SMITHSONIAN 2022 SURVEYS IN NORTHWEST NEWFOUNDLAND AND TESTING A BASQUE WHALING STATION IN ST. PAUL RIVER, QUEBEC

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Surveying in Port Saunders, Nfld, and excavating a Basque Baleen Pit in St. Paul, Quebec



## This report is dedicated to

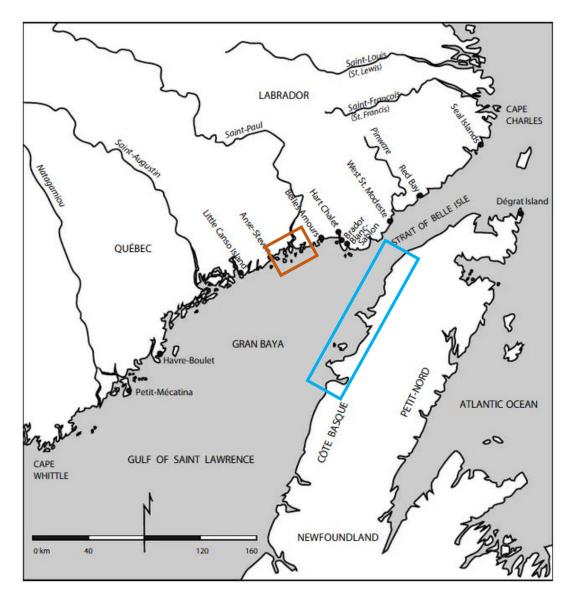
## Bill and Ilene Lowe

(deceased within ten days of each other in January 2023)



Dinner with the the Lowes in Port Saunders in July 2022. (I-r:) Bill Lowe, Bill Fitzhugh, Whitney Hadley-Salay, Bella Fermin, Ilene Lowe, Perry Colbourne, and Ben Fitzhugh. (photo: Saraí Barreiro-Argüelles)

Ilene and Bill Lowe opened their home to our team in July 2022 as they have done for decades since the mid-1970s when our research vessels Tunuyak and Pitsiulak found winter berths at the Port Saunders Marine Center, then directed by Mark Lowe, Bill's brother. Perry Colbourne lodged with them while he readied Pitsiulak for sea, and when our teams arrived, we too found shelter, home cooking, and untold hours of stories and stimulating conversation. Over the years we returned occasionally when boat break-downs or other business brought us in reach of their hospitality and warmth. Thank you, Ilene and Bill, for your friendship, fun, and thirst for knowledge and for the ever-welcoming 'Hotel Lowe'.



Field areas researched in 2022

This report provides a summary of 2022 archaeological research on two projects, one carried out in late July in northwest Newfoundland surveying for historic period Inuit sites and collecting modern caribou DNA samples, and a second in early August testing the Bonne Espérance-4 (EiBk-61) Basque whaling site in St. Paul River on the Quebec Lower North Shore.

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Pitsiulak, a covid-victim, resting at the Triton Marine Center and not to be launched (again) this summer. (photo: Ben Fitzhugh)

PART I. Caribou Studies and Coastal Surveys for Historic Inuit Sites in Northwest Newfoundland



Saraí Barreiro-Argüelles and Ben Fitzhugh document rock structures at New Ferolle-3, Feature 1.

# Proposal to Newfoundland Provincial Archaeology Office: On the Question of Tent Rings, Caribou, and Inuit in Northwest

**Newfoundland** (by Brad Loewen, William Fitzhugh, and Saraí Barreiro Argüelles)

This project on the archaeology of the 16<sup>th</sup>-18<sup>th</sup> centuries aims to investigate the nature and cultural identify of tent rings reported on six sites in northwest Newfoundland during surveys conducted in the 1980s and 1990s. None of these sites has been identified as to their age or affiliation. We will also survey for unreported tent ring sites.

The significance of these sites is tied to a broader study of Inuit occupations in Grand Bay, the arm of the Gulf of Saint Lawrence that opens west of the Strait of Belle Isle, between Newfoundland and the Québec Lower North Shore. In the 16<sup>th</sup> century, Inuit expanded south as

far as the Straits and Grand Bay in a cultural and ecological dynamic that archaeologists are seeking to understand. In this context, excavation of seven Inuit winter sites on the Québec-Labrador Gulf coast has found them filled with Basque material culture and well-preserved fauna. Most of these sites are located a "tickles" where harp seals can be caught in large numbers in late fall (Fitzhugh 2014). Ninety percent of the fauna from the LNS Inuit houses are caribou, with smaller amounts of harp seal. An ongoing DNA analysis of the caribou bones has determined that some of the bones from these 16-17<sup>th</sup> C. Inuit winter sites are not, as expected, from Quebec-Labrador tundra or woodland caribou populations. Instead, they belong to the Newfoundland stock.

A problematic aspect of Inuit archaeology on the Québec-Labrador south coast is the absence of summer tent rings, as confirmed by surveys on islands, questioning residents, and review of archaeological field reports. The only known exception is a tent ring on the Twin Isles at Red Bay (EkBc-7) (Pastore and Auger 1984:57-58; Tuck 1984:78-80; Delmas 2018). We can rule out the hypothesis that Inuit occupied their winter houses year-round, because summer shore birds are lacking among the faunal remains. Researchers have long asked where the Inuit who wintered on the Quebec Lower North Shore spent their summers. Did they return to Inuit population centers on the Labrador coast? Or did they travel to northern Newfoundland to hunt caribou from the Northern Peninsula herd?

In this context, archaeologists at the Smithsonian Institution, Université de Montréal, and Simon Fraser University undertook a DNA study of caribou bones found in Inuit winter-house middens on the Québec Lower North Shore with a view to discerning their origin in the Labrador-Québec or Newfoundland herds, which are known to be genetically distinct. The bones were selected from seven different middens on four sites: Hare Harbour-1 on Petit-Mécatina Island, Little Canso Island, Grande Isle at the mouth of the Saint-Paul River, and Hart Chalet at Brador (Figure 2). Preliminary results of this analysis, obtained in May 2022, showed that 32 out of 33 caribou represented are from the Newfoundland population. The 33<sup>rd</sup> bone, whose DNA is poorly preserved, may match a Greenland caribou reference.

These results have brought a new focus on tent ring sites reported in northwest Newfoundland on Old Ferolle, St. John and Keppel Islands (Fitzhugh 1982; Kilmarx 1987; Thomson 1993, 1995). When archaeologists reported these features in the 1980s and 1990s Inuit southern expansion was not yet of scholarly interest. Researchers were seeking instead to understand the Amerindian sequence in northwest Newfoundland, from Maritime Archaic through to historic Beothuk. Nothing in the survey reports indicates that the archaeologists suspected these tent rings were remarkable, and they remained the only ones reported in this part of Newfoundland for more than 30 years. The surveyors did not provide detailed descriptions or photographs of the tent rings. Test pits suggested some of the rings contained Dorset artifacts. On three of the six sites, we do not know how many rings the surveyors saw (Loewen et al. 2021). The lack of information makes it urgent to return to the sites, find the features, and document them more fully.

Code	Location	Name	Number of rings
EdBh-1	Keppel Island	Keppel Island	1
EeBh-11	St John Island	Hind	Multiple
EeBh-13	St John Island	Short	2
EeBh-16	St John Island		Multiple
EfBh-4	St John Island		Multiple
EgBf-5	Old Ferolle Island	Old Ferolle Beach	9

Of added interest, these tent ring sites may have a Basque regional association mirroring that of the Lower North Shore Inuit winter sites. Along this 60-kilometer stretch of Newfoundland coastline, archaeologists have recorded French Basque cod fishing sites at Barbace Cove (EdBi-12), Old Port-au-Choix West (EdBi-13), East Port-au-Choix (EdBi-22), Old Ferolle Bakery (EgBf-4) and, notably, Old Ferolle Beach (EgBf-5) where nine tent rings lie within the bounds of a major fishing station (Pope 1985; Thomson 1993, 1995). This overlay of summer tent rings and French Basque fishing stations complements the Inuit winter houses and Basque-style tryworks on the Québec-Labrador coast. This complementary leads us to hypothesize a seasonality of Inuit caribou hunting and consumption strategies across Grand Bay that was part-and-parcel of Basque-Inuit relations in this region, possibly enabled by Inuit access to Basque sailboats called *chalupas*.

Two historical texts also suggest the Newfoundland origin of caribou consumed on the North Shore may reflect a cross-Gulf seasonality. In 1694, the Mingan seigneur Louis Jolliet sailed along the North Shore and visited an Innu family at Mécatina (Delanglez 1948: 213):

They told us that several Eskimos had **wintered** in this place. These Eskimo had built three wooden houses coated with mud, one of which was still intact. They had no fire inside, but had a special place for it in the open. In the **autumn** they store up seals and game for the winter; and when the snow permits it they hunt caribou. Our Mingan Indians found four Eskimo here last **spring** and defeated them. It is probable that the others had fled, for they have no firearms, although they are expert bowmen. These are the very first facts we learned about this nation.

Twenty years later in 1714, a Basque captain named Duhalde, writing in Spanish, left a description of trade at Port-au-Choix Barkham 1988:184):

In the month of August, a great number of Natives come here to trade, giving their pelts for biscuit, alcohol, needles, thread, shoes, socks, shirts, jackets, pipes, tobacco, etc... The nature of the trade is to place the goods in a boat; either the Natives or the French [i.e., Basques from France] push the boats up against each other, choose the

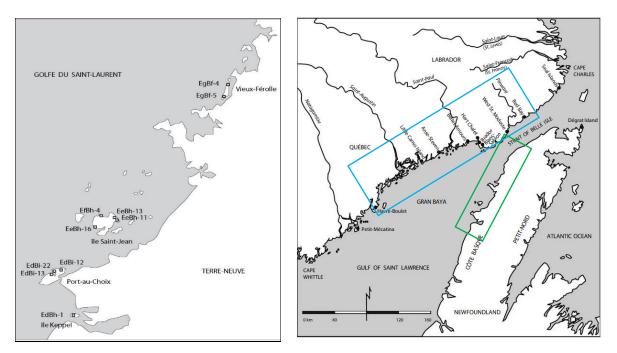
goods and state their value before pushing the boats apart. The Natives come from the mainland in **summer**. They are from the nation of the Eskemoucks.<sup>1</sup>

Jolliet's account thus places Inuit on the Lower North Shore in fall, winter and spring, while Duhalde stated that Inuit travelled from the mainland to northwest Newfoundland in summer during the transatlantic Basque fishing season.

Investigation of the tent rings on Keppel, St. John, and Old Ferolle Islands will ascertain the cultural affiliation and date range of these features and bring data to our hypotheses. If these tent rings prove to be Inuit, they will deepen our understanding of the historical texts, and bring vital data to our caribou bone study. As well, they will shed light on a major question of Inuit archaeology on the Lower North Shore and in southern Labrador, namely the summer habitat of these newcomers. Finally, they will bring new data on Basque-Inuit relations, which some archaeologists have suggested were part of the motivation of Inuit southward migration in the 16<sup>th</sup>-17<sup>th</sup> C, at a time when the Little Ice Age would have provided added incentive by the expansion of sea ice and harp seals into Newfoundland and Gulf waters (Fitzhugh 2020).

The 2022 Field Project will be conducted by car and outboard along the coast from Port Saunders to St. Barbe and will be primarily directed at visiting and investigating the known reported tent ring sites. The team will include William Fitzhugh, Perry Colbourne of Lushes Bight, three students, and possibly other archaeologists familiar with the region. Work will be conducted during the last two weeks of July. No extensive excavations will be made, and the purpose of the work will be to photograph and map the sites, observe their architectural feature (Inuit tent rings have very identifiable markers), and test for fauna, artifacts, and charcoal samples. Normal procedures for fieldwork will be followed, and all materials will be described and catalogued for deposit in the PAO storage and archives.

<sup>&</sup>lt;sup>1</sup> En el mes de agosto gran número de salvajes vienen aquí para trocar dando sus pieles por pan, aguardiente, agujas, hilo, zapatos, calcectines, camisas, chaquetas, pipas, tobaco, etc.... La naturaleza del commercio es poner los bienes en un bote; o los salvajes o los franceses empujan el bote desde uno a otro, sacan los bienes y ponen su valor antes de reempujar el bote al otro lado. Los salvajes vienen de tierra firme en verano. Son de la nación de los Eskemoucks (PRO CO 194/6, fol. 240-241, in Barkham 1988:184).



Sites with tent rings and French Basque fishing sites in northwest Newfoundland.

The areas of the Québec Lower North Shore and northwest Newfoundland discussed in this proposal.

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## Newfoundland Provincial Archaeology Office Permit

New[oundlan Labrador	Government of Newfoundtand and Labrador Department of Tourism, Culture Arts and Recreation		
	ARCHAEOLOGICAL INVESTIGATION PERMIT granted by: Provincial Archaeology Office Dept. of Tourism, Culture, Arts & Recreation P.O. Box 8700 St. John's, NL A1B 4J6		
PERMIT NO.	22.32		
NAME	Sarai Barreiro Arguelles		
ADDRESS	7850 Rue Saint-André, Montréal, Québec		
INSTITUTION	Université de Montréal		
is authorized to co	induct archaeological investigations at the location(s) stated below, subject to the		
terms and condition	anduct archaeological investigations at the Resources Act, RSNL 1990, c. H-4		
terms and condition LOCATION(5)	Keppel Island, St. John Island, Old Ferolie Island		
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### Field Team and Acknowledgments

The northwest Newfoundland coastal survey was conducted from 16-28 July by a field team consisting of Saraí Barreiro-Argüelles (PhD candidate, University of Montreal), Bella Fermin and Whitney Hadley-Salay (anthropology undergrad students, Purdue University), Ben Fitzhugh (University of Washington, Seattle), Perry Colbourne (Lushes Bight, Newfoundland), and William Fitzhugh (Smithsonian). Since Route 430 runs directly along the coast, most survey areas were accessible by car while others could be reached by outboard boat towed on a trailer behind Perry's truck. For the first week of the survey we lodged at the home of Bill and Ilene Lowe, old friends living in Port Saunders, who also provided important logistical and research information concerning caribou and their movements. Bill's son Gordon Lowe gave us our first sample of caribou antler for DNA analysis, and Ken Offrey of Eddie's Cove West provided another. As usual, Perry and Louise Colbourne hosted the team during our visits to Lushes Bight at the beginning and end of the season. As this report goes to press, we received the sad news, first of Ilene's Lowe's death, and only ten days after that, of Bill Lowe's passing. We dedicate this report to their memory.



Newfoundland Survey team at the reconstructed Norse longhouse at Parks Canada's L'Anse aux Meadows site (Fitzhugh, Whitney Hadley-Salay, Saraí Barreiro-Argüelles, Perry Colbourne, and Bella Fermin), and boating to Keppel Island in Port Saunders:

#### **Fieldwork Introduction**

The purpose of the 2022 fieldwork in northwestern Newfoundland was to search for modern caribou samples and for historic Inuit sites that might have been involved in the acquisition of caribou found in 17<sup>th</sup> century Inuit sites on the Quebec Lower North Shore. Several of these sites contained large amounts of caribou bone and antler whose DNA match animals belonging

to the Newfoundland stock, not to the Labrador-Quebec herd as we presumed at the time of excavation. A local source seemed logical because caribou were available on the QLNS until the middle of the 20<sup>th</sup> century. Hunters in St. Paul River report caribou were regularly seen as late as the 1970s, but not after that. Today QLNS hunters hunt far to the north in central and northern Labrador-Quebec, if a hunt is even permitted.

Newfoundland's Great Northern Peninsula (GNP) is home to one of several populations of Newfoundland caribou, which as an aggregate has been isolated from the Quebec-Labrador herd following the retreat of glacial ice and submergence of the Strait of Belle Isle. All caribou in Newfoundland share more biological ancestry with other Newfoundland animals than with the Quebec-Labrador herd. So although caribou may occasionally have crossed the Strait on the ice or swimming, there has not been enough genetic contact to blur the geographic boundary. On the other hand, genetic studies indicate that the present population of the Great Northern Peninsula herd has a closer biological relationship to the Q-L herd than other Newfoundland animals have, as might be expected by geographic proximity.

Our fieldwork in July 2022 was directed at the coastal region from Port Saunders to St. Barbe, and during the two week survey period we found caribou and caribou signs (shed antlers, feces, and occasionally hair) everywhere we surveyed. We met local people who fished, logged, trapped, and hunted and had detailed knowledge of caribou and their behavior, knowledge that had been passed down over generations. The story was always the same: caribou winter in the highlands of the peninsula, and in spring move to the coast where they spend the summer in small groups feeding along the shore, swimming out to islands, rearing their young, and then retreating back into the hills in the fall. One resident told us he knew of places in the hills where shed antlers could be found. All were confident that the animals could cross the strait on the ice in cold winters or swim across in summer, although we never found anyone who observed such crossings.

We imagined three possible scenarios for explaining Newfoundland caribou in QNS Inuit middens: (1) local hunting of Newfoundland animals that had established a population on the QLNS; (2) direct procurement by Inuit hunting GNP animals in northern Newfoundland; or (3) trading Labrador-Quebec pelts, hides, baleen, and feathers for Newfoundland caribou and other European goods with Europeans present along the Newfoundland western shore. Inuit made a few appearances during the 16<sup>th</sup> century at Red Bay during the height of the Basque whaling period (Tuck 1981, 1983, 1984, 1986, 1989, 2005; Barkham 1980, 1989; Delmas 2018), but it was not until the 17<sup>th</sup> century, after Basque activity declined, that Inuit began to appear regularly in the Strait of Belle Isle and established winter villages on the QLNS. By this time most Inuit had acquired wooden boats, sails, and anchors. We were especially on the watch for Inuit summer camps dating to the 17<sup>th</sup> and early 18<sup>th</sup> centuries. At this time Labrador Inuit were using tents whose perimeter rocks left a rectangular outline, had a U-shaped central hearths, and were usually accompanied by meat caches, sliding-door fox traps (found at winter sites), and oval above-ground grave cairns. Such sites are ubiquitous in Inuit-occupied Labrador but

have been missing in our surveys along the QLNS. Could the missing Inuit summer sites be present along the coast of Newfoundland if Inuit hunted caribou there? To avoid flies and provide quick response for hunting or danger, Inuit summer camps are almost always on islands or promontories and other outer coast locations lacking forest and soil cover and are almost never in the bays or forested river mouths. Rarely do Inuit tent rings become hidden or buried, so we had a good chance of finding them if they were present.

#### **Inuit Structure Types**

The Labrador Inuit who settled on the eastern Quebec Lower North Shore in the 17<sup>th</sup> century utilized a variety of structures archaeologists have documented along the central coast of Labrador. To date, the only Inuit dwellings found on the LNS are winter houses similar to those used along the Labrador coast. These dwellings are rectangular sod and earth constructions with entrances on the long side generally facing the shore and have raised sleeping benches along the rear uphill side. Although LNS Inuit winter dwellings share these features with contemporary Labrador structures, they differ in having shorter entrance passages, less or no interior stone floor pavement (using wood instead), and a kitchen alcove outside the door in a corner of the entry alcove rather than inside the house. This architectural innovation enabled cooking over wood fires rather than over oil lamps which can be used indoors because they do not produce toxic smoke.

Extensive surveys along the LNS have failed to identify any type of Inuit dwelling other than the sod house. This is one of the most unusual features of the southern Inuit settlement pattern. In Inuit settlement areas on the Central and North Labrador coast, tent rings, grave cairns, food caches, and stone fox traps probably outnumber winter houses by 100:1. So why are they not present on the LNS? It is not likely that LSN Inuit lived in sod houses year-round because they would have been intolerably hot, and summer fauna are not present in their middens. Did they utilize a completely different type of summer structure that replaced the Labrador sealskin tent? If so, they would still need hold-down rocks and stone fireplaces. No such structures have been found. Could they have spent summers at sites on the interior, away from the coast? Again, not likely, since they needed access to their boats, and Innu groups occupied the interior. Might they have spent their summers elsewhere, back in Labrador? Probably not because of the distance and European trade opportunities in the south. Instead, establishing summer camps on the northwest coast of Newfoundland might have been a viable option since that distance is only a day's sail. The summer presence of caribou on the Nfld coast would have been a major annual attraction after harp seals abandoned the eastern Gulf for their Arctic summer grounds in spring.

Most of the surveys done previously on the northwestern coast of Newfoundland were directed at finding or excavating Maritime Archaic or Dorset sites. Intentional general surveys have focused on Port-au-Choix, Bird Cove, and New Ferolle (Kilmarx 1987; Thomson 1993; and Hartery 2005). All of these projects discovered Dorset sites but no evidence that could be confidently identified as Inuit. Would a new and more intensive survey produce different results? And what would we be looking for?

The most abundant and ubiquitous feature of Inuit settlement landscape are stone tent rings. We know several tent ring types from the Labrador coast, including small and large circular tents (the latter generally found after canvas was available). Seventeenth century Labrador Inuit used rectangular tents with U-shaped stone hearths and mid-passage dividers that created two lateral residence areas; these structures were common as fall and winter dwellings. Sites of this period are usually accompanied by stone food caches, stone human grave cairns (sometimes with built-in grave good chambers), and stone fox traps with drop-stone doors. Circular tent rings were also used during the 'high-summer' season. As noted above, most Inuit summer sites are found on islands, on points and promontories, usually in exposed locations that have excellent views of the surrounding waters. The location of these sites—sometimes on bare rock—contributes to their archaeological visibility. They are not likely to be obscured by ground cover, shrubbery, or trees. Of all the survey sites reported previously, those on St. John Island north of Port-au-Choix reported by Kilmarx are closest to Inuit tent rings; however, most, when tested, lacked diagnostic Inuit features and produced chipped flint or stone tools indicating Dorset affiliation.

#### Background

Our surveys recorded several types of stone features found along the shore (see below and map of survey zones). All of the shores surveyed consisted of exposed bedrock, shingle, or cobble beaches or terraces. There are very few sandy beaches along the outer coast. Erosion ledges from former high sea stands have created benches of exposed limestone, and much of this bedrock has been eroded into angular large and small blocks, often mixed with rounded sea-worn cobbles thrown up by storm surges. Many of these open coasts are not likely to have been used for dwelling sites because sea exposure made it impossible to land or launch small boats. Almost none of these locations had tent rings, although we found many had rock cairns, hunting blinds, cache piles, or other features. The only location with tent rings were those recorded by Kilmarx on St John Island and by Thomson at Old Ferolle-1 site (see below). The remains of other structures like rock alignments, rectangular foundations of store sheds or boat-house foundations were found at Fisherman Cove on Current Island and at the Dog Peninsula Isthmus.

