025 Colonial Encounters Inuit Agency and Colonial Narratives in the Eastern Arctic. PhD, MUN

Holly, Donald H. Jr. and T. Max Friesen
2025 The Archaeology of Forgetting, the Dorset, and Arctic Antiquity. Cambridge Archaeological Journal https://doi:10.1017/S0959774325100061:1-13.

Lacy, R.S. 2026. Community Archaeology & Burial Landscapes in New Perlican, Newfoundland and Labrador. In Collaborative and Community-Engaged Archaeology. Edited by Carolyn Dillian, Katie Clary, and Charles Bello. University Press of Florida: Gainesville.

Lacy, R.S. 2024. Daisy Wheel, Hexfoil, Hexafoil, Rosette: Protective Marks in Gravestone Art. Berghahn Books: New York.

Marianne Stopp. 2024. The Spirit of Revolution on a Contested Coast: Sixteenth- to Eighteenth-Century Inuit Resistance and Dispossession in Southeastern Labrador, Canada. Historical Archaeology 58 (3): 544-564. https://doi.org/10.1007/s41636-024-00526-3

Marianne Stopp and Hana Nikčević. 2024. Attuiock and Caubvick: Two Portraits of Labrador Inuit in the Blumenbach Collection. Weltenfragmente, Michael Kraus, editor. Göttingen:Universitätsverlag Göttingen, pp.401-405. https://doi.org/10.17875/gup2024-2708

Marianne Stopp and Hana Nikčević.. 2025. Adding to the Portfolio and the Narrative: Further Images of Eighteenth-Century Labrador Inuit in England. Arctic 78(1): 1-28. https://doi.org/10.14430/arctic81238

Samuels, Amanda G., Donald H. Holly Jr., Michelle R. Bebber, Metin I. Eren, Scott McKinny, Briggs Buchanan, Jonathan Paige, Robert S. Walker, and Christopher B. Wolff
2025 Experimental archaeology on the Introduction of European Raw Materials in Indigenous Technology: A Case Study on the Beothuk of Newfoundland, Canada. In From Hard Rock to Heavy Metal: Metal Tool Production and Use by Indigenous Hunter-Gatherers in North America, edited by Christopher B. Wolff and Michelle Bebber, pp. 220-243. Berghahn Press, New York.

Spinelli, R. and R.S. Lacy, eds. 2025. Death, Commemoration & Cultural Meaning: Past and Present. Berghahn Books: New York.

Temple, Blair
2025 " 'A Considerable Improvement': Archaeology and Pre-and Post-1892 Fire Streetscape Changes of Water Street, St. John's." Newfoundland Quarterly 118(2):34-41.

Wolff, Christopher B., Donald H. Holly Jr., and Amanda Samuels
2025 The British Metal Invasion: Iron Use and Its Role in Cultural Changes among the Beothuk of Newfoundland, Canada. In From Hard Rock to Heavy Metal: Metal Tool Production and Use by Indigenous Hunter-Gatherers in North America, edited by Christopher B. Wolff and Michelle Bebber, pp. 202-219. Berghahn Press, New York.

If you have any comments or suggestions for the next Archaeology Review please contact Stephen Hull.

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