The paucity of tent rings and other types of stone dwelling types was a major surprise considering 8-10,000 years of prehistory known on the Island of Newfoundland and the abundance of these features on the Labrador coast during most culture periods. Several factors may explain the scarcity of rock-built dwellings in Newfoundland. Maritime Archaic structures follow the same pattern as in Labrador in leaving minimal structural traces. As in Labrador, later Indian cultures used rock-bordered tents or wood dwellings, but their sites tend to be found in bays, river-mouths or valleys, or on raised beaches grown over with shrub or forest vegetation, not in the settlement locations generally chosen by Inuit. Dorset people left sod-house foundations that can be seen when cultural organics promoted grass, as at Port-au-Choix, but their summer camps in Nfld are rarely found because of vegetation cover. What is left for the survey archaeologist without the time and resources to conduct extensive test-pitting in vegetated or peat-covered ground are the exposed, vegetation-free limestone outer coast shores. These conditions account for the huge difference in culture history knowledge and its accessibility to archaeologists between Newfoundland and Labrador.

One of the factors that contribute to site visibility is geological uplift history. In some areas like Labrador and the northern Gulf of St. Lawrence, the removal of glacial ice resulted in isostatic rebound that continues to this day, removing sites from the active shore to positions on raised beaches and terraces. This process accounts for Dorset and Maritime Archaic sites in Newfoundland being located at increasingly higher elevations. While uplift occurred early in the Holocene in NW Newfoundland, uplift on the northern peninsula, where glacial ice was thinner and melted earlier than in mainland Labrador-Quebec or central Newfoundland, it slowed such that relative sea level has been close to the modern level for the past millennium (Bell et al. 2005; Smith et al. 2005). For this reason, there is little evidence of eroded shorelines or exposed peat at the shore or river mouths. Hence there is no reason to believe that Inuit sites might have been lost to submergence or erosion. We may expect that the shoreline of today in this part of Newfoundland is close to what it was in the 17-18<sup>th</sup> centuries.

Despite the difficult conditions for identifying prehistoric sites in Newfoundland, the actual conduct of coastal fieldwork is facilitated by the large expanses of open ground that can be accessed on foot.

#### **Geography and Landscape**

North of Bonne Banne Bay the coast of Newfoundland is largely a straight shore of limestone deposits eroded by the sea into ledges, and boulder beaches in coves and protected areas. The shore is interrupted periodically by peninsulas and shallow bays into which salmon and trout rivers flow. Between these lie long stretches that had few settlement options until the heyday of cod and lobster fishing in modern times. Spruce, pine, birch and mixed forest dominate the coastal regions. Marine and terrestrial resources are abundant, with harp seals and caribou being the major species, backed up by black bear and smaller fur-bearers and cod and other fish, as well as many species of seabirds, ducks, and geese. Winters are mild with little snow, and sea ice is intermittent in late winter. The Great Northern Peninsula offered a hospitable environment for people with a maritime adaptation. While its geographic isolation from Nova Scotia and Labrador-Quebec has the biogeographic hazard of extinction of small animal or human populations in island settings, neither Cabot Strait or Strait of Belle Isle were barriers. Even so, Newfoundland has fewer animal species and prehistoric cultures than neighboring regions. Its location at the junction of temperate, subarctic and arctic regions has influenced its culture history and made it historically a suitable habitat for Indian and Inuit cultures, including almost 1000 years of Dorset Paleoinuit occupation. Dorset culture persisted until 700-800 CE and was succeeded by Beothuck Algonkians, who became extinct under European pressure in

the 19<sup>th</sup> century and were replaced by Mi'kmaq who entered Newfoundland from across Cabot Strait early in the historical era and may occasionally have reached the northwest coast of Newfoundland. Mi'kmaq are a possible contender for the tent ring sites on Old Ferolle Island.

#### **Recent Inuit History**

The Little Ice Age facilitated the expansion of Thule Inuit into Labrador around 1400 CE. Attracted by the appearance of Europeans and their desirable boats, sails, iron, and other materials, Inuit began appearing in the Strait of Belle Isle in the mid-16<sup>th</sup> C. and by the early 17<sup>th</sup> settled the Quebec Lower North Shore west of the Strait of Belle Island. By this time, growing European activity precluded Inuit settlement in northern Newfoundland, although exploration and ventures to obtain southern materials like yew wood needed for Inuit bows, were documented by James Cook's explorations in the 1760s (Lysaght 1971). It seems likely that Inuit in the early 17<sup>th</sup> c. would have been aware of northern Newfoundland's other resources, including caribou, which might have led to acquisition either by direct hunting excursions from their LNS settlements, or barter arrangements with Europeans operation in the northern peninsula region. We hoped to expand the surveys made by Kilmarx on St. John Island and Hartery et al. in the Bird Cove-Dog peninsula regions to other potential Inuit camp locations in unsurveyed parts of the coast between Port Saunders and St. Barbe.

St. John Island, 12 sq. kms in area, 5 km from the mainland, and 10 km from Point Riche Peninsula, is the largest island lying off the northwest coast of Newfoundland. The island was visited by Elmer Harp in 1950, by William Fitzhugh in 1982, and Priscilla Renouf in 1984. Those visits were limited to inspecting the harbor known as 'The Haven' on the southeast side of the island where French and recent Newfoundlander settlements have been located. John Kilmarx was the first to survey the entire island, initially in a reconnaissance trip in 1986 and then with a two-month survey in 1987. He produced several reports and a PhD dissertation (Kilmarx 1986b, 1987, 1999), the latter dealing largely with theoretical issues of small collection samples recovered from a couple of the larger Dorset sites. He reports habitation sites with rectangular or 'conjoined' tent rings and hearth features at the Short and Hind (EeBh-11, 13) sites, and at the Abe and Theresa site (EeBh-17), a possible house pit that was not tested. All of these and a dozen other sites without structure evidence were accompanied by Dorset collections or lithics of undetermined cultural origin. There was no evidence of tent rings or other features that might be related to Inuit. This is probably significant since St. John Island would have been attractive to Inuit during trading ventures such as that documented at Port-au-Choix by Barkham. Its deep southern harbor would have provided shelter; marine fauna is abundant; caribou would have been available in summer; and the island's distance offshore provided security from surprise attack. Nevertheless, it seems to have had no Inuit occupants. The absence of Inuit evidence accords with results of our surveys elsewhere.

#### **Preservation Factors**

Coastal erosion which can be an important factor in the loss of recent unconsolidated beach sediments and shoreside archaeological sites due to crustal submergence or rising sea levels is not occurring in this region of Newfoundland. Maritime Archaic and Dorset sites are found on raised beaches and terraces, and there is little evidence of significant marine transgression in the form of exposed peat banks. At least for the past few hundred years it is not likely that shoreside sites such as Inuit tent rings have been lost to erosion or submergence. On the other hand, major damage to near-shore areas has occurred from the mining of shore deposits for road construction, docks, fish-plant and military communication infrastructure, and for use as town dumps. These disruptions have probably destroyed Holocene sites on some of the disturbed terraces and beaches, although in a few locations like Eddies Cove West, the northern point of New Ferolle, and south of Pidgeon Cove Point these operations reached the shore.

#### **Survey Structure Types Identified**

**Rectangular Foundations** In four locations—Dog Peninsula Isthmus, Old Ferolle-1, and two locations on Current Island (Fisherman's Cove and a site on the south end of that island)—we found the remains of rectangular structures. Most appeared recent although the Old Ferolle-1 feature must date to the French occupation. These structures seem to be foundations for store sheds or boat houses just above the tide zone that were dismantled or collapsed and rotted.



Rectangular shore structure in Fisherman Cove, Current Island; Feature 24 tent ring at Old Ferolle-1.

**Tent Rings** This feature type so common in Inuit-occupied Labrador is scarce on the northwest Newfoundland coast. We encountered them only on Old Ferolle-1, where they have been documented previously by Thomson (1993) and at Plum Point by Hartery (2005). At Old Ferolle they are on an exposed shingle terrace completely devoid of vegetation. All of these features are roughly round or oval, 4-6m in diameter, with perimeters of small rocks with spaces between them, suggestion of an entry door on their down-slope side facing the shore, and occasionally a few rocks in the center that may have been a tiny hearth. There are no outlying larger rocks to anchor guy-ropes. Poles must have been used to make a conical tent

frame. No external cache piles were associated with the New Ferolle-1 TRs, and the three cache pits that are found at the site are at the shore and have no obvious association with the rings.

**Hunting Blinds** Hunting blinds are distinguished by a semi-circular rock wall 1-4 tiers high, facing the shore, used for hunting birds or seals. In a few cases we found blinds facing away from shore, in which case they were for shooting birds whose fly-ways cut inland, across points or other obstructions. Some of these blinds are built into ledge outcrops. Shotgun shells and beverage containers are common finds in these structures.



A one-person hunting blind facing the Current Island interior; and a probable old seal cache.

*Caches* are rock piles used for storing game, eggs, or other materials and may be large or small. Most used for storing large game like seals have depressed centers and built-up walls resulting from rocks tossed out while retrieving the contents. Their rocks need to be large enough to deter entry by foxes or larger scavengers.

*Marker piles* Small piles or cairns are common along the outer coast facing the open sea. These are of recent construction, and many still have spruce poles lodged in their centers, or the rotted remains of poles lying nearby. Markers often occur in pairs: one on the crest of the first beach ridge and a second some tens of meters inland perpendicular to the shore. If there is no inland marker there is often some other feature like a hill, rock outcrop, or prominent tree that served as the inland mark. Fishermen lining up these markers know where to drop their lobster pots or net anchors if they triangulate with a second set of markers nearby. Many of these markers are made with as few as 2-3 rocks, just enough to support a pole.



Paired shore-side and inland pole markers for positioning fishing nets or lobster traps on the west side of Current Island.

**Cairns** Cairns are simply undifferentiated rock piles. Their function may include human or dog graves or other unknown functions. We found dog graves common near settlement areas like Fisherman's Cove (Current Island) and Pigeon Point. Two or three very large rock piles might conceivably be human grave cairns. One at Pigeon Cove Point had rocks removed from its top but did not seem to have been disturbed to ground level. There are several round and oval rock piles at the southern end of Current Island associated with an abandoned cabin that may be a cemetery; the largest of these mounds was covered with 19<sup>th</sup> century artifacts. A second large stone pile, Thomson's Feature 13 at Old Ferolle-1, also found with artifacts, may be the remains of a collapsed stone building chimney. Another large stone mound was found as part of a stone feature complex on New Ferolle north of Jim Muse Cove.



Cache or human grave at the southern end of Current Island; hearth circle at old farm site north side of Dog Peninsula.

*Hearths* Hearths are distinguished by a variety of indicators, such as a small ring or an arrangement of slab rocks, or presence of wood, charcoal, bone or other remains. Many of these features had modern artifacts like glass, tin cans, and nails from burned planks. The large French period bakery at Old Ferolle North is a large circular structure surrounded by a built-up rock wall.

*Standing Stones* This is a fairly rare type of structure in our survey area but occurred in a few places.

Note: All of these structures are only a short distance from shore, usually on the lowest beach ridges or wave-cut benches. We never found structures or archaeological materials on the higher terraces that we occasionally surveyed.

(References are at the end of Part I)

#### Newfoundland Field Diary (William W. Fitzhugh)

This summer it was once again possible to conduct fieldwork in Canada after a hiatus since our 2019 project on the Quebec Lower North Shore. Project planning took shape very late because I was waiting for grants that would enable combining archaeological survey in northwest Newfoundland to identify possible Inuit caribou hunting camps with research at a Basque tryworks in St. Paul on the Quebec Lower North Shore. Despite a lengthy process of planning with Erik Phaneuf, who was heading up the request for Ministry of Culture and Communication funding to conduct surveys for wreck sites and excavation of a Basque tryworks, Quebec funding did not come through, and so the Quebec project was reduced to investigating one of the small tryworks identified in 2019.

The Newfoundland project came about when caribou bones we had excavated over several years at Inuit winter sites on the Quebec LNS were determined to be Newfoundland animals on the basis of DNA analysis by Dongya Yang at the University of British Columbia. The analysis had been arranged by Brad Loewen, my LNS partner. Preliminary analysis suggested that of 25 caribou samples from Hart Chalet and Jacques Cartier Bay sites, many might be Nfld caribou rather than the expected Quebec woodland caribou. Full analysis eventually determined that of 47 caribou samples collected from four Lower North Shore sites, 40 samples represented 14 Québec-Labrador individuals while three individuals (17.6%) that came from Newfoundland. Four samples could not be determined. The three Nfld caribou were identified at Hart Chalet House 2 (n=2) and Little Canso Island House 2 (n=1). Could Inuit be harvesting Nfld caribou directly by voyaging across the Gulf of St. Lawrence? Could Basque connections be involved? Or were Nfld caribou the dominant animals in the eastern region of the QLNS, perhaps having replaced the Quebec animals by migrating across the Strait of Belle Island? We decided to survey the NW Nfld coast to see if any of the tent rings sites identified in earlier surveys are Inuit, especially as Inuit summer/fall sites are missing on the Quebec shore.

I left Washington in late June and worked for a couple weeks in Vermont as plans for the projects developed. My son Benjamin, an archaeologist at the University of Washington in Seattle, volunteered to come to Newfoundland for a couple weeks in July, and I had offered slots to two Purdue University students who attended my zoom lecture to their Anthropology Club in the early spring. Getting them on board turned out to be complicated because of new Smithsonian rules concerning field projects with interns. Nancy Shorey and I had a tough time securing SI permission, but at the last minute, after delaying the start of the project one week, our travel papers were approved, and Bella Ferrin and Whitney Hadley-Salay flew to Boston and bussed to Dartmouth on 11 July. I picked them up in Hanover at 6pm and got them to our house in Fairlee for dinner with Ben, Lynne, and my sister Portia Fitzhugh.



Departure from Fairlee, VT: Ben Fitzhugh, Whitney Hadley-Salay, Bella Fermin, and WF.

**12-15** July (Tuesday) Fairlee VT to Sussex, N.B. We loaded the 'new' Subaru with two duffels on the roof and left about 8:30 but had not even cleared the driveway when a call from Lynne reported I had left some crucial luggage behind. Once really on the road, Ben served as navigator. We breezed through Canada Customs at Calais/St. Stephens and by dusk arrived at the Fairway Inn in Sussex, New Brunswick,

our usual first night stop. We were glad to see the Elvis Presley-era décor and license plates from around North America were still on display in the restaurant and introduced Bella and Whitney to Canadian poutine, but they opted for more standard fare and headed off for a swim in the motel pool.

**13** July (Wednesday) Sussex, N.B., to North Sydney, N.S. The next day took us through New Brunswick and across Nova Scotia, with brief stops for coffee in Sackville and lunch at the Canso Causeway where I got my first shock of Canadian gasoline prices—1.12/liter and \$113 for a tank-full. We had arranged to visit Louisbourg Fortress National Site to say hi to its director, Eddie Kennedy, and to meet Xabi Otero, who was visiting for a week getting two Basque students oriented for their summer work as park interpreters in a Basque fishing cottage. We arrived about 4pm and met Xabi and Karen Pink (Eddie's assistant) who marched us off for a brief visit with a group of Univ. of New Brunswick staff and student archaeologists who were hunting for a cemetery associated with the fortress' hospital. They were just beginning their test pits and had no results yet. We had a brief tour of a couple of the fortress residences so Whitney, Bella, and Ben could catch a taste of the interpretation, and then had dinner at a small restaurant in town with Mikele Albisu (ethnologist), Garaci Maeso (archeologist), and Rafael (a Basque chocolate manufacturer) before getting to the Marine Atlantic ferry, *Highlander,* for its midnight departure for Port Aux Basques. We took our usual 'berths' in the upper deck lounge and spent the night sleeping in our chairs or on the floor, serenaded by the usual cacophony of snores, loud voicings, children crying, etc., and woke just before our arrival at 7am.



Visiting Louisbourg Fortress and meeting University of New Brunswick archaeologists searching for the hospital graveyard; Dinner with Basque Louisbourg presenters (I-r): Rafael Gorrotxategi, Whitney, Garaci Maeso, Ben, Mikele Albisu, and Bella.

**14 July (Thursday) Port aux Basques to Lushes Bight** This day brought us to Corner Brook for an 11am breakfast at Jungle Jim's, followed by a drive west of the city along the south side of the bay, where we found at Frenchman Cove a fishing boat supported by a crane, being pumped out after sinking overnight at the pier. Apparently, the engine had been removed without plugging the sea connections!



Frenchman's Cove in Bay of Islands, Corner Brook, Nfld; a crane supporting a boat that sank overnight when someone failed to secure the sea-valve (photo: BF).

We arrived at Deer Lake just as Saraí Barreiro Argüelles stepped off her plane from Montreal via St. Johns, but without her luggage—apparently par for the course for Air Canada these days due to a deficit of baggage handlers. We had time for a quick visit to the Triton Marine Center, finding *Pitsiulak* looking wonderful in a new coat of blue paint, then to the Long Island ferry for a 6:30 crossing. We were accompanied on the ferry by Jill and Louise Colbourne who were returning from Grand Falls where Louise was to have a bile duct gall stone removed, without success, so she was pretty uncomfortable. Lots of the Colbourne crowd had already arrived on Long Island for the 'come home' day this Saturday, so we were greeted by Jane, Tracie and husband Jason (trailed by his companion beer cooler on wheels), Stephen and his 90-pound white dog, sister Kay, and many others, including Cassie—now growing into an articulate youngster, and her little sister, Cami. Perry had prepared a dinner of crab legs, so we had a feast. The girls were invited to stay at Jim Wise's garage loft, and Ben and I set up a tent on the lawn outside Perry's mother's house, now occupied temporarily by Kay and her relatives. Perry's mother is doing well in her Springdale retirement home; she has lost most of her memory but is physically healthy.



Hazel McIsaac, the Long Island ferry; and Pitsiulak in Triton with a fresh coat of paint but unable to float again this summer due to lack of operating funds. (photos: Ben F.)

**15** July (Friday) Lushes Bight The next day began with a trip to Springdale to put money in our account at the Bank of Montreal before a visit to Triton to pick up and pay for the boat trailer we need for

surveying without *Pitsiulak*. Robert at Budgell's shop had a trailer suitable for our 22ft outboard. We picked it up and returned in time to catch the 1:30 ferry, which was filling up with "Long Island Day" families. We loaded the boat on the trailer and began packing gear into the boat and Perry's truck, so we'd be ready for the trip to the west coast in the morning. Dinner was a huge platter of lobsters, so many we could not eat them all (a 'first' in my experience!). We discovered Bella had never eaten lobster, which added another wrinkle to our subsistence plans since Whitney is vegetarian. Perry lit a fire in an old washing machine tub after dinner, and people began assembling for 'smores' and 'spider weiner' roasting—the latter involves splitting a wiener four ways from each end and cooking on a stick. As it cooks, the split parts curl and become spider-like. This idea was not yet part of the Colbourne weiner roasts in 2019. A 'bang' from across the harbor announced the beginning of the Long Island Day fireworks display, which was a fine, if miniature, version of the extravaganza we saw a few days ago on 4 July in Fairlee.



Cooking 'spider wieners' at the Colbournes; and readying the speedboat for departure on our new trailer.

**16** July (Saturday) Lushes Bight to Port Saunders By 7am we assembled at Perry's for a cup of coffee and final packing of gear in Perry's truck (food and floater jackets), in the speedboat (archaeology and boat gear), and personal stuff in the Subaru. Despite care in getting my stuff organized and ready, I managed to leave behind the box containing my field notes from previous surveys north of Port-au-Choix, my archaeology dig stuff, and maps. I did not discover this until we had driven all the way to Port Saunders, so we arranged for one of the Colbourne relatives to bring it to Jill in Corner Brook for pick-up by Perry when he drives Bella to Deer Lake in a couple weeks. I chatted with Perry's brother Dennis, who was skipper of the *Hazel McIsaac* Long Island ferry. Dennis has a new property near the Trans Canada Highway at South Brook and is building a house there with his girlfriend. His daughter, (former) policewoman Britney, has a new baby girl (her first) but has decided to bow out of police work. Another family change was the split-up of Perry's daughter Jill and her husband of several years, Matthew, who has a job on the Marine Atlantic ferry. They have no kids, so that is a blessing. Jill has been promoted from her lab tech bench job at Corner Brook Hospital and is now a day-working lab-tech manager.



Ben, Whitney, and Bella in Gros Morne National Park.

In Deer Lake, Ben and the girls stayed behind in my car to pick up Saraí's lost backpack, and Perry and I went ahead to Bill and Ilene Lowe's in Port Saunders. The boat towed smoothly but the truck guzzles lots of gas. I had called Ilene and Bill yesterday and found them eager to put us up for a few days while we surveyed around Port Saunders and Port-au-Choix. Ben arrived with the girls (who say they are fine with this gender term!). Before supper we met Gordon and his wife and their energetic toddler son, Reed, who uses his grandparents' place as a playground full of toys. Gordon is living nearby and working as a fisherman, so he and Perry (who drank lots of beer together when Perry was here preparing the *Pitsiulak* at the local marine center) had lots to talk about. Gordon, it turns out, has some caribou antlers and gave me a sample for our caribou DNA project. Bill Lowe spends most if his time on his porch watching the weather and goings-on along the town road and in Port Saunders Bay. His house looks down on a 'real old-time-red-painted general store' perched by the shoreside. The 'old feller' who runs it does business selling Mercer's gear to local fishermen. Port Saunders still has a small fleet of fishing draggers and halibut-hookers.

**17 July (Sunday) Port Saunders** After a breakfast of Ben's oatmeal we drove to Port-au-Choix and did some beach-combing from the Point Riche lighthouse toward the Parks Canada Interpretation Center, taking the opportunity to orient the team to our search for Inuit tent-ring sites. The walk began at the Cape Riche Dorset summer site just south of the lighthouse. I had never visited this site, which is on a grassy terrace with no obvious house pits like the Dorset winter site at Phillips Garden. The tent-ring survey was a bust as we found only a few cultural features like duck blinds and scattered recent party hearths. The high point, however, was sighting several caribou, one of which was a large buck. I secured a sample of caribou dung for DNA analysis. When we visited the museum, I found the buck looking through the window at a set of antlers on display! As in previous visits, the museum staff were surprised to find a student of Elmer Harp visiting town. We had a quick look at the north end of town (the Parks Canada Interpretation Center for the Maritime Archaic site had been closed out of deference to Indian sensibilities) but did not have time to visit Phillips Garden and returned to the Lowe's for lunch.



Dorset site beaches south of Point Riche Light; a caribou experiences déjà vu at the PC interpretation center.

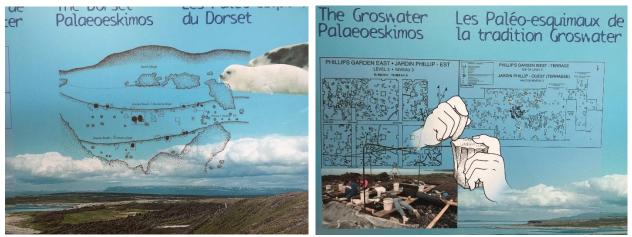
In the meantime, Perry had launched the boat at the marine center, and we made an excursion to Tail of the Cod at the south end of Keppel Island to check for possible Inuit sites. Bill Lowe remembered that he, I, and Gordon visited that location and others around the Island, including the so-called Inuit house-pit north of the lighthouse wharf in 1980, finding Dorset flakes at the Cod Tail and a biface and Ramah chert flakes west of the lighthouse. Strangely, I recalled nothing about this excursion and thought he was mistaking me for Jim Tuck, but he pulled up a photo of me digging at the Cod Tail site, and Saraí found my Provincial Archaeology Office report for 1980 describing that survey, which matched Bill Lowe's recollection. Perry and Ilene made a Sunday boiled dinner for supper, and I got a start on writing this diary account. Gordon appeared later in the afternoon with a piece of caribou antler from a rack he collected in the country west of Port Saunders. So now we have a second DNA sample.



Orientation at the Dorset site at Point Riche Light; and our first boat outing, checking out Tail of the Cod at the south end of Keppel Island. No luck there! (photos: Ben F.)



Harp seals, the 'great provider'; and description of the Point Riche Dorset summer site via Parcs plaques.



The Dorset site at Phillips Garden; and the Groswater site at Phillips Garden East.

**18 July (Monday) Port Saunders** The strong southwest wind continued today. Before leaving for surveys around Eddie's Cove West, I stopped at the Nfld Forestry office on the north side of Port Saunders to see if they had caribou samples. I had a nice chat with Blair Reardan who had no DNA material, although they occasionally get road kills. He referred me to Wayne Barney in the Corner Brook wildlife office who is the go-to guy for caribou on the west coast. The pattern for caribou movements is winter in the highlands in the Long Range Mountains and spring and summer on the coast, with lots of movement at all times. If a sample turns up this summer, they will keep it for me. We then headed north to Eddie's Cove West with the boat, guided by google earth views. There is a small dock and jetty there and a ramp that can be used only at high tide. The SW wind was too strong for boating, so we drove out along the dirt road to the west after I had been advised by Jim Offrey, whom I found working in his barn. He is a delightful fellow in this 70s who remembered the surveys done by Kilmarx and others here and on St. John's Island, 3 miles offshore. I had looked around the harbor on the south side of St J. Is. in 1980

when heading north from Bonne Bay in *Tunuyak*. Kilmarx found several tent rings, some with Dorset material, around the island. Jim did not have caribou samples, but he directed me to a neighbor who in turn directed me to Ken Offrey who lived nearby. Ken had a caribou rack mounted over the entrance of his store shed and graciously offered to cut a piece off for me. While doing so, we had a discussion about caribous during which he mentioned that there were places in the hills where lots of antlers could be found on the ground, where they had been shed. This seems bizarre, but seems to be true, and Bill Lowe said anything that Ken said could be depended on. So now I have three local samples from the NW Nfld coast. Everyone I have spoken with says caribou could easily swim or cross the Strait on the ice, at least in former years which were colder than today.



*Ken Offrey of Eddies Cove West gave us a piece of his caribou trophy; the Bird Cove Museum Dorset display; and Crystal Gibbon and Austyn Pittman hosted us at the Bird Cove Interpretation Center.* 



Lawrence Caines' collection from Plum Point beaches with axes, nails, sounding weight, and iron ballast; and the Caines family at their home near the Big Droke and Caines Maritime Archaic sites.



A weathered information panel at the Big Droke-1 Maritime Archaic site located near Lawrence Caines' home in Bird Cove.

After Eddie's Cove West we drove to Plum Point and had a tour of the Bird Cove Heritage Museum where we were given a tour of the exhibits by Crystal Gibbon, assisted by Austyn Pittman. We were only the fifth group to arrive after the museum opened last week. The exhibits include Maritime Archaic materials from Dale Kennedy's Big Droke (meaning a patch of woods) site and a second MA site next to it called the Caines site, named for Lawrence Caines, a friend of the late Dale Kennedy who found us at the museum and showed us some of his beach finds including three old French axes, a large rectangular piece of iron (ballast?) with a rope hole, and other materials. He then led us to the edge of the shallow lake next to Big Droke where he thought some mounds might be important. We slogged through the shore mud and thick spruce to see them, but they appear to be natural humps covering boulders—but who knows?—they are next to the MA sites and have not been tested. We met his family and had their help locating a possible cabin rental. We eventually found one at the St. Barbe Dockside Inn and reserved it for the 21<sup>st</sup> to 29<sup>th</sup>. A 40-minute drive got us back to Port Sunders, dinner, and talk with Bill Lowe about many things under the sun, including most of the people we met today—"All good people you can trust and believe." I found a copy of Lynne Fitzhugh's *Labradorians* on Bill's bookshelf next to the multi-volume 1950s *World Book Encyclopedia*.

**19 July (Tuesday)**—Port Saunders The SW wind ended last night and was replaced by a beautiful warm day with virtually no wind, so this was a good time for boating, and we decided to investigate the tent rings Callum Thomson (1993) reported on Old Ferolle Island opposite Plum Point, where in 2001 we picked up Selma Barkham with the *Pitsiulak* and travelled over to the Quebec Lower North Shore for our first survey of that coast. We launched the outboard in Blue Cove, just north of the Plum Point Motel and left Perry ashore to re-adjust the support brackets on the trailer. We landed on the west side near the southern tip of Old Ferolle Island, which has a huge expanse of unvegetated limestone rubble that had accumulated as beach shingle and was used during the French period as flakes for drying codfish. I had visited the site in 1982 (Fitzhugh 1983) and reported on the stone pathways that seem to have been used for wheeling barrows of raw and dried fish. Two of the pathways consisted of double line of large limestone blocks about 0.75m apart with rubble fill between them. One north-south line marks the eastern end of the flake patch and runs from the vegetated hillslope south to three small cache pits near

the shore. A second double line begins near the middle of the first line and runs roughly NE-SW across the shingle surface and intersects a single north-south pavement line at a 30-degree angle.



Old Ferolle-1 (EgBf-5) French 'fish flake' NE-SW barrow pathway; and a single block line marking the western end of the Old Ferolle site where most of the tent rings are found facing the southern shore.



Ben and Saraí documenting Old Ferolle-1 tent rings by drone; structure 24 viewed to N.



Drone shot of Old Ferolle-1 (EgBf-5) showing intercepting paved barrow paths. View NE. (photo: BF/SBA)



Rectangular foundation at NE end of Old Ferolle site, view S; Bella and WF record an old lobster pot storage cache at the NE end of the Old Ferolle site, view S.

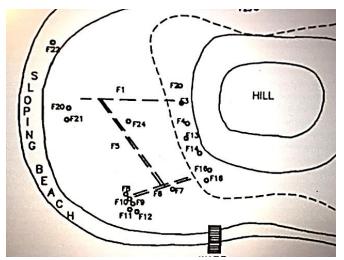
At the base of the hill, a mound of slabs seems to create a ponded area that today is filled with moisture-loving vegetation. Perhaps it was originally dug out by the French and dammed to catch water. This is the U-shaped feature on the Thompson map; the uphill part of the feature may be natural rock accumulation at the base of the hillslope. We also noted a rectangular foundation at the east end of the site near where fishermen have been storing and discarding old lobster traps resting on double lines of logs parallel to the shore. Some of these racks are more than 60-70 years old; plastic trap tags, metal springs, and concrete weights were abundant in an old line we found rotting in the vegetation north of the boat landing at N51-04'76.6", W56-53'90.6". Only one artifact was found on the huge flake site surface—a buff-colored ceramic sherd. There are no Basque tiles anywhere in sight. There must be some structures here for workers and supervisors, but all other potential locations, especially likely on the east side near the best boat landing, were covered with thick ground vegetation, and we did not do any testing in vegetated areas (but see our second visit below). An early satellite image from 2010 showed a wharf and cabin where we anchored our boat, but both had been dismantled by the time of a 2013 image.



*WF and Whitney recording the possible water reservoir; Bella and Ben at one of the Old Ferolle site cache pits showing trashed lobster traps in the distance.* 

Our purpose of course was not to make a huge project recording the flakes and pathways; Callum Thomson did a fine job with that (Thomson 1993), and more documentation was added in a report by Latonia Hartery (2004). But we were able to make a drone map of the site using Ben's and Saraí's drones. We also GPS-ed the pathways and general site features, taking individual drone verticals of each tent- ring. Our attention was directed at the several tent-rings and other surface features to see if we could identify their cultural affiliation. Were they possibly Inuit? After inspecting all individually, and photographing, sketching, and droning them, none were found to have specific Inuit markers like sleeping platform dividers or Inuit hearth forms. Most were circular and about 3-4 m in diameter, facing down-slope toward-the-water, with vague doorway openings; but many were incomplete, with border stones missing or displaced, making interpretation difficult. We did not have time or materials to do controlled feature maps, but we did document all the features mapped by Callum, using his feature numbers. No Basque or prehistoric materials were noted. Our drone photos should enable us to draw accurate tent feature maps. We also documented four large pits that had been dug into the shingle above the first shore berm, and we suppose these may have been caches for storing fish or harp seal carcasses though they are rather small of that. Although their association with the fish flakes is uncertain, they are found at the termination of the paved eastern border pathway.

Here are the measurements and GPS readings of the numbered features on the Callum Thompson map (see publication in early PAO series journal). All photos were taken looking north. Measurements in meters with width first and length (front-to-back) second.



Calum Thomson's 1993 map of Old Ferolle-1 (EgBf-5) features.

Rectangular foundation (10x5.5m) near the boat landing (not on CT map) N51-04'43.1" (not identified by C.T.)

F-X Waypoint P30, Tent ring N51-04'39.8", W056-54'05.2" no rock outline, but a circle of cedar vegetation, small rib x-section cut at both ends (collected), feathers (bird nest). I removed grass here and scraped into the shingle but found no charcoal or other cultural signs.

F-5 WP45, N51-04'40.8", W056-04'01.7", lower/south end of east double pavement line.

F-6 WP46, N51-04'41.5", W056-54'01.8", midpoint of eastern double line where it intersects E-W double line.

F-7 WP47, N51-04'42.3", W056-54'01.2", north end of F-7 eastern double line where it disappears into hillslope vegetation.

---- WP48, N51-04'42.3", W056-54'04.6", north end of western (border) N-S line.

---- WP49, N51-04'40.5", W056-54'06.2" W end of E-W double line where it meets N-S single line.

F-10 WP41, N51-04'40.5", W056-54'06.9", western large cache pit, 0.75m deep, 2m west of F-XX

F-XX WP42, N51-04'40.6", W056-54'01.6", 4.57 x 2.5 oval cache pit, 2m east of F-10, marked on CT map but not numbered.

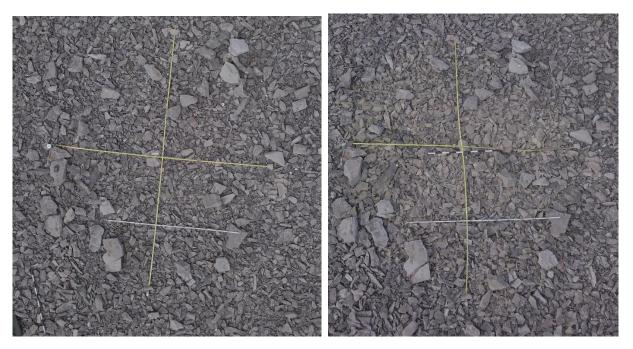
F-11 WP43, N51-04'40.5", W056-54'01.2", 1.0x1.5m small cache pit.

F-12 WP44, N51-04'40.6", W056-54'01.1", 1.25x2.5m, small easternmost pit.

F-21 WP32 tent ring N51-04'40.1", 56-54'05.3" 4m wide x 5.5m long. Possible sleeping area border in the uphill rear. (This is not a very distinct feature and provides little space in the rear of the tent, so unlikely to have been an Inuit feature).

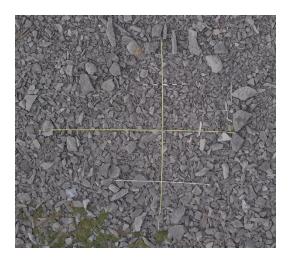
F-24 WP35, N51-04'41.4", W56-54'04.6", 3w, 4m long tent ring, possible a doorway extending downslope.

F-25 WP39, N51-04'40.7", W056-54'04.5", 3.25w, 3.8 long.



a) Drone photo of OF-1 F-25 before; and (b) after excavation (and a few moved rocks documenting 'archaeological disturbance'). North at top. F-25 produced clay pipe fragments and a small iron nail (perhaps a recent intrusive lobster trap nail. (photos BF, SBA)

- F-26 WP37, 51-04'40.2", W056-54'04.6", 3.25w, 4.25 long, possible entry door extension.
- F-27 WP38, N51-04'40.2", W056-54'03.9", 3.25w, 3.5 long.



*Old Ferolle-1 F-27 before excavation, which produced a small piece of shoe leather with stitching holes. North is up. (photo: BF/ SBA)* 

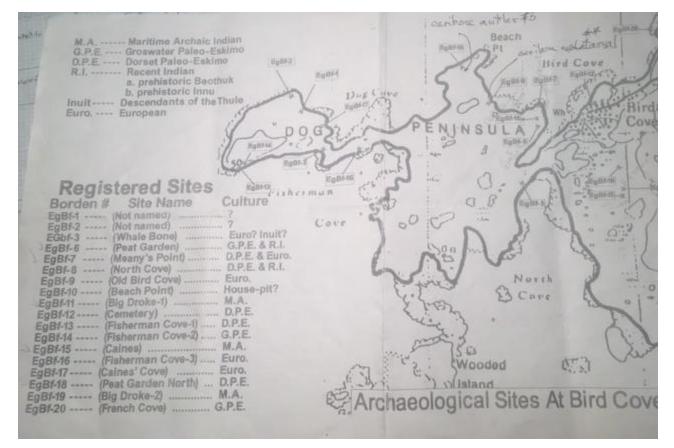
- F-28 WP40, N51-04'40.4", W056-54'03.7", 3.9w, 5.0 long.
- F-30 WP36, N51-04'39.8", W056-54'04.7" 4.25w, 4.25 long, slightly D-shaped.
- F-31 WP34, N51-04'39.8", W056-54' 05.7" 4m wide 5m long.
- F-xx (Callum T. did not number this one) WP39 N51-04'40.3", W056-54'05.9", 4x5m.
- WP35 SW end of SW/NE single paved line N51-04'40.1", W056-54'06.7"

Our work at Old Ferolle did not advance the goal of identifying Inuit settlement sites. Although the location would have been a typical one for Inuit—on an exposed rocky beach terrace or headland—there were no certain indicators of Inuit architecture, no artifacts on the surface, and no faunal remains on the surface except a single small piece of cut rib bone in Feature-X and a white ceramic sherd long the western N-S path pavement line. Some of the rings have been occupied as bird nests. No chert flakes were found. The presence of some tent-rings inside the area enclosed by the walkways (most were south of the fish-flake area) suggests these features post-date the fish-drying occupation. Most seem more likely to be "Indian" rather than Inuit or European; the latter would more likely have been rectangular tents. No rectangular structures similar to 17-18<sup>th</sup> C. Inuit summer camps in central Labrador were present. None of the rings had any indication of hearths or other internal features.

**20 July (Wednesday) Port Saunders** Rain in the morning and most of the day. We drove to Bird Cove and walked out toward Dog Peninsula following the hiking trail created as a village heritage and recreation job project following the archaeological discoveries made by Dale Kennedy, Latonia Hartery, and MUN students. You drive to the south end of town and walk across a long wooden bridge that connects to a trail system that takes you to some of the sites excavated by the Bird Cove Project in the 80s-90s, like Peat Garden and Peat Garden North.



Bird Cove-Dog Peninsula site and trail map; bridge access to Dog Peninsula.



Archaeological sites registered by the Bird Cove Project in a leaflet available at the Bird Cove Museum.

The bridge spans a tidal inlet that in Dorset times probably connected Bird Cove south to North Cove, which is why Dorset sites like Peat Garden and Peat Garden North are located here. Today they are just grassy openings in the forest. The jobs project created a trail along the shore for ATVs (which are no longer permitted) lined with rocks on either side with limestone rubble in between—a huge amount of work went into this miles-long trail. Halfway out along the north shore there is an isthmus with a grassy

clearing and an old graveyard, a former house site, and a modern a vegetable garden. Between the garden and northern shore someone had made an excavation where I found an old caribou bone ion the back-dirt from the dig (EgBf-9, 51°03'14.1"N 56°56'49.4"W, a European site). That bone became our caribou sample "Bird Cove #4".



Prepared walkway encircling the entire Bird Cove-Dog Peninsula shoreline; Whitney with cervid leg bone from Bird Cove project excavation back-dirt at the isthmus farm site; and a garden plot at the farm site.

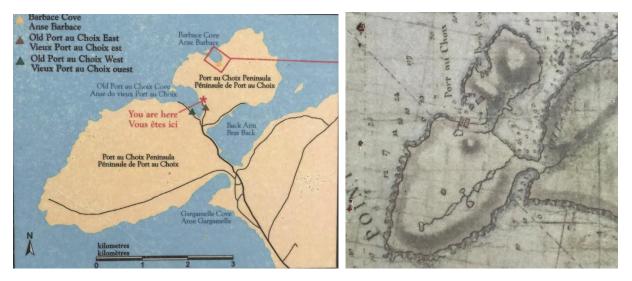
West of this, a spur of the trail goes to Beach Point where we found a shed caribou antler (sample Bird Cove #5, N51-03'24.9", W056-57'05.9") and a large cache pit (EgBf-10, N51-03'28.1", W056-57'01.7", 100 m north of geodetic survey marker 193), probably for caching seals. On this Dog Peninsula isthmus we met "Spirit", a large mare who accosted us, expecting an apple. We had heard about her from Crystal at the museum. Spirit would not take a granola bar or a cookie, and when we moved on, she blocked Whitney's path and would not let her pass. Spirit finally relented and followed us for a while, until Ben was able to get her interested in a banana. All in good fun, said Spirit. She spends her winter in a barn and hauls wood and in summer roams the peninsula importuning hikers. It turns out that the location I remembered surveying, finding tracks up the shingle beaches (boat launching runways?) was not on Dog Peninsula but on New Ferolle, which is two peninsulas further south, next to Shoal Cove. Dinner was a vegetable stew with a few pieces of beef thrown in.



Bella and Whitney at a Bird Cove cache pit; and with "Spirit", summer custodian of the peninsula region.

Notes from Saraí's readings:

"New Ferolle is the name of the cove on the northeastern tip of Ferolle Point, a cove that is wide open to northeast winds and provides very little shelter. It was, and still is, used by fishermen, but Old Ferolle Harbour which lies between Ferolle Island and the mainland was a much safer harbour with deep water in places where ships could tie up directly to the shore. This would have been the harbour where Joanes de Ea, whose will was written at Red Island, was buried in 1632. The harbour must have received its name because it reminded Basque fishermen of Ferrol in Galicia (northwestern Spain), a deep-water harbour that was well known to numerous Basque whalers who went every year to Galicia for the winter whaling season." (Barkham 1989:18-19)



Map of Port-au-Chaix peninsula; Capt. James Cook's 1766 map showing PC (north) harbor and Barbace Cove with wharves and buildings. Bennie Is. is at the NW entrance of PC harbor. (Parks Canada images).

#### **Benie Island and Inuit**

"Benie Island, in the middle of the small harbour, has a wharf or stage where piles of lobster pots can usually be seen, but the interesting thing about Benie Island is that more than three hundred years ago this island already had a wharf which was used for preparing fish. It also appears to have seen yearly trading sessions between Basques and Inuit, who were nearly always referred to in contemporary documents as "the savages", although occasionally called the "Eskimoucks" or "Eskimaos" or "Eskirmaux". There is a good description of what happened in August of each year when the Inuit appeared in the harbour and found two or three French or Spanish Basque ships at anchor. In order to avoid direct contact, as each group of humans was equally afraid of the other, they kept a strip of water between them as a safety device. The "Eskirmoucks", for instance, put their skins into a boat and shoved it off, and when the Basques had grabbed the boat and removed the pelts they then put in a supply of: "Bread, Brandy, Needles, Thread, Shoes, Stockings, Shirts, Jacketts, Pipes, Tobacco, etc." and shoved the boat back towards the Inuit." (Barkham 1989:18)



Parks Canada maps of sites and places on Cape Riche Peninsula. Blue arrow marks Benie Island.



A small Inuit-like sod-walled structure at P-au-C North Harbor.

**21 July (Thursday) Port Saunders to St. Barbe** Another nice day. Plans changed when Saraí passed on information from one of Selma Barkham's reports (see above) about 'silent trade' between Inuit and Basques at Benie Island, located at the north entrance of Newell Cove on the north side of Port-au-Chaix. So we decided to check it out. There is a mowed path around the north side of the cove, and just a few hundred meters in we found a circular pit (3x4m, N50-43'08.3", W057-21'53.3", facing 250T) dug into the hillside ten meters from the shore with a doorway entry opening onto the path—giving it the look of a small Inuit sod house. We GPS-ed it but could not test because it seemed to be on Parks

Canada land (but see map above), so we will see if there is any record of it in the Nfld PAO database and perhaps will be able to do a test pit later. (We never found a chance to do this.)



Photographing a possible Inuit sod house foundation on the east shore of Port-au-Chaix North Harbor; and caribou with yearlings resting north of PC North Harbor. Benie Island is the small flat rock seen with surf breaking on it. (Photos: B.F.)

Benie Island turned out to be just a tiny rock with a turf of grass at its top. The entire north and east side of the cove is covered with thick grass and other vegetation (no trees), but Ben noticed one rectangular foundation on one of the upper beaches near the intermittent stream at the NW side of the main meadow area. We continued walking north and found three adult and two yearling caribou sleeping off their latest meal, paying no attention to us even when we approached to take pictures. Barbace is a small cove a half km north of PC North Harbor. We walked around the southern half, noting it as a likely Dorset site, but it is most known for its French fishing settlement. Saraí found a few multi-colored transfer print ceramic sherds where the path comes down from the hill to the cove, along with some molded glass and whiteware.



'Davy' Jones entertained us at the French bakery in PC North Harbor; and a chaloupe at the French oven and bakery. This replica of the chaloupe at Red Bay was built by Christian Ondicola of Saint-Jean-de-Luz.



Finding ceramics on the trail descending to Barbace Cove; 19<sup>th</sup> century ceramics. All were left in place.

Back at the parking lot we found David Jones hailing us at the reconstructed French oven. He is hired to attract and entertain tourists and sang a few songs for us. He is originally from Blanc Sablon and knew Clifford and Florence Hart and used to play music with Clifford. He now lives in Port-au-Choix and is well travelled in Canada and the States. Inside the bakery, two ladies were preparing the dough which would not be baked until 2pm, so we moved on, said goodbyes to the Lowes and headed north. Perry went straight to St. Barbe and our rental cabin, and we detoured to New Ferolle for a survey of its outer point. In 1989 or 1990 we tied the *Pitsiulak* up at the fish plant after crossing from Labrador to Port Saunders when we got caught in a bad tide-rip and took refuge ashore.



A large field of 'pushki' at the old offal (garbage) site used by the New Ferolle fish plant; a hunting blind on the shore north of the New Ferolle town dump.

We parked at the fish plant and walked out along the shore road, passing a large growth of 'pushki' vegetation where we found some bricks and hummocky ground, designated New Ferolle-4 (N51-01'55.1", W057-03'29,8"). Later, Clifford Doyle, the plant owner told us this was where they dumped fish offal, so it was not a Labrador Inuit village midden after all! There were several potato peat gardens along the road, and where it bends to the west, a road bull-dozer pile contained square and round nails, transfer print ceramics, brick, and modern materials (photo). A hundred meters to the south, Ben found a circular structure built into a limestone beach ridge (New Ferolle-1, N51-02'03.8", W57-03'34.5", 4x3.5 m), about 50 m from the shore, next to another possible structure to the east with a semblance of stone walls which was filled with water. No artifacts were found in either one when we scratched a bit inside the pits. We decided these were probably modern dozer pits. A much more certain circular stone walled structure, New Ferolle-2 (N51-02'05.8", W57-03'34.3"), was to the north, built out from a ledge near the water. This must have been used as a duck blind, and as if to confirm this, a flock of eider ducks flew past a hundred meters offshore. A modern beer bottle was tucked into a crevice in the wall. Several hundred meters to the west, Ben found a line of five caches designated New Ferolle-3 (F1-5) built into limestone beach ridge north of the town dump pit, most of which had been opened. Cache 1, 2 m in diameter (N51-02'02.4", W57-03'41.7"); Cache 2 (N51-02'02.1", W057-03'41.7"); Cache 3, a double cache (N51-02'02.1". W057-03'43.1"); Cache 4 (N51-02'02.2", W057-03'43.9"); Cache 5 (unopened, N51-02'01.7", W057-03'45.1"). People we spoke with in town did not know about these structures, or their function, but I surmise they were for caching harp seals during the spring hunt.



Rock depressions north of the New Ferolle town dump are probably bull-dozer excavations; and a series of large rock caches, probably for harp seals, north of the N.F. dump. Cultural affiliation unknown. (BF photos)

Back at the fish plant I spoke with Seaward Seafoods/Doyle Seafood Ltd plant owner, Clifford Doyle, who told me about the offal site but did not know about the other structures we recorded. We spoke quite a bit about caribou, and he confirmed what we have been hearing from others about wintering in the hills and coming to the shore in spring and summer, often swimming out to the islands, and that they could easily swim across the Strait. He showed me a small walrus tusk he found at the shore near the New Ferolle lighthouse and said people had found 'sharp stone tools' at Jim Muse Cove, between the town dump and New Ferolle Light, which is probably a Dorset site. Doyle's paternal ancestors were Irish conscripts to the fishing industry, and his wife's were French from Quebec. That ended the day's survey,

and we drove to Dockside Motel and Cabins, finding Perry already well installed. We packed our food and gear into the tiny 2-room, dining/living room, bath, and kitchen, and Ben prepared a chili dinner.

**22** July (Friday) St. Barbe The Eastern U.S. heat wave began to hit Newfoundland today, and some areas in central Nfld may reach 38 degrees C. The west coast is moderated by the Gulf and had a brisk eastern breeze most of the day. We returned to try and locate three places on the west coast of Old Ferolle Island that looked like cache pits or pit houses on Google Earth but were less convincing on Ben's Google Pro account. We launched the boat from Blue Cove again and landed on the northern tip of the island. We found a small cache 0.5-1.0 m dimension at N51-05'06.2", W056-53'32.2", and a caribou leg bone (tibia/fibula) at N51-05'34.0", W056-52'59.3". After walking nearly to the southern tip of the island and finding nothing, I realized the 'pits' must have been patches of vegetation. Saraí found a cherty piece of limestone loose on the surface that might have been worked but was probably wishful thinking. There is a large cemetery at the northern tip next to a French bakery oven described in Thomson's report, but we did not have time to check it out. Later we returned to document the oven.



The Catholic cemetery near Forrester's Point; and a hunting blind south of the Pigeon Point mound.

After lunch at the cabin, we launched the boat at Forrester's Point and attempted a survey of Current Island, which has exposed shingle beaches at its southern end. The tide was low and rising and we had to maneuver around several shoals against an onshore easterly wind. Shoals and wind on the southeast side of the island prevented us from landing, so we cruised around the southern end, eyeing the raised beaches and seeing a baby harbor seal and two porpoises, but we could not land because of sea swells. We ended up circling the entire island without finding a safe landing place and decided to try again tomorrow with better wind and tide conditions. Local folks at Forrester's Point told us there are two cemeteries on the island, which was once encircled by a road and had a farm at its northern (sandy) cove. After driving along the shore road north of Forrester's Point, passing an amazingly decorated Catholic cemetery and the local 'convenience store' where Perry found and later made our turkey dinner, we settled on checking out Pigeon Cove Point on the south side of St. Barbe. We found the point had been mined for garden peat and has dark streaks in Google images that show ATV tracks in the peat. The exposed limestone beaches along the west coast had a 1.5 m high mound of rocks at its north end, on the second major terrace at N51-12'22.8", W56-47'16.4". We called this Pigeon Cove Point-1 Mound and measured it as 3 m above sea level; its base is 8 m laterally and 9 m perpendicular to the shore. The center had old orange lichen-covered rocks around the rim of an old excavation pit that did

not extend into more than the upper portion of the mound. The rocks on the outside were weathered like the rest of the beach rocks, so the mound is not recent. A dead crow or raven was rotting at the northern base of the mound.



The Pigeon Cove mound on the upper terrace and a dog burial cairn in foreground; the disturbance in the upper portion of the Pigeon Cove mound.

I wondered if this might be a Maritime Archaic burial mound but doubted this could be true given its low elevation above sea level. I checked with Stephen Hull at the Provincial Archaeology Office who reported no PAO record at this location. Between the mound and the shore, on the first terrace, we found several small mounds about 1-2 m in diameter, and when we removed the center rocks from one (N51-12'23.2", 56=47'17.1"), we found the bones of two dogs at Pigeon Cove Point-2. There is a small U-shaped 'hunting' blind about 20 m south of the dog burial and a few other small mounds we did not open south of that on the crest of the first terrace. There is also a partly vegetated cairn about 20 m northeast of the big mound, on the same terrace (N51-12'22.8", W56-47'15.7").



Dog burial cairn at Pigeon Cove Point; and Plot of Pigeon Cove Point sites (photos: BF)

**23** July (Saturday) St. Barbe to L'Anse aux Meadows to St. Barbe Rain and fog this morning. We were up at 7a for Saraí's Mexican quesadillas. I took a break and drove to Pigeon Cove Point to ask anyone I could find about our mound and dog burials. Had a long chat with Douglas Gibbons, a 70-year-older now retired and tending to his well-kept wood lobster traps. He prefers them to the expensive wire traps (sometimes called 'American' and by others, 'Canadian' or 'Nova Scotian') because they are cheaper and fine for keeping lobsters as long as you tend the traps every day. The wire ones keep lobsters ok for a

few days because they have more room and lobsters don't end up eating each other when they get hungry. He grew up in one of the houses nearby but never paid any attention or even knew the mounds existed; they were to him just part of the landscape. He thought his father might know something, but we never had time as ask him.



Iron sculpture above the LAM site; Project team outside LAM longhouse. (photos: BF)

We left for L'Anse aux Meadows in the fog about 9 and arrived about 11, finding the parking lot already packed with cars and camp trailers. We were admitted free as 'museum people' and soon found some of our old interpreter friends, among them Paul and Richard, whom we first got to know when they were lodging with our Quirpon friend, Boyce Roberts. We learned that Matthias Brennan, the former LAM manager, is now working at Gros Morne Park. Paul, talkative and insightful as always, bemoans the lack of Norse artifacts in the museum and generally has lots of ideas for improvement. He gave us and a bunch of tourists a great tour of the site, pointing out all sorts of things, including vegetation types, and house details. He was a bit nervous (he said) about me being in the group, but he knew much more than I did about the site. I was struck, as before, how incredibly lucky we are that Ingstad met George Decker and heard about the 'Indian mounds' that never would have been found had the site not been grazed by cows so that the peat house walls could be noticed under the high grass that had grown up over the site. In the main house we found Frederick giving his spiel to visitors, pausing only when he discovered us in the doorway. He talked with us quite a while about how concerned he was with giving a factual and truthful tale when so few details of Norse life are known with certainty. I reassured him he was not the only one to worry about accuracy and not to be too concerned about a bit of historical reconstruction. Then we visited with 'Ragnar' (Mark) the blacksmith, who recruited Whitney as his bellows operator and made her a small boat nail. He had three bloom fragments from the 2017-19 smelts to show, and a tiny chunk of minimally-forged iron from one of them that was still far from being forged steel. His message: the incredible number of man-days needed to acquire and roast bog iron, smelt, and forge just a couple kilos of useful iron. Lunch was at Gina and Adrian Noordhof's Norseman Restaurant on their outside deck. Gina was full of news about her eldest son's progress toward a career as an electrical engineer (while still in high school!) and her new invention—a quadruped frame that supports young kids learning how to ice skate. She has had strong interest from buyers and plans to produce hundreds of thousands!

<image>

Meanwhile she continues to produce her series of kids books. I forgot to ask her about Norstead, the kids Viking Park, which I heard is doing poorly, business-wise.

Paul giving his L'Anse aux Meadows tour, and 'Ragnar'/Mark and Whitney making an iron nail.

LAM has been operating through the covid pandemic, open for Newfoundlanders, and is enjoying a big surge in visitation now. We did not find Boyce home at Quirpon but left messages. We bought two desert pies from his sister at the RV park and headed home. Frederick has been helping Boyce get his B&B business and home affairs worked out, becoming like a son to him.

**24 July (Sunday) St. Barbe** We had a cool SW breeze all day today, quite strong in the afternoon. Perry dropped us off on the east side of Current Island where two old wharfs could be seen on early GPS images, and we walked south to the eastern end of the grassy fields. Walking up the open ground on the north side of the hill we found caribou antlers (Current Is. caribou samples #7, N51-10'42.1", W056-50'01", and #8 N51-10'39.3", W056-50'15.7", a large single rack), and a third caribou antler sample #9 (weathered) came from N51-10'20.1", W056-50'27.0". Current Is.-1 is at N51-19'24.5", W56-50'09.3" at the shore where there is a cleared area with rocks showing a cabin floor that had fragments of a small iron kettle and a huge cast iron barking pot used for tarring cotton fish nets. North of this, back near the edge of the woods, may be the older of the two cemeteries we had heard about on the island, which we learned at one time had 30 families and is now uninhabited. Several rock mounds and rock concentrations were found half buried in vegetation near the forest edge, the most prominent being an oval pile 40 cm high and measuring 5.5x2.5 m, upon which we found broken ceramics and glass, an iron stove coal grate, nails, and other material (Current Is.-2, N51-10'24.1", W056-50'12.8").



*Current Island caribou antler #7; Current Island-1 dwelling foundation with nails, Iron kettle, and a barking pot for tarring nets. (photos: BF)* 



Current Island-2 cemetery (?) mound-1 with 19<sup>th</sup> C. iron and ceramics. (photos: BF)

Surveys along the exposed cobble beach wrapping around the south end of the island and continuing to the NW point documented scores of rock features including caches, cairns, marker pole support rock piles, and a single set of two round tent rings. Current Island Cache-1 was an oval mound at N51-10'18.3", W056-50'21.8". C. Is. Cache-2 is on the 3<sup>rd</sup> beach berm with seal bones and shotgun shell casings N51-10'18.5", W056-50'24.6". A range marker pole cairn was at N51-10'39.3", W056-50'15.7". There were many other caches or cairn features about 50 m apart on the first beach berm at the southern tip of the island. Current Is-3 has part of a round tent ring (N51-10'18.7", W056-50'26.0") with red fire-burned crystalline hearth rocks in the center three meters northeast of a rectangular TR (2x3 m), west of a vegetated peat mound in which Ben excavated a 25cm test pit (negative results). No artifacts or bones were on the surface.



*Current Island-3 tent ring with red hearth stones and neighboring features; a stone blind facing inland. (photos: BF)* 

Other sites include: a 'reverse' hunting blind facing the island's interior, not the sea, at N51-10'20.4", W056-50'30.9" 7 rocks high and 75 m from the shore, on the third beach ridge, which one of the locals said had been used by his father for hunting ducks and gulls. A pole marker cairn at N51-10'22.5", W056-50'38.7". A hunting blind of low rocks at N51-10'22.8", W056-50'39.8". An old cairn covered with orange lichen N51-10'26.5", W056-50'39.4". Pole marker cairn N51-10'39.2", W056-50'15.2". Pole marker cairn N51-10'26.5", W056-52'14.2". A mossy rock pile N51-10'48.9", W056-50'06.6". A pit 8x8 m crest-to-crest N51-10'52.9", W056-50'03.3" on the firs beach berm, possibly having had a wooden roof. A stone enclosure 8x3 m at the shore bank and without lichen N51-10'53.5", W056-50'02.1". Three cairns at N51-10'53.5", W056-50'01.3"; N51-10'53.7", W056-50'00.9"; N51-10'54.0", W056-50'00.4" — these last three are on the third beach ridge. Hunting pit blind on first beach ridge N51-10'54.4", W056-50'00.4". Marker pole cairns at N51-10'54.8", W056-49'57.8", and N51-10'55.2", W056-49'56.7". Two-person hunting blind facing the sea on first beach ridge N51-10'56.0", W056-49'56.3". U-shaped hunting blind on first ridge N51-10'55.7", 056-49'52.9". Dog burial (without skull) at N51-10'53.5", W056-49'48.1".

Current Is-4 (locally known as 'Fisherman Cove') is at the shore of a huge grassy meadow in the middle of the island. A shoreside rectangular foundation is next to a boat slip N51-10'48.5", W056-43'42.5". A very large and still smelly whale skull is embedded in the storm tide beach. On the east side of this cove we found about 10 dog burial mounds (not-GPS'd); an opened cairn N51-10'48.1", W056-49'27.9"; a collapsed cairn N51-10'42.2". W056-49'26.4"; a conical cairn at N51-10'50.3", W056-49'24.8"; a collapsed cairn at N51-10'54.2", W056-49'22.8"; two pole marker cairns and one burial cairn N51-10'57.0", W056-49'20.8" with a square nail a few meters to the north. We learned from fishermen that pole markers were set up on lower and higher beaches as range markers so fishermen would know where to set their cod trap anchors. Most of these are old and have rotten poles beside them, because this type of fishing place-marking has been replaced by GPS.



*Fisherman Cove shore structure on the north side of Current Island; and stoneware sherds found (and left) there.* 



Ben inspects a whale skull lodged in the beach at Fisherman Cove; one of many dog burial cairns on the shingle beach on the NE shore of the cove.

**25 July (Monday) St. Barbe** The day began sunny and warm and descended into a multi-day rain and mist storm. Fortunately, we got our surveying done before the rain began in earnest. After a quick stop at Anchor Point to check beyond the town's stinky Doyle Group fish plant, finding only a wooden hunting blind, we began with the beaches between Nameless Cove and Savage Cove and found the approach to be a recent industrial wasteland—a bull-dozed landscape extending nearly from Highway 430 ("the Viking Trail") to the shore. Everything had been flattened and huge concrete building foundations marked the site. The scale was so large that it might have been a military radar station that had been 'cleaned up', but what was left was gravel pits, concrete cable bases for towers, and piles of metal and other debris. However, the land immediately along the shore was mostly unscathed, except for a burned fishing boat and cabin. We found nothing of interest except for a couple small boulder hearths aligned perpendicular to the shore (N51-19'36.7", W056-43'02.4") with wood poles on each side of the hearths, and a seal bone showing on the surface. At Flowers Bay we checked out the lighthouse Island point and learned about this history of lighthouses on the French Shore. The tide was low enough for us to cross the flats to Cooper Island, in the entrance to Savage Bay, and here found a possible tent

ring behind the beach berm on the north side of the island. Our test pit came up empty. The rest of the island was covered with such thick grass and meadow plants that we could see no sign of former habitation, which must have been extensive. By mid-afternoon a steady rain began, and we bailed out for our cramped cabin. Saraí cooked a nice dinner, and I did a big laundry load in the Dockside Motel HQ.



Two linear cobble structures at Savage Bay with wood, seal bones, and plastic; testing a possible tent ring at Cooper Island. View south toward Savage Bay. (photos: BF)

**26** July (Tuesday) St. Barbe Another day with strong SW wind cleared the Icelandic low that brought heavy rain until this morning. Perry spent part of the day finding a halibut for dinner, finally having success at the Doyle New Ferolle fish plant. The halibut was \$100 for a 9-pound fish. We drove to Bird Cove (again) to make a full-day excursion to Dog Peninsula, which we did not have time to reach several days ago. The walking path took us through the woods in the middle of the Bird Cove Peninsula, and then to a prepared double rock-lined, rubble-filled path around the entire Dog Peninsula. At the first grassy isthmus we saw Spirit (the horse) grazing, but we crept below the bank along the low-water flats so she would not importune us like last time.

Bird Cove Peninsula-1 was a cache pit at N51-03'01.2". W056-57'50.5" on the third beach ridge next to some flat slabs. On the south side of the second isthmus (called 'factory cove' on the hiking map) we found several stone features at N51-02'53.8", W056-58'10.1" which we called Dog Peninsula-1, but it will has its own name and Borden number that we don't know now. L-1 was a cache pit one meter in diameter at the eastern end of the site. L-2 has two parallel 14 m long rows of rocks 8.5 m apart, perpendicular to the shore, ending only a few meters from high tide, with stone cache-like features at their seaward ends. This site was recorded in the Nfld site records by the Bird Cove archaeology team as EgBf-16.



Dog Peninsula-1 cache and rectangular foundation (EgBf-16) on the southern side of the Bird Cove-Dog Peninsula isthmus; weather-trashed information panel at Dog Point Cape, the location of 'Cook's Carine' (the local misspelling of Capt. Cook's cairn).

Dog Peninsula-2 is the Captain Cook Cairn (on signs spelled as 'Cook's Carine') on the hill above the high southwest corner of the peninsula, marked by a plastic sign that has broken to piece from the weather. Our Dog Point-3 is on the northwest corner of the peninsula and includes a ring enclosure (3x4 m) at N51-03'18.2", W056-58'?40.4". Dog Point-4 N51-03'18.4", W056-58'35.7" is a U-shaped blind on the NW point. Dog Point-5 (N51-03'17.1", W056-58'32.3" is a '4-person' blind build next to the hiking trail with its opening facing the sea (perhaps it was a lunch spot for the trail crew?). Two modern hearth rings (not GPS'd) are at the northern edge of the large grassy meadow (a former house site?) at Dog Cove, where there is a modern picnic area at the SW corner of the meadow. This site is registered as EgBf-1 on the Bird Cove trail map. Dog Peninsula-6 is a rock cluster on the third beach ridge at N51-03'10.6", W056-58'31.0", and there is a second rock cluster on the 6<sup>th</sup> beach ridge in the same sandy beach cove at N51-03'09.0", W056-58'30.7", and this one contained a bed of charcoal beneath a rock slab and a piece of charred wood nearby—therefore a recent feature. Although open to the north and east, this is the finest boat landing area we saw anywhere on Bird Cove/Dog Peninsula-a fine sandy beach with boat access even at low tide.

Dog Peninsula-7 N51-03'05.0", W056-58'18.3" has two modern hearth rings in a grassy meadow (former house habitation?) with a modern picnic area at the rear of the grassy field. Some of these sites are recorded with Borden numbers by the Bird Cove team. None had any artifacts associated, and none showed any Inuit construction features. The entire survey distance we logged was about 8 miles. Almost all of this was on the prepared walkway made by the Bird Cove community during the past ten years. The highlight of the tour was seeing two mature caribou, a male with a large rack and the other (female?) with slightly smaller antlers. For a while they walked ahead of us across the tidal flat, pushed on by our progress, until they reached the "Spirit" isthmus, where they crossed into the meadow and disappeared. Perry prepared his halibut for dinner along with scalloped potatoes and corn. I tried calling Florence Hart to alert her of our arrival on Friday; she is at home but I was not able to get though.



Modern hearth rings on the northwestern shore of Dog Cove; and New Ferolle Light, beautifully maintained on a high point jutting into the Gulf.

**27** July (Wednesday) St. Barbe This was the last day for the Indiana girls. Whitney and Bella both had to return home for unexpected family issues. This was a shame, for they will miss the 'dirt' side of archaeology in Quebec. Nevertheless, they have had a good taste of surveying, even though we did not (so far) find any Inuit sites. Instead, we gathered lots of data on historical coastal land use, collected caribou samples, and had lots of interaction with local people. The latter was what the girls will probably remember most. They did not leave with Perry until after lunch, so they helped us with a morning survey of New Ferolle Light.

Perry was in New Ferolle yesterday to buy his halibut and remarked on the bad condition and length of the road, some 18 kms west from Highway 430 Viking Trail. We could drive right to the lighthouse, which we found in classic Newfoundland form, painted white and red and flashing from the original tower, not some spindly iron contraption. The grass around it was trimmed, viewing seats were in place, and signs warned visitors not to enter the building. The point it is on is made of treacherous sharp, cutty, limestone, with many freshwater ponds. A peculiar feature was a building foundation that had at one end an earth-covered structure resembling a root cellar with a padlocked door. North of the lighthouse a series of raised beaches sweep east and north, and on one of these we found New Ferolle Light-1 (N51-01'25.9", W056-05'30.9"), a large-stone cache that had been opened. We found nothing here, but Ben managed to lose his chap-stick tube into its crevices. The high beaches to the east are mostly open and would seem excellent prospects for early sites, but our work made us stick close to the shore.



Rectangular foundation and root cellar south of the New Ferolle Lighthouse; Ben inspects a large cache structure on a high beach a few hundred meters east of the lighthouse.

New Ferolle Light-2 we approached from the north side of the peninsula, walking south. Ben recorded a couple of blinds at the shore just south of the dump. Bella, Whitney and I found what may have been the site of a small settlement complex on the second beach ridge 100m north of Jim Muse Cove. This is one of the most promising possibly pre-European sites we located during the entire survey. It consisted of a circular boulder structure (L-1, N51-01'27.5", W057-04'13.4") open on the east side, away from the sea, possibly having served as a blind or a shelter made with very large rocks, next to a couple small conical caches on either side, and a few meters to the south on the same ridge, a very large oval mound some 8x5 m in dimension (L-2, N51-01'27.5", W057-04'14.3"), about one meter high, long axis perpendicular to the shore, and intact. Perhaps a burial cairn? Local people know of this site, say its very old, and they have no idea what it is or who made it. L-3 is a small cache pit 40m west of L-2, near the shore at N51-01'47.7", W057-04'15.0".



Whitney inspects a set of structures including an enclosure, a large unopened mound, small pits and other features north of Jim Muse Cove; Saraí documents a cache pit at the SW side of the cove.

The main purpose of this survey was to visit Jim Muse Cove, mentioned to me by New Ferolle's Clifford Doyle, who said some chert artifacts had been found there, which would likely have been Dorset. This is a very nice cove with a gravel beach open to the north but well protected from summer SW wind. It has several grassy terraces extending up 5-10 m high bordered by spruce bush; a path through the bush

leads to what may have been a house clearing which we did not have time to check out. There is an ATV trail to this location both from the south and north, and joy-riders have cut circular ATV ruts into the peat-covered raised beaches. We saw no sign of Dorset or other flint tools but did record a cache pit at the SW corner of the meadow at N51-01'49.0", W57-04'26.2".



Ben, Saraí, and Perry (driver) at Bella's and Whitney's Blue Cove departure for Deer Lake; Excavation of Feature 25 tent ring at Old Ferolle, where we recovered pieces of a clay pipe and small (probably recent) iron nail. A second tent ring, Feature 27, produced a fragment of perforated shoe leather.

We returned for lunch, and Bella and Whitney packed their things and left with Perry for a night at Jill Colbourne's in Corner Brook before their flights from Deer Lake Thursday. On their way they helped us launch the speedboat at Blue Cove, and Ben, Saraí, and I motored over to Old Ferolle-1 at the south end of Old Ferolle Island. During the afternoon we excavated (i.e. scraped gravel!) two of the tent rings, which involved turning over the upper layer of rocks since there was no soil. Feature 25 is 'inside' the French flakes area and for that reason can be presumed to post-date the flakes. The feature was roughly circular with no indication of a hearth. There was no soil below the surface rocks, no charcoal or indication of a central hearth, but we find fragments of a clay pipe and a small iron nail, the latter probably a modern lobster trap late-comer since parts of rotting traps have been wind-scattered all over the site. Ben and Saraí flew the drone for post-excavation views. We only had my small pocket-pad available for notes, so the site maps had to be sketchy. Feature 27 (original waypoint 38, N51-04'40.2", W056-54'04.0") is on the 2<sup>nd</sup> or 3rd beach ridge off the French flakes area. This ring was made of larger rocks than F-25 and some had been moved, making the ring incomplete. The interior surface rocks were larger and more difficult to excavate. We found a small leather fragment with two perforations, each with iron stains, suggesting the piece may have been part of a leather shoe. Small nodules of chert were also recovered but none showed signs of use.

**28 July (Thursday) St. Barbe** The day started off with a chilly wind from the north, but not enough to cause trouble anchoring near the cemetery on the north end of Old Ferolle Island. We had considered testing the rockpile at the east end of the Old Ferolle fish-drying operation, but Saraí found a description of that feature in the 1993 Jacques Whitford report by Callum Thomson mentioning that his team had excavated on the south side of this mound and found 18<sup>th</sup> C. artifacts. So there seemed little need for us to test the north side of the mound. Instead, we decided to visit the French oven (EgBf-4) near the modern cemetery on the north end of Old Ferolle. A rising tide in the morning that made it easier to get ashore and off-haul the boat. The oven was only fifty meters southeast of the cemetery, a couple meters

above sea level. Below the shore bank is a small clearing that was overgrown by brush and young conifers. Nevertheless, the oven was clearly visible as a circular walled structure five meters in diameter from outside wall to outside wall. Many of the rocks were being destabilized by grass, small shrubs, and young conifers, and the interior has some 1 meter tall conifers growing in it. We cut away the grass and brush and young trees, and Saraí took drone shots of the oven and surroundings. There were no bricks among the wall rocks, which were not cemented. Ben made a 50x50 cm test excavation against the wall on the east (down-hill) side of the ring, finding nothing except 23 cm of sterile peat between a rooty topsoil and a basement of limestone shore deposits. The east side of the ring. The absence of tiles in the test pit and wall suggests the oven is French and not Basque. We had to get to the boat before the rising tide ended, so we departed around 11:30 and returned to Blue Cove, had lunch, called Perry, and found him just leaving the Deer Lake airport with a four-hour drive ahead of him. The ladies got off fine. I made a reservation for the 10:30 ferry to Blanc Sablon tomorrow, right after Ben meets his bus to Deer Lake, where he will overnight and fly out on Saturday.



Old Ferolle French oven (EgBf-4) was overgrown with vegetation when we found it; the site after we cleared the vegetation. We also drone-recorded the feature.

# **Preliminary Findings: Caribou Samples and Inuit Site Surveys**

After three years of no northern fieldwork due to covid restrictions, the 2022 season became a hybrid when I learned there would be no Quebec Ministry of Culture and Communication (MCC) funding support for operating the *Pitsiulak* on the Lower North Shore. We had also hoped it might be possible to conduct a week of work at the Shell Island Ramah chert reduction site in outer Groswater Bay, but now that will have to be postponed. I was able to find a minimal salary for Perry Colbourne so that he could take part in two projects this summer: a survey of the northwestern shore of Newfoundland to identify historic period Inuit summer camps, and preliminary excavations at the Bonne Espérance-4 Basque tryworks site discovered in St. Paul River in 2019.

**Caribou DNA Samples** The rationale for the Newfoundland survey stemmed from results of a DNA analysis of caribou bones from our Inuit winter sites on the QLNS that identified them as belonging genetically to Newfoundland caribou rather than, as expected, the Quebec-Labrador herd. Could LNS Inuit have been acquiring caribou from northern Newfoundland, either directly by summer or fall hunts when the animals are plentiful along the northwestern shore, or through trade arrangements with the Basque or French? Our work involved two weeks of foot and outboard surveys between Port Saunders

and St. Barbe. Participants included myself, Benjamin Fitzhugh, Whitney Hadley-Salay, Bella Fermin, and Perry Colbourne. We collected nine samples of caribou bones, antler, and feces to augment previous knowledge of DNA material from the NW Nfld caribou population (currently numbering about 6000 animals) and sent the samples off to Dongya Yang's laboratory in Vancouver for analysis. We found caribou to be abundant along this coast, with pairs and small groups seen everywhere we surveyed. 'It is their custom to winter in the highlands and summer on the coast and islands,' commented Bill Lowe of Port Saunders. This view was echoed by many other coastal residents we spoke with. If this were the case in the past, Inuit hunters would have found Nfld caribou their most available prey.



Several of the nine modern caribou samples from NW Nfld sent to Donya Yang for DNA analysis.

#### Table I. Modern Newfoundland Caribou Samples Collected

Sample	Date	Location	WP	Photo record	Comments
1	2022-07-17	Point Riche Peninsula, Port au Choix, NL.	N50° 41' 42.6" W57° 24' 25.2"	IMG_6020	Caribou dung animals inhabiting Point Riche Peninsula
2	2022-07-07	Port Saunders, NL	N49° 35' 27.0" W55° 42' 52.0"	IMG_6920	Gordon Lowe, shed antler found in the hills east of Port Saunders, NLFD. Collected probably 20 years ago
3	2022-07-18	Eddies Cove West, NL.	N50° 44' 56" W57°10' 17"	IMG_6922, 6923	Ken Offrey, Eddies Cove West (just north of Port aux Choix), caribou killed in the hill's northeast of Port aux Choix.
4	2022-07-18	Dog Peninsula, Bird Cove, NL.	N51° 03' 14" W56° 56' 50"	IMG_6925, 6927	Caribou leg bone, Dog Peninsula (surface collected)

5	2022-08-04	Bird Cove, NL	N51° 03' 24.9" W56° 57' 05.9"	IMG_6935, 6936	Shed antler from Bird Cove
6	2022-07-22	Old Ferolle, Plum Point, NL.	N51° 05' 34.0" W56° 52' 59.4"	IMG_6937, 6938	Leg bone from Old Ferolle
7	2022-07-24	Current Island, Plum Point, NL.	N51° 10' 42.5" W56° 50' 01.1"	IMG_6939, 6940	Shed antler from Current Island
8	2022-07-24	Current Island, Plum Point, NL.	N51° 10' 30.7" W56° 50' 15.7"	IMG_6941, 6945	Shed antler from Current Island
9	2022-07-31	Current Island, Plum Point, NL.	N51°10'20.1" W056° 50' 27.0"	IMG_6948, 6949	Shed antler from Current Island

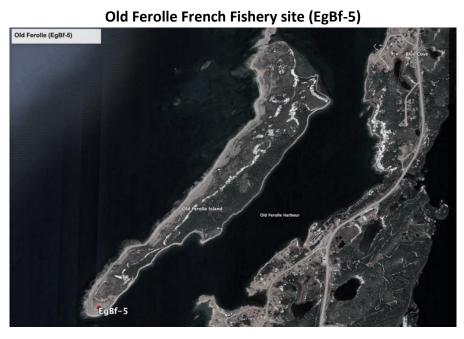
**Inuit Site Surveys** By contrast, our search for Inuit sites was completely negative. The previouslyreported Keppel Island site reported initially by Wintemberg and Harp, and later investigated by me, has been discounted as an Inuit occupation. We did identify a small possible Inuit-style pithouse on the shore of Old Port-au-Chaix Harbor (a round structure dug into the earth with a short entrance passage). This site is located beside the footpath ten meters from the shore and a few hundred meters north of the Parcs Canada parking lot. We could not investigate this feature becasue we did not have a permit. Despite foot surveys on all of the likely shores, peninsulas, islands, and headlands, no identifiable Inuit dwelling structures or other Inuit features were found. Further, we found tent rings rare at sites that would have been promising Inuit locales as known in Labrador, and we found previous surveys by Kilmarex, Thomson, and others had identified most of the tent ring sites, and none of these had the distinctive features known for Inuit camps such as rear sleeping partitions, U-shaped hearths, rectangular or D-shaped borders. We mapped, GPS-ed, and drone photographed the group of circular tent rings at the south end of the Old Ferolle Island French fish-drying site and excavated two, finding clay pipe fragments, shoe leather, and two small 17-18th ceramic sherds. We also droned and cleared vegetation away from the French oven at the north end of the island. One place with a record of tent rings we could not survey was St. John's Island, which was too far off-shore for our small boat to reach and return safely. Most of the sites recorded there are Dorset and have not been reported as having Inuit features.



A sample of our survey results along the western shore of **Current Island (Forresters Point**), one of the many locations we studied, showing the intensity of recent/modern activity. (map by Ben Fitzhugh)

Our results give us confidence that Inuit do not have an archaeological presence on the northwest coast of Newfoundland and probably did not acquire caribou from this region by physically hunting these animals, although they may have acquired animals indirectly through trade with Basque or French. It would be useful to test the Port-au-Chaix Northern Harbor pithouse to see if this is an Inuit structure, because Selma Barkham (198:18) reported this region was known for Inuit-Basque/French 'silent trade'.

# Fieldnotes, GPS locations, Illustrations, and Maps



Old Ferolle Island and French Fishery site (EgBf-5) at SW end of the island.



Drone view of Old Ferolle Island looking NE over the fishery and tent ring site.



*Old Ferolle French fishery flake showing barrow pavement pathways and tent ring features.* 

Name	Latitude	Longitude	Elevation	Location	Feature designation	Photo/s record
Ol_Fe_South_1	51,07779804	-56,90185701	-0,347864	Old Ferolle Island	South end of F1 (Pathway)	See drone pictures
Ol_Fe_South_2	51,07791533	-56,90172858	0,534897	Old Ferolle Island	F1 & F5 intersection	See drone pictures
Ol_Fe_South_3	51,07786557	-56,90164247	2,457994	Old Ferolle Island	F20_Tent Ring	DJI_0008,0009, 0010, 0011
Ol_Fe_South_4	51,07771118	-56,90158416	1,533394	Old Ferolle Island	Bone Fragment Landmark	DJI_0048,0049
Ol_Fe_South_5	51,07858713	-56,90150651	3,047948	Old Ferolle Island	F2 Enclosure	DSC_0412,0413

#### Table II. Old Ferolle GPS data

Ol_Fe_South_6	51,07780087	-56,90147306	-0,52357	Old Ferolle Island	F21 Tent Ring	DJI_0019,0020,0021
Ol_Fe_South_7	51,07771561	-56,90144719	-1,137345	Old Ferolle Island	F31_Tent Ring	DJI_0015,0016,0017,0018
Ol_Fe_South_8	51,07815744	-56,90130195	3,064627	Old Ferolle Island	F24_Tent Ring	DJI_0002,0003,0004,0005
Ol_Fe_South_9	51,07771611	-56,90130181	1,758888	Old Ferolle Island	F30_Tent Ring	DJI_0022,0023,0024
Ol_Fe_South_10	51,07783314	-56,90127441	2,768591	Old Ferolle Island	F26_Tent Ring	DJI_0026,0027,0028,0029
Ol_Fe_South_11	51,07841783	-56,9012714	2,370336	Old Ferolle Island	F1 Extreme north end (pathway)	See drone pictures
Ol_Fe_South_12	51,07797109	-56,90124432	2,410358	Old Ferolle Island	F25_Tent Ring	DJI_0030,0031,0032,0033,003 4
Ol_Fe_South_13	51,07838703	-56,90123498	3,266699	Old Ferolle Island	Seal bone landmark	DSC_0414
Ol_Fe_South_14	51,07783578	-56,90110171	1,500612 5	Old Ferolle Island	F27_Tent Ring	DJI_0035,0036,0037,0038
Ol_Fe_South_15	51,07782657	-56,90110729	1,311067 3	Old Ferolle Island	shoe leather (surface finds in F27)	See artifacts inventory
Ol_Fe_South_16	51,07789095	-56,90105265	2,185862	Old Ferolle Island	F28_Tent Ring	DJI_0039,0041,0042
Ol_Fe_South_17	51,0781130 3	- 56,9005340 1	0,672922	Old Ferolle Island	Surface Find (pottery)	See artifacts inventory SDC_0415,0416
Ol_Fe_South_18	51,0779208 6	-56,9005229	-1,85276	Old Ferolle Island	F9_Large depression	DJI_0054,0057
Ol_Fe_South_19	51,0778775	-56,900515		Old Ferolle Island	F10_Depress ion	DSC_0394
Ol_Fe_South_20	51,0784039 8	- 56,9005100 2	2,404922	Old Ferolle Island	F6_Nord end of pathway	See drone pictures
Ol_Fe_South_21	51,0781977 2	-56,900502	2,977433	Old Ferolle Island	F5&F6 midpoint intersection	See drone pictures
Ol_Fe_South_22	51,077996	-56,900484		Old Ferolle Island	F6_South end pathway	See drone pictures
Ol_Fe_South_23	51,0779410 1	- 56,9004405 1	-0,9334	Old Ferolle Island	F8_Small depression	No photo
Ol_Fe_South_24	51,0779019 9	-56,900345	-0,581496	Old Ferolle Island	F11_Depress ion (old wharf)	DJI_0058,0060
Ol_Fe_South_25	51,0779432 2	- 56,9003073 2	1,161075	Old Ferolle Island	F12_Depress ion (old wharf)	DJI_0059,0060
Ol_Fe_South_26	51,078525	- 56,9001959 6	0,449219	Old Ferolle Island	unidentified feature	No photo
Ol_Fe_South_27	51,07877	-56,900016	2,874245	Old Ferolle Island	F16_Rock Pile	No photo

Ol_Fe_South_28	51,0787778	-56,90	4,431734 5	Old Ferolle Island	F16_Rock pile surface find	No photo, see inventory artifacts
Ol_Fe_South_29	51,0794340 2	- 56,8984360 2		Old Ferolle Island	Lobster arrangemen t	IMG_3569,3570,3572 DSC_0387,0388
Ol_Fe_North_1	51,0850489 7	- 56,8922859 6		Old Ferolle Island	Small cache	No photo
Ol_Fe_North_2	51,0864769 9	-56,889229	4,552064	Old Ferolle Island	Chert fragment	(SBA) IMG_6252, 6253,6256
Ol_Fe_North_3	51,0943463 2	- 56,8812230 2	9,181061	Old Ferolle Island	Oven	IMG_6880-6911

# Old Ferolle North 'Bakery' (EgBf-4)



Old Ferolle Island showing west shore features and 'bakery' (EgBf-4) at north end.



Old Ferolle North 'bakery' structure next to a modern cemetery, north to upper right (photo: SBA).



Drone detail of the 'Bakery' (EgBf-4) structure, north to upper right (photo: SBA).

### Table III. New Ferolle North (EgBf-4) Site Data

ID	Lat	Lon	Name	Cmt	WP
24	51,094356	-56,881234	Oven	Oven	N51° 05' 39.7 » W56° 52' 52.5 »
25	51.085048969835043	- 56.892285961657763	Cache	Small cache	N51° 05' 06.2 » W56° 53' 32.2 »
25	51.086476994678378	-56.88922899775207	Core	Emplacement of fragment of chert, non-collected	N51° 05' 11.3 » W56° 53' 21.2 »

#### New Ferolle



### Table IV. New Ferolle Feature GPS Data

Name	Latitude	Longitude	Elevation	Location	Feature designation	Photo/s record
Ne_Fe_1	51,0238360 1	-57,09192596	10,68080 6	New Ferolle Lighthouse	Boulder mound1 / possible burial	JBF photos : DSC 1038, 1039, 1040

Ne_Fe_2	51,0302810 3	-57,07394301	-1,914809	New Ferolle – Capelin Cove	Cache	No photo
Ne_Fe_3	51,0299209 8	-57,070827	0,715253	New Ferolle – Capelin Cove	Pit Feature	(JBF) DSC 1061-1062
Ne_Fe_4	51,0298539 7	-57,07063199	-3,328186	New Ferolle – Capelin Cove	Small rock pile	No photo
Ne_Fe_5	51,029945	-57,07038598	-5,533101	New Ferolle – Capelin Cove	Small rock pile	No photo
Ne_Fe_6	51,0300019 9	-57,07030199	6,498966	New Ferolle – Capelin Cove	Pit Feature	No photo
Ne_Fe_7	51,0299959 6	-57,07025296	6,810763	New Ferolle – Capelin Cove	Small rock pile	JBF DSC 1059
Ne_Fe_8	51,0317399 8	-57,06755298	5,331699	New Ferolle – Capelin Cove	Hunting Blind	_ JBF DSC1045-1047
Ne_Fe_9	51,0334819 9	-57,064795	11,74975 5	New Ferolle	Hunting Blind	JBF DSC 1041-1043
Ne_Fe_10	51,0338180 2	-57,06251051	6,33354	New Ferolle	Cache	JBF DSC 559-560
Ne_Fe_11	51,0338910 3	-57,06220001	5,629474 5	New Ferolle	Cache	JBF DSC 551-552
Ne_Fe_12	51,0339235 1	-57,06196598	5,561468 5	New Ferolle	Cache	JBF DSC 0553,0554
Ne_Fe_13	51,0339365	-57,06184449	5,079451 5	New Ferolle	Cache	DSC_556
Ne_Fe_14	51,033993	-57,061573	5,066208 5	New Ferolle	Cache	JBF-DSC 558
Ne_Fe_15	51,0343739 9	-57,05957903	5,070250 5	New Ferolle	Rock pit house	IMG_6842,6843
Ne_Fe_16	51,034929	-57,059553	2,640011	New Ferolle	Cercle stone blind	JBF) DSC_0543,0544
Ne_Fe_17	51,0343780 2	-57,05928901	-2,026347	New Ferolle	House- oval pit	JBF) DSC_0534,0535,0538,0540
Ne_Fe_18	51,0319854 9	-57,05828503	0,223378	New Ferolle	Bricks and hummock y ground	(JBF) DSC_0526,0528

### **Current Island**



Current Island 2022 Survey map

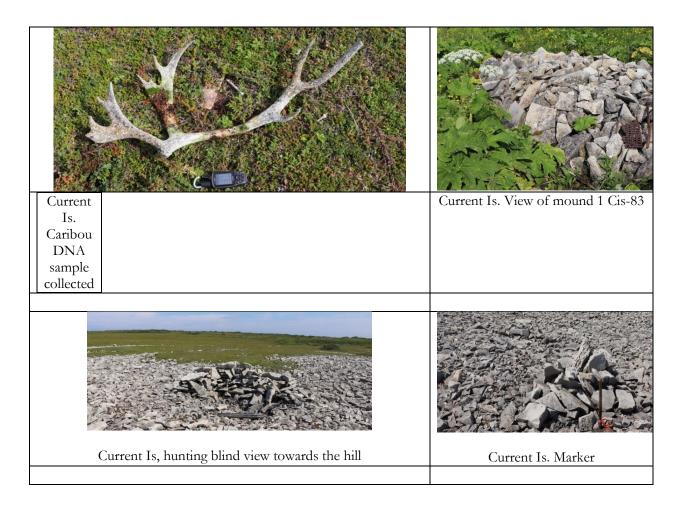
### Table V. Current Island Feature GPS data

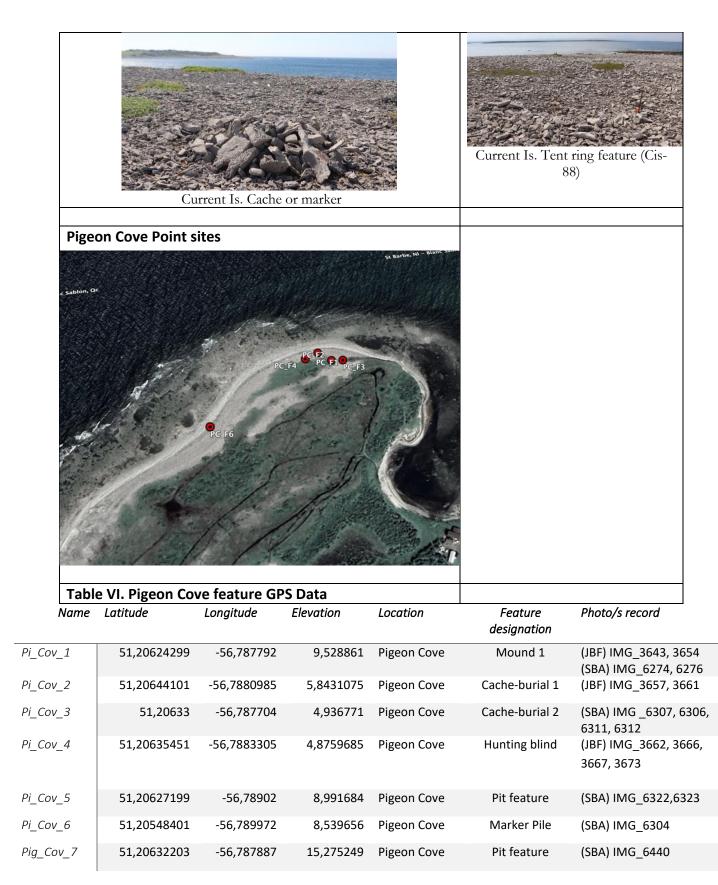
Name	Latitude	Longitude	Elevation	Feature designation	Photo/s record
Cu_ls_1	51,17372196	-56,84479401	2,081763	Pole Marker	
Cu_ls_2	51,17299802	-56,844404	2,166548	Hunting Blind	(SBA) IMG_6492,6493.
Cu_ls_3	51,17402002	-56,844274	3,130009	Linckern cairn	
Cu_ls_4	51,17291101	-56,84409496	3,851762	Pole Marker	
Cu_ls_5	51,17458597	-56,84361401	5,287102	Pole Marker	
Cu_ls_6	51,172334	-56,84359498	2,972999	Hunting blind	JBF DSC 803-806
Cu_ls_7	51,17446996	-56,843425	3,475393	Pole Marker	
Cu_ls_8	51,17488202	-56,84329298	2,670184	Pole Marker	JBF DSC 853
Cu_ls_9	51,17216804	-56,84316801	2,439579	Pole Marker	JBF DSC 801-802

Cu_ls_10	51,17222898	-56,84288001	2,911976	Pole Marker	
Cu_ls_11	51,17222596	-56,84283701	2,712457	Pole Marker	
Cu_ls_12	51,17217198	-56,84271698	3,302471	Pole Marker	
Cu_ls_13	51,17418104	-56,84234901	13,850282	Rock feature	JBF DSC 825-827
Cu_ls_14	51,17576103	-56,84226402	0,788649	Cache or pole marker	
Cu_ls_15	51,17599103	-56,84198197	-0,304553	Pole marker	
Cu_ls_16	51,17232549	-56,84191198	5,700738	Hunting Blind	JBF DSC 797-799 (SBA) IMG_6495,6498.
Cu_ls_17	51,17158198	-56,84104898	3,604893	Pole marker	
Cu_ls_18	51,17158298	-56,84104898	4,030475	Cache or pole marker	JBF DSC 756-758
Cu_ls_19	51,17661397	-56,841038	1,447717	Cache or pole marker	
Cu_ls_20	51,17205799	-56,84084899	5,997047	Pole Marker	
Cu_ls_21	51,172248	-56,84084002	4,667165	Caribou sample #9	(SBA) IMG_6477
Cu_ls_22	51,17628397	-56,84081202	2,382073	Cache or pole marker	
Cu_ls_23	51,17155096	-56,84078604	1,745197	Cache or pole marker	JBF DSC 0773-0775
Cu_ls_24	51,17181801	-56,840606	5,209206	Tent ring recent?	(SBA) IMG_6484-6488
Cu_ls_25	51,17186503	-56,84056702	2,627176	Tent ring recent?	(SBA) IMG_6478,6479,6480,6481
Cu_ls_26	51,17155801	-56,84050198	2,925734	Cache	
Cu_ls_27	51,17679602	-56,84045898	-2,129037	Cache or pole marker	
Cu_ls_28	51,17174098	-56,84045001	1,205109	Cache	JBF-DSC772
Cu_ls_29	51,17159598	-56,84042796	2,490883	Cache post	
Cu_ls_30	51,17180603	-56,84017902	3,819209	Cache or pole marker	
Cu_ls_31	51,17176001	-56,83939104	4,201766	Cache or pole marker	
Cu_ls_32	51,177799	-56,838133	-3,271818	Cache or pole marker	
Cu_ls_33	51,17789598	-56,83805203	-3,669125	Cache or pole marker	
Cu_ls_34	51,17520204	-56,83768901	14,661986	Caribou sample #8	JBF : DSC_0721, 0722 (SBA) IMG_6436-6438.
Cu_ls_35	51,17756297	-56,83751198	-1,524959	Pole Marker	
Cu_ls_36	51,17758996	-56,83749497	9,167451	Pole Marker	
Cu_ls_37	51,17796849	-56,83726803	-1,049059	Cache or pole marker	(SBA) IMG_6539,6540.
Cu_ls_38	51,17758099	-56,83723404	-0,009182	Pole Marker	
Cu_ls_39	51,178546	-56,83690597	-3,454359	Boat (recent)	(JBF) IMG_3735 (SBA) IMG_6550,6547.
Cu_ls_40	51,17337001	-56,83688502	9,083201	Mount 1	(SBA) IMG_6455,6456,6458-6462
Cu_ls_41	51,17339498	-56,83674596	8,562972	Mount 2	(SBA) IMG_6463,6464.

Cu_ls_42	51,17898404	-56,836321	-2,670983	Boat (recent)	(SBA) IMG_6543,6545.
Cu_ls_43	51,17960103	-56,83611799	-1,661509	Cache or pole	
Cu_ls_44	51,17988702	-56,83608396	-2,570136	marker Cache or pole	
64_19_11	51,17500702	50,00000000	2,370130	marker	
Cu_ls_45	51,17347503	-56,83591599	4,247021	Cabin floor	JBF-DSC 727-734
Cu_ls_46	51,18009003	-56,83582697	2,311731	Cache/burial	
Cu_ls_47	51,18016999	-56,83570996	2,141387	Cache or pole marker	
Cu_ls_48	51,18023101	-56,83546999	3,665991	Cache or pole marker	
Cu_ls_49	51,18023604	-56,83515801	-1,743062	Pole Marker	(SBA) IMG_6514-6517.
Cu_ls_50	51,180632	-56,83509003	2,590728	Cache or pole marker	(SBA) IMG_6537-6538.
Cu_ls_51	51,181206	-56,83451504	3,650782	Hunting Blind	
Cu_ls_52	51,18121999	-56,83447002	5,029693	Pit Feature	
Cu_ls_53	51,18136701	-56,834264	-1,853661	Large Circular Pit	(SBA) IMG_6558,6560,6561.
Cu_ls_54	51,18151998	-56,83390802	-2,222716	Hunting Enclosure	(SBA) IMG_6565-6568.
Cu_ls_55	51,18152799	-56,83368099	1,9958125	Cache or pole marker	
Cu_ls_56	51,17846302	-56,83363502	8,466879	Caribou sample #7	(SBA) IMG_6433.
Cu_ls_57	51,18159052	-56,8335735	2,927363	Cache or pole marker	
Cu_ls_58	51,18178049	-56,833438	1,0563915	Hunting Blind	
Cu_ls_59	51,18167551	-56,833437	2,7972005	Cache or pole marker	
Cu_ls_60	51,18171897	-56,83342547	3,8316595	Cache or pole marker	
Cu_ls_61	51,18175501	-56,83340548	1,9637285	Cache or pole marker	
Cu_ls_62	51,18175702	-56,83332397	3,621072	Pole Marker	
Cu_ls_63	51,18181201	-56,83310797	4,804803	Pole Marker	
Cu_ls_64	51,1818895	-56,83276699	2,095632	Cairn	
Cu_ls_65	51,18218198	-56,83250204	1,989937	Cache or pole marker	
Cu_ls_66	51,18199297	-56,83240397	-0,38315	Pole Marker	
Cu_ls_67	51,18221199	-56,83205352	-1,9076825	Hunting Blind	
Cu_ls_68	51,18208702	-56,83187096	1,673387	Cache or pole marker	
Cu_ls_69	51,18205902	-56,83163996	1,848303	Cache or pole marker	
Cu_ls_70	51,18215399	-56,83137999	-1,765204	Hunting Blind	
Cu_ls_71	51,18193103	-56,83084301	2,984579	Cache or pole marker	
Cu_ls_72	51,18186498	-56,83069004	2,620836	Cache or pole marker	

Cu_ls_73	51,18165698	-56,830152	-0,557577	Cache	
Cu_ls_74	51,18153096	-56,83003801	3,412438	Cache dog burial	IMG_6607,6608,6609.
Cu_ls_75	51,18157497	-56,83003399	2,860255	Hunting Blind	
Cu_ls_76	51,18046101	-56,82883504	1,874533	Rock pile	
Cu_ls_77	51,18012699	-56,82857503	1,372577	House feature?	
Cu_ls_78	51,18003798	-56,82440403	0,337929	Cairn	
Cu_ls_79	51,18033797	-56,82398904	3,248279	Cairn	
Cu_ls_80	51,18064298	-56,82354304	4,41126	Cairn	
Cu_ls_81	51,18173598	-56,82300501	3,853458	Cairn	
Cu_ls_82	51,18249999	-56,822472	3,05016	Cairn	
Cu_ls_83	51,18313903	-56,82202399	0,008393	Wall segment	
Cu_ls_84	51,18318496	-56,821824	2,762202	Cache or pole marker	
Cu_ls_85	51,18321598	-56,82021501	2,852608	Cache	
Cu_ls_86	51,18326903	-56,82019397	1,968958	Cache	





Name	Latitude	Longitude	Elev	Location	Feature designation	Photo record
Dog_Pen_1	51,0476520 2	-56,98788	6,672489	Dog Peninsula - West Cape	Cairn	(SBA) IMG_6745,6746,6 747.
Dog_Pen_2	51,0549600 3	-56,978022	7,047099	Dog Peninsula - Dog Cove West	Pit feature	(JBF) DSC_0926 to DSC_0929
Dog_Pen_3	51,0550460 3	-56,9779	6,799126	Dog Peninsula - Dog Cove West	Ring enclosure	(JBF) DSC_0930- DSC_0932
Dog_Pen_4	51,0551140 1	-56,976577	4,694651	Dog Peninsula - Dog Cove West	Hunting blind	(JBF) DSC_0935- DSC_0939
Dog_Pen_5	51,054738	-56,975638	3,77618	Dog Peninsula - Dog Cove West	Hunting blind	(JBF) DSC_0940- DSC_0945
Dog_Pen_6	51,0529529 9	-56,975281	2,790222	Dog Peninsula - Dog Cove West	Cache	(JBF) DSC_0946- DSC_0947
Dog_Pen_7	51,0525049 7	-56,975192	-0,63798	Dog Peninsula - Dog Cove West	Rock cluster	(JBF) DSC_0950- DSC_0953
Dog_Pen_8	51,0514009 9	-56,971752	1,767575	Dog Peninsula - Dog Cove West	2 modern hearths	(JBF) DSC_0965
Dog_Pen_9	51,0474510 2	-56,971529	2,681882	Dog Peninsula - Fisherman' s Cove	Blind w bush	(JBF) DSC_0895- DSC_0897
Dog_Pen_10	51,0479250 2	-56,969676	2,349989	Dog Peninsula - Fisherman' s Cove	Cache	(JBF) DCS_088- DSC-090
Dog_Pen_11	51,0479660 1	-56,969653	1,905696	Dog Peninsula - Fisherman' s Cove	Cache	(JBF) DCS_088- DSC-090.
Dog_Pen_12	51,0482749 6	-56,969469	1,438982	Dog Peninsula - Fisherman' s Cove	Cache	(JBF) DSC_08840DSC_0 885.

## Table VII. Dog Peninsula Feature GPS Data

Dog_Pen_13	51,0503260 1	-56,964037	5,824965	Dog Peninsula - Dog Cove	Cache 1x1.5m	(JBF) DSC-0879.
	51,0569049			Dog	Caribou	
Dog_Pen_14	7	-56,95165096	155,91208	Peninsula	sample #5	IMG_6935,6936.
	51,0577870			Dog	Pit House or	IMG_6104,
Dog_Pen_15	4	-56,95047749	3,6216385	Peninsula	Cache	6105,6106,6108.
	51,0538879			Dog	Caribou	
Dog_Pen_16	9	-56,94719003	5,757659	Peninsula	sample #4	IMG_6925, 6927.

## Provincial Archaeology Office 2022 Journal Manuscript:

# On the Question of the Tent Rings, Caribou, and Inuit in Northwest

### Newfoundland

Saraí Barreiro-Argüelles<sup>2</sup>, William Fitzhugh<sup>3</sup>, Brad Loewen<sup>4</sup>, Ben Fitzhugh<sup>5</sup>, Dongya Yang<sup>6</sup>

In the last 15 years, archaeology on the Québec Lower North Shore (QLNS), just northwest of Newfoundland, has revealed an extensive complex of Inuit winter houses associated with Basque sites and material culture. The Basque association of Inuit presence in the 17<sup>th</sup> and 18<sup>th</sup> centuries remains to be fully understood, as does the apparent absence of Inuit summer habitat on the QLNS. As well, associated faunal remains show reliance on caribou in the Inuit diet, which is striking in this region where *Rangifer* populations are historically much smaller than in Newfoundland. An in-progress ancient DNA study undertaken by the University of Montreal, the Smithsonian Institution and Simon Fraser University has found that the DNA of some caribou remains match the Newfoundland subspecies, and not the Labrador-Québec herd as we presumed at the time of excavation. Indeed, a local QLNS source seemed logical because caribou were available on this coast until the middle of the 20th century. Hunters in Rivière-Saint-Paul report regularly seeing caribou into the 1970s, but not subsequently. Today QLNS hunters hunt caribou in central and northern Labrador-Québec when a hunt is even permitted. These interrelated questions led us to ask whether Inuit traveling in Basque *chalupas* may have spent part of their summer in northwest Newfoundland and carried caribou carcasses with them to consume as they settled in for the winter on the QLNS.

This text provides a brief overview of the archaeological survey conducted during 16–29 July 2022 in northwestern Newfoundland from Port Saunders to St. Barbe. Our first goal was to collect shed antlers to enrich our DNA database of Newfoundland caribou. Our second purpose was to search for historic Inuit sites that might have been involved in the acquisition of caribou whose remains occur on 17<sup>th</sup>-century Inuit sites on the QLNS.

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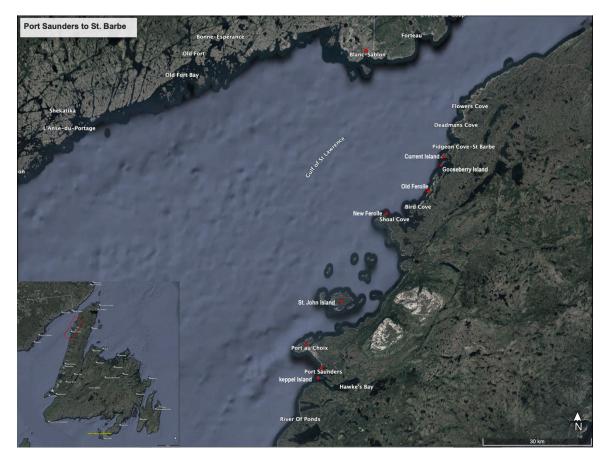
In addition to their relative abundance, Newfoundland caribou as an aggregate herd has been isolated from the Quebec-Labrador herd following the retreat of glacial ice and submergence of the Strait of Belle Isle (about 8,000 years). All caribou in Newfoundland share more biological ancestry with other Newfoundland animals than with their Québec-Labrador cousins. So, although caribou may occasionally have crossed the Strait on the ice or swimming, there has not been enough genetic contact to blur the geographic boundary (Wilkerson *et al.* 2018). Based on this genetic distinction, we hypothesized two alternative scenarios to explain the presence of Newfoundland caribou at 17<sup>th</sup> century Inuit sites on the Lower North Shore: 1) direct provisioning by Inuit hunting animals in northern Newfoundland, and 2) exchange of skins, hides, baleen and feathers from Labrador and Quebec for Newfoundland caribou and other products with Europeans or Indigenous people present along the west coast of Newfoundland.

#### Objectives

Our fieldwork in 2022 was directed at the coastal region from Port Saunders to St. Barbe (Fig. 1), with three main objectives: 1) surface-collecting caribou samples; 2) investigating tent rings reported on Old Ferolle Island by Callum Thompson in 1993 and 1995; and 3) searching the coast for unreported tent ring sites.

The first objective of surface-collecting caribou remains was in support of the QLNS caribou ancient DNA research project, which aims to determine the genetic identity, geographic stock and sex of archaeological samples to better understand Inuit hunting strategies and seasonality. We organized a survey to find recent caribou tissue such as shed antlers, excrement and hair. Informal conversations with local people who fished, trapped, and hunted were key to gaining insights into caribou behavior that residents have built over generations. We visited locations frequented by caribou during the summer season, which coincides with Indigenous and European occupation.

Our second objective was to record and assess tent ring features reported in 1993, 1995 by Callum Thompson on Old Ferolle Island, which have not been subsequently investigated. Our purpose was to ascertain whether these structures were occupied by Inuit as suggested by Callum Thomson, by other Indigenous groups, or by Europeans. Old Ferolle was chosen for its ease of access and its proximity to Port-au-Choix, Pigeon Cove, New Ferolle and Current Island where caribou are present during the summer. We had also planned to investigate the tent rings reported by John Kilmarx (1987) on St. John Island, but weather and logistics thwarted this plan. Kilmarx reported "few associated artifacts" at the two sites, but felt that these objects were "probably Dorset" in cultural affiliation. Similar reasons prevented us from investigating tent rings reported on Keppel Island (Fitzhugh 1982). The tent rings at Old Ferolle, St. John Island and Keppel Island are the only ones currently known in Newfoundland (Stephen Hull, pers. comm., November 2020). Notably, Latonia Hartery did not report any Inuit-style rings during her research in the Bird Cove-Plum Point region (Hartery 2004). Our third objective was to explore the coast for any other unreported tent ring sites.



*Fig. 1. Map of the coastal region from Port Saunders to St. Barbe with the sites mentioned in this rapport (Google Earth Pro image edited by Saraí Barreiro Argüelles).* 

### Methods

We carried out pedestrian surveys in Eddies Cove West, Old Ferolle Nord (EgBf-4), Current Island, Pigeon Cove, and New Ferolle to obtain contemporary caribou DNA samples and look for signs of historic Inuit camps or hunting. All these sites are strategic areas known for their hunting resources and European presence. Transects spaced at 5 to 10 meters between surveyors along the coastal zone allowed us to record a range of historic and possible prehistoric structures.

We located the tent rings at Old Ferolle South (EgBf-5) with the help of a topographic map produced by Callum Thomson (1995). All the reported tent ring features are still visible. We recorded them photographically on the ground and from the air using a digital camera and a DJI Mavic Pro drone. Measurements and other characteristics were noted with standard field instruments. We processed the photos to produce detailed drawings of each tent ring feature using Adobe Illustrator.

### Surveys for Caribou DNA Samples and Unexpected Finds

We collected a total of nine antlers and bone samples at Point Riche Peninsula, Port Saunders, Eddies Cove, Dog Peninsula, Bird Cove, Old Ferolle (Plum Point) and Current Island. All samples were surface-collected except samples 2 and 3 that local residents donated. We removed fragments of 10 cm to 15 cm for DNA extraction and analysis and left the rest of the antlers in place (Fig. 2).



Fig. 2. Bella Ferrin collecting Caribou Sample #8 at Current Island (photo: Saraí Barreiro Argüelles).

We encountered several unexpected archaeological features during our surveys. At Current Island we recorded more than 85 stone features. Current Island, just south of St. Barbe, has an irregular shape about 2 kilometers long and half a kilometer wide. French seasonal fishermen fished these waters in the early 1800s; English settler occupied Current Island around 1871 (Thornton 1979) when a burial ground was reported here (NHA 1872:652). On the east side of the island, we found several elongated stone mounds that could be part of this cemetery. Along the south and west shores are numerous small stone cairn markers that indicate an intensive phase of fishing or seal hunting activity. The markers are conical, vary in height from 40 to 60 cm, and have a vertical cavity at the top for inserting a wooden pole, some of which were still in place (Fig. 3). Most of these markers are found in pairs, possibly for alignment purposes to position offshore locations or to guide approaching boats. Blinds for hunting birds, seals or caribou and caches for storing game are found in the same sector (Fig. 4). Other less common structures include dog burial cairns (Figs. 5 & 6) as well as modern campfires and tent sites.

On the northwest shore of Pigeon Cove Point we found six features, two of which are dog graves and one large rock pile that might be a human grave mound. Another large mound was found associated with a boulder enclosure and caches just north of at Jim Muse Cove, north of the New Ferolle light, as well as other markers, blinds, and caches. All these structures are at the shore, usually on the lowest beach ridges or wave-cut benches.



Fig. 3. Large boulder mound at Pigeon Cove (photo: Saraí Barreiro Argüelles.) Fig. 4. Hunting blind on the shore north of New Ferolle near the town dump (photo: Ben Fitzhugh).



Fig. 5. A dog cairn burial at Pigeon Cove (photo by Saraí Barreiro Argüelles). Fig. 6. Detail of a canine skull visible between the rocks, Pigeon Cove (photo: Saraí Barreiro Argüelles).

### Investigating the Tent Rings at Old Ferolle Island

Work at EgBf-5 at the south end of Old Ferolle Island focused on investigating the tent rings reported by Thomson (1993, 1995). These tent rings are located on a natural marine-deposited surface of limestone slab rock bordered by three pavement lines, each about one meter wide, that Thompson interpreted as pathways for transporting fish, possibly by wheel- or hand-barrow, from the old wharf to suitable areas for cutting stage or drying fish (1993 :13). We documented tent rings to identify their characteristics and possible cultural affiliation with European fishermen or to Inuit or other Indigenous groups (Fig. 7). Our survey was facilitated by a topographic map created by D. Burt for Jacques Whitford Environment (Thomson 1995). After identifying the tent rings visible on the cobblestone flake surface, we divided into two teams. Team 1 followed the topographic map with the location of the circles and took GPS coordinates and measurements of each feature. Team 2 focused on photographic recordings of each tent ring and marked them with flagging tape after coordinates were taken. A drone obtained a plan view from which we were able to draw the rings. We identified nine tent rings; Thompson reported three rings during the preliminary survey in 1993 (F20, F21, F24), and six others in 1995 (F25, F26, F27, F28, F30 and F31).

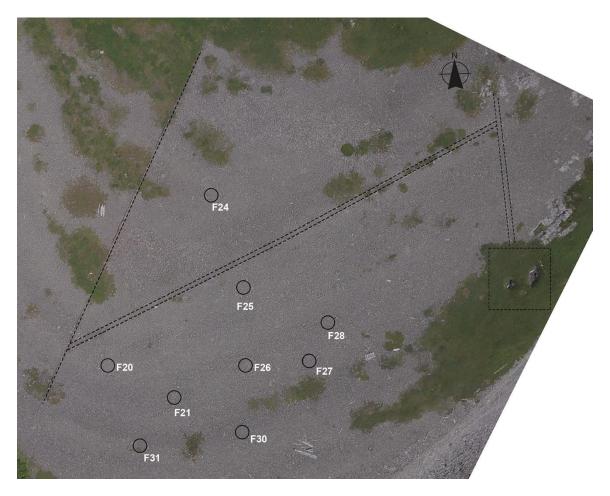


Fig. 7. South end of Old Ferolle Island (EgBf-5) and the location of the fish-drying flakes and the tent rings found on the flake surface. The linear features are paving stone pathways, possibly for wheel-barrows or carts (photo Ben Fitzhugh information, Saraí Barreiro Argüelles drone)

Each tent ring feature consists of stones larger than the natural flake surface stones. The features can easily be identified as surface elements placed on the natural flakes and are not embedded amongst these. They stand out from the surface flakes that are evenly distributed and packed into place, whether naturally or from human activity. The rings typically measure four to five meters across, and the large flat stones that form the features are arranged in a roughly circular shape. However, their current layout is often irregular, and it is possible that some stones have been moved by their occupants or others at a later time, either purposefully or inadvertently. There are possible hearth features inside and outside the rings, but these have no regular structure and most consist of a cluster of a few rock slabs.

The tent rings are spaced at distances of 10 to 15 meters, with no overlapping rings and no sign that any stones were taken from one ring to create another. It is thus possible that all the tents existed at the same time. Only Feature 24 is offset from the main cluster of rings, on the opposite side of a pavestone pathway and at a higher elevation.

We excavated two tent rings, identified as Features 25 and 27. We only had time to excavate inside the rings. We divided each feature into six areas using measuring tapes and then turned over each surface stone looking for small artifacts, digging a few centimeters beneath the surface rocks before returning

them to their original position (as well as possible). No deep or vertical excavations were made, and no stones were moved outside the structures. In Feature 25 (Figs. 8 & 9) we found small tube fragments of one white clay pipe, while on the surface of Feature 27 lay a piece of insole shoe leather with stitching holes, and two local chert unifacial core fragments (Figs. 10 & 11). At the conclusion of our Old Ferolle work, we spent a few hours clearing the encroaching vegetation from the French bakery site (BgEf-4) at the north end of the island.

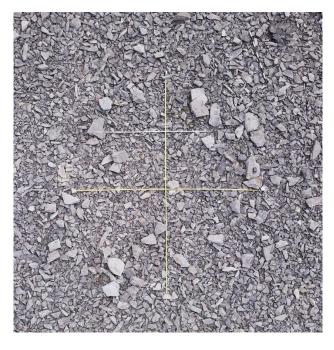


Fig. 8. View of Feature 25 before excavation (photo: Ben Fitzhugh).

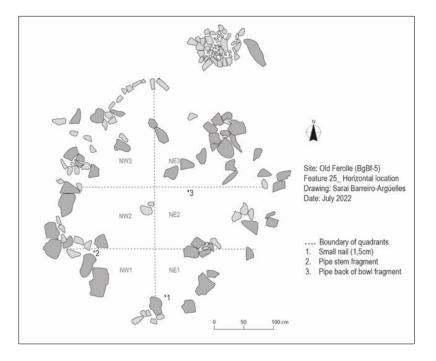


Fig. 9. Quadrants excavated in Feature 25 with the location of the objects found.



Fig. 10. View of Feature 27 during excavation (photo: Ben Fitzhugh)

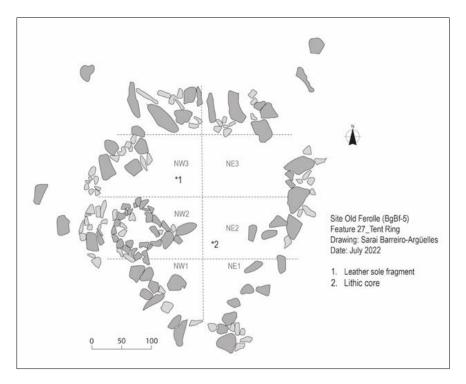


Fig. 11. Quadrants excavated in Feature 27 with the location of objects found.

#### Discussion

The stratigraphic position of the tent ring features is later than the packing of the natural surface flakes, indicating their emplacement in a specific area of lesser human traffic. Our limited understanding of the natural and/or human packing of the surface flakes, and of the fishing station's layout and traffic areas, makes it difficult to ascertain whether the tent rings are contemporaneous with the station or posterior to it. Some stones may have been moved a short distance from their original positions, without leaving the area of their tent ring.

Due to their irregular outline, the features do not readily conform to traditional tent rings associated with the Inuit (round or D-shape rings of tent-flap hold-down rocks with a door area opening downslope toward the shore and a line of rocks marking a rear sleeping area) or other Indigenous groups. While the outlines may represent an historical adaptation to a new tent shape, household organization, or other material culture, the lack of comparative examples makes any interpretation provisional. The tent rings recorded at four sites between St. Barbe and Port Saunders – Old Ferolle Island, Keppel Island, and two sites on St. John Island – are the only such features known in Newfoundland. The cluster of nine rings within the confines of the flake drying surface at the fishing station on Old Ferolle militates for an association between the unidentified tent occupants and the French or Basque fishing crews.

Our work at the Old Ferolle Island (EgBf-5) fishing station did not yield definitive answers to the question of the tent ring occupants' cultural affiliation but determined that they were occupied after the creation of the paved pathways and the gravel cobblestone fish-drying flakes on which the tent rings are found, and that the occupants had access to European materials. The few artifacts found in Features 25 and 27 are of European manufacture, except likely for the two fragments of local chert cores. None of these objects is diagnostic of a particular group or culture and none was found in a hearth or other feature ensuring their association with the ring, although this seems likely.

While preliminary in nature, our investigation showed that significant information on architectural tent ring variability can be obtained through vertical drone photographic to record and produce maps of visible elements. The plan views reveal specific shape characteristics that might, in future study, enable the cultural identification of these occupants on an historical fishing station.

#### Conclusion

Consultation of previous archaeological reports and the help of the PAO has revealed four sites with tent ring components on the northwest coast of Newfoundland. None of these sites readily corresponds with traditional Inuit-style tent or artifacts, and even though we could not visit St. John Island to investigate its rings, we recall that Kilmarx reported associated Dorset artefacts. The tent rings at Old Ferolle contain information to suggest that further excavation may identify their builders, who seem likely to have been Indigenous people attracted to this large fishing station, rather than European. The seasonality of the summer tent rings complements that of the Inuit winter houses found on the Québec Lower North Shore (QLNS), while the Newfoundland origin of some caribou consumed on the QLNS also suggests a cross-gulf dynamic for 17<sup>th</sup>-century Inuit. The results of our caribou sampling will help advance knowledge of Inuit hunting strategies and the locations where Inuit obtained the caribou found in their Lower North Shore middens. More investigation is needed into the tent ring features of northwest Newfoundland, to shed light on Indigenous relations with Basque or French seasonal fishing crews operating on this coast in the 17<sup>th</sup> centuries.

**Acknowledgements** Our project was supported by several people. Special thanks go to the Colburn family who hosted us at Lushes Bight at the beginning and end of fieldwork. In Port Saunders Bill and Ilene Lowe graciously hosted us and taught us local history and caribou lore. Ben Fitzhugh shared field skills, mapping, and drone expertise. Smithsonian interns Bella R. Ferrin and Whitney Hadley-Salay provided invaluable survey assistance. The PAO provided permits, encouragement, and funding.

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View of the ancient cemetery and Old Ferolle 'bakery' site (EgBf-4) (photo: Saraí Barreiro-Argüelles).

# Newfoundland Artifact Finds (by Saraí Barrieiro-Argüelles)

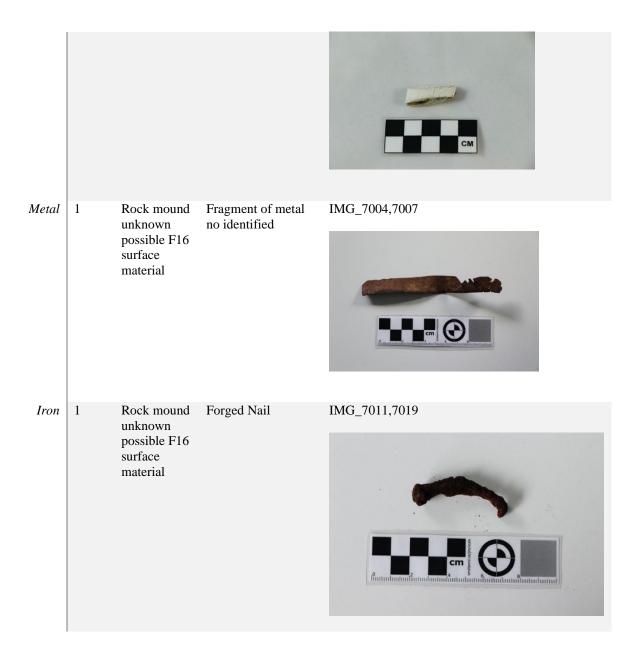
Material	Qt y.	Provenience	Description	Photo record
Pottery	1	Surface finds	Fragment of Rim sherd Whiteware	IMG 7045,7046,7048.
Glass	3	Surface finds	Fragments of soda bottle	IMG_7033,7034,7037,7039.
Glass	1	Surface finds	Fragment of glass lid	IMG_7040,7042.
Pottery	2	Surface finds	Fragments of teapot	IMG_7020,7022,7026,7029,7032.

### **Current Island**

# Old Ferolle (EgBf-5)

Material	Qty.	Provenience	Description	Photo record
Clay	3	Feature 25 quadrant NE-2 5-8 cm depth	Pipe fragment (back of bowl)	IMG_6950, 6952, 6953,6956, 6958,6959.
Clay	3	Feature 25 quadrant NW-1 5-8 cm depth	Fragmentary stem pipe	IMG_6967,6964
Iron	1	Feature 25 Quadrant NE-1 5-8 cm depth	Nail	IMG_6969,6976
Leather	1	Feature 27 Surface finds	Insole shoe leather with stitching holes	IMG_6984,6985,9433

Lithic	1	Feature 27 Surface finds	Fragment of local chert (?) Limestone	IMG_6987,6988,6992,6993
Lithic	1	Feature 27, surface finds	Fragment of local chert (?) Limestone	IMG_6994,6995,6997,7002
Pottery	1	Earthenware fragment.	Surface finds between the slabs of Feature 6 (pathways).	IMG_9473,9475,9476.
Bone	1	Seal (?) bone fragment	Surface finds	IMG_9478,9479,9480

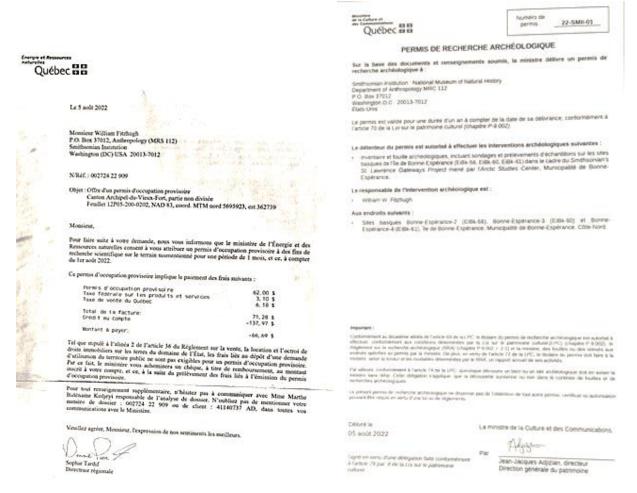


# Part II. Testing a Basque Whaling Tryworks at Bonne Espérance-4, St. Paul River, Quebec



Saraí Barriero-Argüelles and Francisco Rivera Amaro excavating Bonne Espérance-4 during the last day of the dig.

# Ministry of Energy and Natural Resources (MERN) and Ministry of Culture and Communication (MCC) Permits



### **Field Team and Acknowledgments**

Our field team for the QLNS consisted of Saraí Barreiro-Argüelles, Francisco Rivera Amaro, Perry Colbourne, and William Fitzhugh. Although we arrived on site in Quebec on 29 July, we were not able to begin excavations until 6 August due to a delay in receiving our permits. Work then took place until 12 August when we were obliged to shut down to meet other scheduled commitments. We thank the MERN and MCC officials (especially Olivier Roy) for expediting our permit requests, and for the strong endorsements by the St. Paul Municipality administration and Whiteley Museum. Our project was made possible by support from the University of Montreal, Canadian SSHR research agency, and Smithsonian Institution. Local support was provided by the Whiteley Museum, the Bonne Espérance Municipality, and the Centre de Services Scolaire du Littoral, Québec. Garland Nadeau and Eileen and Piercy Schofield were invaluable supporters, hosts, and information sources. Perry Colbourne provided transportation and boating assistance, and with help from Garland Nadeau's freezer and fishing rod, kept us well fed and nourished with stories and bakeapples.



Dinner upon arriving in Quebec at Florence Hart's home in Brador: Florence, Perry, Francisco Rivera Amaro, and Saraí Barreiro-Argüelles. (right) Excavating the baleen pit at Bonne Espérance-4 (EiBk-61) with film photographer Louise Abbott and Whiteley Museum Board Chairman, Garland Nadeau. (photos: Saraí Barreiro-Argüelles, Francisco Rivera Amaro)

### **Project Description**

In 2019 underwater divers from the University of Montreal taking part in our St. Paul River project discovered Basque tiles and ballast stones along the west shore of Bonne Espérance Isle, on a narrow channel between B.E. and Grand Isle. A shore survey by Brad Loewen discovered the source of the tiles and ballast at two small trywork furnaces (BE-3, EiBk-60; and BE-4, EiBk-61) above the ledges on this protected island channel, and test excavations revealed extensive archaeological deposits. A test pit at BE-4 produced tiles, charcoal, baleen, animal bone, and seeds—an unusual inventory for an industrial whaling site. We returned in 2022 to explore BE-4 more fully and determine whether it contained evidence of domestic activity as well as blubber processing. We were also curious if we might find traces of Basque contact with the nearby Labrador Inuit site we had excavated previously on the northern shore of Grande Isle, less than a kilometer away, where we had found Basque tiles, iron spikes and nails, and a large sawn plank from a European ship. Our intent in 2022 was to conduct further tests to determine the size of the BE-4 site, the natural of the activities carried out, search for datable materials, determine the site's and collections' conservation and preservation status, and see if evidence of Inuit contact was present.

## Quebec Lower North Shore Field Diary (William W. Fitzhugh)

**29 July (Friday) St. Barbe to Brador** Ben met his bus driver at 7:15 and I paid the Dockside Motel bill, nine days and \$1473. Our stay worked out well, and we had nice service with clean towels and trash removal. Most clients are overnighters getting off the ferry and heading south in the early morning hours. We got on the ferry with plenty of time for its 10:30 departure and while en route, sat with a couple from Vancouver who were on a bus tour that will take them to Red Bay for a day, then back to L'Anse aux Meadows and other locations. The ferry ride was smooth, with a northeast breeze that grew

stronger as we approached Blanc Sablon, where Perry spied a new tower and guessed that we would have better internet and cell phone service than in previous years. On shore, Saraí and I made a quick trip to the L'Anse au Clair Home Hardware store where we bought a roll of 1/8" hardware cloth to use along with our ¼" screen. The man who helped us find the screen immediately recognized we were archaeologists, whom he knew about from past diggings at the Blanc Sablon River mouth. He is part Inuit, a Rumbolt, and—he was proud to tell us—the owner of the store.



Approaching the Blanc Sablon ferry terminal and boat dock; off-loading the ferry Qajak at Blanc Sablon.

We arrived at Florence Hart's and found Perry and Florence deeply engaged in 'catch-up'. She had met Saraí previously, still mentions 'floies' in every other sentence (they greeted us as soon as the car door opened), has trouble gardening because she needs a hip operation, and is still a great conversationist. She and Perry have a close relationship after all the years of hospitality she has given our crews, and especially because Perry often got her out picking bakeapples (they are not quite ripe yet, though Perry has his eye on some locations). We later went on to St. Paul to launch the outboard but returned to Florence's for a dinner of New Ferolle halibut cooked by Perry and spent the night telling stories and hearing local gossip, for instance about her neighbor Clarissa Smith's new book project, following her classic first book, Broken Wings, about growing up in Brador. En route to St. Paul River we stopped at the Middle Bay Museum café for lunch, where the cook told us she was not pleased with Garland and Eileen for letting her go as cook at the Whiteley Museum. She indicated that this summer has brought lots of visitors to the museum and restaurant, including a bus tour. At the Whiteley Museum we met Garland and the Montreal film team, Louise Abbott and her husband Niels Jensen, as well as my SSHRC Smithsonian post-doc, Francisco Rivera, who has been doing interviews in St. Paul for two weeks already, supporting his industrial archaeology project on the Whiteley fishery and the guano plant across from the fish plant. We decided to home-base at the teachers' residence in town rather than at Eileen's cabin on Grand Isle opposite our tryworks site, and to make daily speedboat runs to and from Bonne Esperance Island. The residence will be better for supplies and communications, which can be had at the Museum. It was low tide and too shallow to launch the boat at the St. Paul boat ramp, so we did that at the Salmon Bay fish plant, and Garland and I drove the boat back to SPR, which reacquainted me with the landmarks and shoals en route. Garland advised us to hide our gas in the boat to avoid having it stolen, as has been happening recently because of the \$2.45/liter price at the pump. After dumping our gear at the residence, we returned to Brador for dinner and a night with Florence.

In the middle of our boat work I had a frantic call from Nancy about an interview Charlie Morrow did with me for his podcast series titled "Immersive". My talk was scheduled to be aired to some 2000 destinations on 1 August—Monday; and here it was, Friday, and the interview had never been 'approved' by NMNH. I did the interview in 2019 and had not heard it or known how and when it might be broadcast until Thursday, when I got a message from Charlie announcing the schedule. I was one of about thirty or so others in fields across the arts, music, and science that Charlie had recruited for interviews. I had not been able to open the link to the interview and had forward it to the ASC team for their possible interest or (doubtfully) edification. Stephen Loring was the one who blew the whistle by asking if it had been cleared by NMNH brass, and Nancy frantically called me to see what could be done—cancel, postpone, or let it run and have me keel-hauled by the museum. Fortunately, I was able to receive her call and asked her to get Charlie (in Finland) to put it on hold. She had Charlie send me another link, which I was able to open at Florence's in the evening. I found the hour-long interview without any problems for NMNH other than the imminent deadline. We'll see what NMNH decides about the Monday airing. Hopefully they will let it happen.



Dinner at Florence Hart's with Perry, Francisco Rivera Amaro, and Saraí (photographing); we visited the Hart Chalet Inuit House 3 and found it grassed in.

**30** July (Saturday) Brador to St. Paul River Rain and fog this morning. We said goodbyes to Florence and paid a visit to her Hart Chalet site and its Inuit village en route to St. Paul. The site is becoming heavily over-grown over by encroaching spruce and grass. The Inuit houses look much larger than I remembered, and there is still much excavation that could be done on the interiors of Houses 1 and 2. Florence has not done more to the cabin but talks of doing new windows upstairs. The rest of the morning was spent getting settled in at the St. Paul teachers' residence, organizing our kitchen and food supplies, and catching up on emails at our comm center in the Whitely Museum while Perry scouted out potential bakeapple picking locations. "Some very good prospects," he noted, but most are a week from ripening. Good news came from NMNH in a short message from Jim Wood saying my interview with Charlie Morrow could be aired as scheduled on Monday. Yesterday we met Louise and Niels Abbott, a film-making team who are here doing a promotional piece for the Whitley Museum. They filmed our boat launch and want to shoot us working at the Basque site. Louise knew Igor Krupnik from an earlier project. Although fog prevented us from getting to Bonne Espérance ('Bony') today, I made preps for a visit tomorrow to clear vegetation, decide where to excavate, and put in a grid. When I went over to Garland's to make wood stakes and borrow his limb loppers and weed whacker, he loaded me down



with crab claws and a halibut steak "so I can make room in my freezer for other stuff," he said. He had spent the morning bottling lobster meat provided by Eileen's fisherman husband, Piercey.

Bonne Espérance-4 (EiBk-61) looking southwest as we began to clear vegetation. Trywork platforms are at the south (left) end of the site. 'Chenal Scallop' separates Bonne Espérance ('Bony') Island from the southern end of Grand Isle to the right.

**31 July (Sunday) St. Paul River** The fog was still hanging on the hills during breakfast, for which Saraí made an oatmeal and apple crumble. Garland showed up in time to pitch in a jar of lobster. There are five more days before the lobster season closes, so everyone is out at their traps. We took the speedboat out to Bonne Espérance to check out the Basque trywork sites and decide which to excavate, and while we were there for three hours Perry checked out bakeapple prospects. We landed at the northern tryworks site (Bonne Esperance-4, EiBk-61), the site that produced organic food remains in a small 2019 test pit. The weather was beautiful and there were no blackflies, only the occasional 'stout'. Using Garland's weed-whacker, we cleared the 1-2 foot high vegetation, mostly grass, horse tail, ground birch, and other low plants from the site area, which is rocky, uneven, full of gullies and small boulders, and 3-4 m above sea level. We would never would have found the site had it not been for Brad Loewen and his U. Montreal divers, Saraí included, who found, just a few meters off-shore, tiles under water at BE-3 and ballast at this site, BE-4. That led Brad to poke around on land, where he found small try-works completely covered with ground vegetation and almost indistinguishable from the surrounding steep

shoreline. Apparently, what was appealing to Basque whalers about this narrow ledge was the shoals to the south that kept Gulf seas from rolling in, and the narrow but deep channel and cliff-like ledge that allowed boats to come ashore at any tide. In 2019 we dug a few test pits and realized that BE-3 and 4 were small-scale versions of the massive Red Bay tryworks. Adding to their uniqueness was recovery of organic food remains in BE-4. We laid out a 25 m grid that turned out to be perfectly north-south along the shore, encompassing the areas tested in 2019, tryworks at the southern end, and a possible domestic area at the northern end of the ledge. As we do not have our archeology permit yet, we did not dig but rather prepared the beginnings of a topographic map. Lunch was on the high rock above the site. Several boats engaged in family outings passed by waving. All seemed peaceful for a tranquil family outing—or an archaeological venture—until on the return to St. Paul we ran into a storm that soaked me thoroughly as the designated driver facing the rain.



Bonne Espérance-4 (I-r) south, central, and northern areas. The south end features a wall parallel to the shore Locus 2; the central area has a mound perpendicular to the shore and a baleen fire pit (Locus 1); the northern area might be a residential/general work area.

Bonne Espérance 4—which I guess we should start called "Bony-4" in keeping with local vernacular—is located on the western side of Bonne Espérance Island, about a half-kilometer north of the Whiteley fishery site (BE-1). The location is not an obvious one and would not have been found had our divers in 2019 not found a small ballast dump a few meter offshore. The vegetation is ankle-to-knee-high, consisting of dwarf birch, berry bush, bakeapples, grass, horsetails, and a few pushki plants which create a thick mat or cushion resistant to trowels and requires chopping with trenching shovels. Once into the humus, you find a tangled mat of roots continuing down into peat subsoil that can be 20-30 cms thick. In Locus 1, where our 2019 test pit was located, this is followed by a darker humic soil with more sand grains and stained with charcoal. This was the layer in 2019 that produced a fox jaw, tile fragments, nut shells, and other food remains. The site is situated on an uneven 5-6 m. wide ledge that runs along the shore for a couple hundred meters, backed by a steeply rising hillside. On the shore side the granite ledge drops sharply about two meters to the high tide line and continues underwater to a depth of about 15 m. The steep ledge and deep water make the location ideal for bringing a fairly large vessel to shore, creating gangplank access to the working surface of the ledge.

The rest of the Sunday passed quiet and sunny. While we were out Garland dumped a load of fresh mackerel in our fridge, which Perry cooked up, while also introducing Saraí and Francisco to Christine

Wilson's dessert bakeapple recipe with butter and sugar. Perhaps tomorrow we will find out about our archaeology permit.

1 August (Monday) St. Paul River This was a frustrating day: the weather was fine for work but we had no word on our MERN (Quebec Ministry of Energy and Natural Resources) or MCC (Ministry of Culture and Communication) permits. MERN has not responded to any of our requests for information on status, and MCC needs their OK before authorizing an archaeological permit. MERN is the 'bad boy' on everyone's list in Canada these days, especially in rural areas where everything you do is related to land and natural resources. Since we have only had electronic responses from MERN, I asked MCC if they would intercede and give us a report. Nothing came back from MCC today, and so we sat more-or-less in limbo waiting on a response that did not come. Perry showed me I could use his iphone as a 'hot spot' to reach the internet, and that kept me in touch with the world from our residence. I also discovered many of my pictures and other files were no longer on my laptop as they have always been, and it took calls to the Smithsonian help desk (Joshua Pincus) to find that my pictures and most other files have been uploaded to the cloud and no longer on my laptop. This was very disturbing, because I am often not working on the SI network when away from DC. It turns out I can download files back to my laptop and keep them there, but doing this through Perry's hotspot costs him gigabytes, and picture files are large. I had to do this for my current field pictures, and it hit his account in a big way—not costing him money but using up much of his quota for this period. Something that was **not** frustrating today was being interviewed on film by Louise Abbott for her media work promoting tourism and the activities of the Whiteley Museum. Dinner was more of Garland's mackerel!

**2** August (Tuesday) St. Paul River Another nice day lost to bureaucracy, but we did get some news from Olivier Roy, who has been helpful to me with MCC business in recent years. I had asked 'someone' at MCC, urgently, to try and find out what the situation was at MERN and why we have heard nothing from them except mechanical responses. Olivier responded at length after succeeding to reach MERN:

I spoke earlier with the person responsible for analyzing your authorization request at the MERN. Your application is currently at the consultation stage with the organizations concerned by your project (other ministries, municipalities, indigenous communities, etc.). These organizations have until August 16 to respond to the MERN and express their concerns, if any. I have been informed that the Municipality of Bonne-Espérance has already responded favorably, but a few other organizations have yet to respond. If everyone responds before August 16, the MERN authorization process will be accelerated.

At this point, the only thing in your power would be to contact the administration of the Municipality of Côte-Nord-du-Golfe-du-Saint-Laurent where your intervention in Belles Amours will take place, in order to inform them of your project and ask them to respond quickly to the MERN's consultation letter. For others, we can only hope that they will provide a quick response, but it would be difficult for you or the MCC to speed up the process any further.

For our part, I have validated with my authorities their position in regard to this situation, and I can confirm that we will unfortunately have to wait for the reception of authorization from the MERN before being able to issue your permit. We are aware of the issues this causes, but we must respect the legal framework and the administrative process in place.

Cordialement, Olivier Roy

Although there is no way I can wait until 16 August, I am hoping that eliminating the Belles Amour dig from the project may clear the way for approval of the Bonne Espérance work. MERN seems to have approval from the St. Paul municipality for this, so maybe this is a way to expedite MERN approval and MCC's concurrence. We will see how this goes tomorrow, when some of Garland's and Eileen's contacts may be able to get involved. Otherwise, I spent the day documenting all my Nfld project pictures. Saraí worked on the caribou samples we will send to Vancouver to Dongya Yang for DNA work, and profiles of the Bonne Espérance northern tryworks. Perry cooked up a beef stew and did a bit more bakeapple prospecting.



The town of St. Paul River looking east.

**3** August (Wednesday) St. Paul River Another beautiful day for digging, with light winds offshore—but no permit. Garland and I met with Leslie Woodland at the municipality office at 9am for a status report and found some wheels are turning with the MRC contacts. Perhaps as a result, I received the following email from Marthe Kedjeyi in the MERN office:

Hello Mr. Fitzhugh,

My name is Marthe, I am pleased to inform you that I am in charge of processing your request to use public land for archaeological research. The processing of your request will go through different steps, including territorial analysis and consultation with our partners and other stakeholders, in order to identify potential use issues on the territory. We will do our best to respond in a timely manner to allow you to complete your work. We have been informed that the Belles Amours (Brador) site is removed from your project this year. I would like to have your confirmation on this. Feel free to contact me if you have any questions. Best regards, Marthe Bidéname Kedjeyié.

Yea! This is the first human being to respond to my many entreaties! I answered immediately that I am canceling the Belles Amours project to speed up the review process and hope to have a positive response from MERN soon. I spent the rest of the morning working on a statement on the Lower North Shore Inuit sites and their caribou samples for Brad Loewen's article on caribou DNA and sent it off to him at noon. I also sent a copy to Anja Herzog asking her to collaborate on the article by discussing the bone sampling provenance. As part of that documentation, Anja had prepared a detailed excel chart describing the samples from Petit Mécatina, Grand Isle, Little Canso Island, Belles Amour, and Hart Chalet.

Bakeapple 'mania' is beginning to manifest now that the berries are nearing ripe. Garland took Saraí and Francisco out to inspect a cove he wanted to assess, and Perry went to bog spots near the fish plant, returning with a sunburn and a report that people are now picking at sites close to the road but have not ventured further inland. Some are reporting the presence of a marauding black bear to frighten pickers off the bogs. Last evening I totalled up the expenses for the Newfoundland project, getting a number of about \$5100 Canadian. Some of that was Perry's pre-season gasoline. The trailer was \$5809.25 Can. \$5100 divided by 6 people is ca \$850 for on the ground expenses for 14 days.

I had an interesting discussion on the town dock with Piercy Schofield, Eilene's husband, about lobster, caribou and lots of other topics—all the time Louise Abbott's camera on a tripod was ticking away. She had just finished interviewing him and wanted me to carry on the conversation. We discussed the last time anyone killed a caribou here in St. Paul which was 'about 40 years ago', the fact that most people who go north to hunt the Leaf River or George River herd, whose animals have different colorationmore brown in the Leaf River herd. We have already heard from Garland that bakeapples always ripen at exactly the same time every year regardless of whether the winter or spring was mild or cold. Recently the cod stock in the northern Gulf crashed, and another moratorium is in effect. The lobster catch has had a hugh surge, nearly doubling, which fishermen attribute to warmer ocean waters around Newfoundland. Many fishermen have replaced their old 'Nova Scotia' oak hoop-topped traps with hard wire traps that hold more lobsters and keep them alive for longer periods in the trap—up to 3-4 days with no food whereas the wood traps need to be emptied avery couple of days. But now Piercey says many are going back to the old wood traps because the metal ones rust and are more expensive. All agree there is less solid sea ice and shorter winters here and in Nfld; harp seals are pupping off Labrador and not in the gulf; and there are cases of harp white-coats drowning when the ice melts before they can swin and feed. Anja Herzog mentioned in an email that we might be able to find caribou pelts—not only bones and antlers—that could provide hair for DNA samples. Piercy provided us with nine beautiful, hard-shell, one-pound lobsters for \$100.

**4** August (Thursday) St. Paul River Another calm day when we could be digging; but here I am, sitting with my laptop using Perry's phone as a 'hotspot'. Fortunately, he has a large data limit, but when he is off berry-picking I have to move to the Whiteley Museum to use their network, which has no hotspot charges. I spent most of the morning there, pulling pictures from my 2018 and 2019 files to make them available to Louise Abbott and Niels Jensen for their media project with the Whiteley Museum. The project is to create a web presence for the museum following three themes: Inuit-Basque connections; seasonal movements of people and animals; and the Whiteley Fisheries history and legacies. Louise reminds me of Susan Rowley's mother—very British-looking and super-directed at whatever she does. She is especially known for her films and books on James Bay, Memphramagog landscapes, and Quebec, which began 30-40 years ago here on the LNS with a book titled *The Coast Way*. That's how she got to know Fred Bruemmer, who also began his photographic career here with his photo essay on the harp seal fishery in Tabatiere.

It's interesting how there are waves of activity like what occurred on the LNS in the 1950s-60s when Bob Bryan got the Quebec-Labrador Foundation started and the Canadian National Film Board made a film about the French-speaking town, Tête-à-Baleine, east of Petit Mecatina. After many quiet decades, now things are picking up again with the energy provided by Garland and Eileen Schofield and movers and shakers on the MRC administration—all focused on tourism development in anticipation of the completion of Highway 236 which will open up a circuit of the Quebec-Labrador lands north of the Gulf. All this is tuned into the current economic development program called 'Expedition 51' named after the coast's latitude coordinate.

I also had a chance to chat with Niels Jensen and discovered we had many mutual friends from McGill University where he was in the anthropology graduate program, having been attracted by Professor Bill Kemp who enticed him by demonstrating how to paddle a kayak while standing on his classroom desk. Niels ended up working on contract projects gathering data for various land claim studies, mostly along the east coast of Hudson Bay, so he and I not only had friends like Kemp and George Wenzel, Fumiko Ikawa-Smith, and others, but also share geographic memories. He was on the HB east coast about eight years after I was there in 1967 with Elmer Harp.

By the end of the day I began to think we might have to leave St. Paul without any new archaeological evidence. The next couple days will be windy and possibly wet, and ten days from now Saraí needs to be in Deer Lake for her flight to Montreal.

**5** August (Friday) St. Paul River Guess what!!! The MERN permit was issued mid-day today and was quickly followed right after by an archaeology permit from MCC (Ministry of Culture and Communication). Amended at my request, the permit is only for the Basque sites on Bonne Espérance ('Bony') Island. We had to forego the boulder pithouse dig at Belles Amours to facilitate the MERN review process because it involved a different local administration (Lourdes-Blanc Sablon) as well as an indigenous review. So after weeks of communications and a week of local politicking by local leaders, help from Olivier Roy, and others, we are finally authorized. In the process, we learned that MCC is trying to work out a better review system with MERN for archaeological projects that do not involve construction, pipelines, mines, and zoning issues MERN's real rôle—protecting the environment.



Basque whaler mannikins at the Parks Canada Red Bay Museum.

I learned about the permits from email I received in Perry's truck after we returned from a tour around Saddle Island in Red Bay. Perry had suggested we use the day for a Red Bay trip since we knew if a permit came there would be no time left to work at the site; and we also wanted to have Saraí and Francisco see the site and museum. It took two hours to drive each way over a road that has been fixed up since 2019 when it was full of potholes. We had lunch at the local 'Whaler's Restaurant', where I found the old photo of Jim Tuck's and Robert Grenier's field team picture still in an envelope on top of the model try-works in the dinning hall. I've seen it there in past years and always point it out to the proprietors as an importaqnt document that should not be mislaid. This time I suggesting they make a project of idetifying and ilisting of all the crew members, which include many local people, on the photo. Doug Robbins was among them and is now living in Blanc Sablon, apparently not doing archaeology.



MUN and Parks Canada Red Bay crews in a photo in the Red Bay Whalers' Restaurant with Robert Grenier (rear left) and Jim Tuck (rear right).

After lunch we joined a tour going through the museum, and I took a few pictures of the collections. I learned that Cindy Gibbons has been promoted upstairs and is working in the old (original) Red Bay lab building, but I did not get a chance to see her. We then joined a group of Toronto Chinese travelers visiting Saddle Island and had a nice tour led by Kirby Ryan, a local guy who was on Tuck's dig crew and was really well informed about the site and Basque history. Also in the group were Terry and Lynn Seymour from western Massachusetts, who knew about Deerfield and Fairlee VT. Also present was a fellow whose name I did not catch who had directed the library and archives at the Royal Ontario Museum for many years. His stories of how the ROM has moved away from research, science, and their

library and archives was sad news. 'Welcome to the Club' was my response, though I believe the SI is so far—doing a pretty good job resisting the slippery slope following only money and audience share. I found Saddle Island much improved from when I visited in 2019, when the site was overgrown and poorly labelled. The Upper Museum near the church has not been re-opened after the pandemic but still has its exhibits intact. The staff says visitation is strong now and that they have 150 bus tours registered this summer. Garland dropped by after dinner and was overjoyed by the permit news. Its just in time because he has a journalist on contract with the MRC tourist developoment program called 'Expedition 51' coming tomorrow, and he and wants us to be digging and talking about Inuit and Basques.



*Kirby Ryan of Parks Canada giving a tour of Saddle Island; and Saddle Island with the wreck of the* Bernier *near where the* San Juan *was excavated.* 

**6** August (Saturday) St. Paul River We were up at 6am to get an early start to the site, and Garland was in the door at 7 making sure we'd be leaving soon, because he was taking Lousie and Niels out to get set up for shooting our arrival. Turns out we got there before them and were starting to turf when they arrived. They left after a couple hours of shooting and drone shots. Saraí and Francisco started a 2x2 m unit where we excavated the 2019 test pit, and indeed Francisco uncovered the test pit that produced those early finds. Soon, baleen and chunks of cinder (congealed fat, charcoal, and dirt) and tiles appeared. Saraí found some cut strips of baleen and a large stack of baleen plates we first thought were birch bark.



The 'baleen fire pit' first tested in 2019, and a stack of baleen plates found in the upper level.

I opened a 1x4 m trench across the hump that runs parallel to the shore, a feature I presumed was a small tryworks, to see what type of cross-section profile it would produce. This project immediately turned up cinders, burned rock fragments, and broken tile, but so far no nails, ceramics, or other material. The hump appears to be more a wall than a hearth, with some large rocks on top. East of the hump, the culture layer drops and is covered with several cms of rooty peat over a 10-cm thick layer of sphagnum moss, and beneath this, a layer of broken tiles, many decayed in water-saturated soil, and a few lumps of charcoal. West of the hump, a layer of broken tile and cinder slopes toward shore. I found a section of modern plastic rope in the turf, a relic of fairly recent lobstering. The quantity of tiles and cinders increases toward the west end of the trench, appearing like a tryworks midden in a mixed charcoal-stained, sandy-peaty soil. At this point, I don't know what to make of the hump/wall and the depression behind it, which parallels the rising hillslope ledge. Could this be the fire pit, built up against the rising ledge? More digging needed.



Beginning the 15S-OW trench across the stone wall feature and burned and broken tiles in the upper level east of the wall.

While we were digging the tide was rising and the anchor float got submerged. I had extended the float line this morning, but it was not enough for the current and rising tide. When I looked next, the boat was in a new position, twenty or thirty feet downwind and down-current, but seemed comforable, so the anchor must have found a shallower place because the float was on the surface again. As I wrote this, I realized the submerged float had pulled the anchor and allowed the boat to drift back until it reached shallower water. So I need to lengthen the float line evern more. At the end of the day I was concerned about getting back into boat safely with our gear, but the team got aboard handily. The SW wind had picked up and it looked like we were going to get hit by another rainstorm crossing the bay. I gave the helm to Francisco, and he did a good job getting us back—without rain—to the dock, where we squeezed in between the other boats in the lee of the pier.

**7** August (Sunday) St. Paul River I was awake at 5 wondering if we should get a really early start to Bony, but better judgment prevailed. Perry, on the other hand, not worried about wind, rounded up Francisco and went off to pick bakeapples. Their arrival seems to have 'driven off' an old man who decided not to compete with the younger folks. While they were gone, Saraí tried out the 3-year old opened box of Aunt Jemima pancake mix and found it still had the old pizzaz with the original name and logo image, which is now cashiered and considered racist. The berry-pickers returned, chased off by rain at the front end of a southwest storm that continued into late afternoon, so not much got done today. Garland dropped in about 8am, and just as the stories began, back and forth, Louise and Niel showed up. The three had had a fine recording session yesterday with one of the old-time St. Paul musicians. 'That may have been the first time he has ever been video-recorded,' said Garland. 'He's not like that cousin of mine who can't stop tellin' the same story over and over. I have a hard time listenin' to those old stories I don't want to listen to.' I talked on the phone with Lynne last night and learned that the traditional Sunday morning reciprocal breakfast (whose location rotates between Lynne and my sister Portia) would be augmented today by brother Josh and Wibs, who were passing through en route to Chatham. So I surprised them with a voice from the Lower North Shore, which Josh had visited one summer when we were digging at Mecatina. Lynne had made blueberry scones for the event. Josh had tuned in to my Charlie Morrow interview last week and for a while wondered if Charlie's introduction would eventually find its way to me. The rest of the day was low-key. I read Ben's new PISAS paper on North Pacific paleodemography and paleoecology—an amazing piece comparing cultural developments in the NW Pacific with Alaska, which he has been working on with a team of archaeologists and biologists for several years. The rainy day ended with a traditional Newfoundland boiled dinner with salt beef, turkey, potatos, cabbage, carrots and lots of gravy! Patches of blue sky and lifting fog on the islands heralded a better day tomorrow, when we are to host the MRC's reporter at the site. Garland is all in a frazzle hosting Louise and Niels, and now arrives this high pressure journalist whose report he hopes will ignite a surge in tourism.



Perry's Newfoundland boiled dinner gave us a break from mackerel, halibut, and lobster! Saraí hiding from the noon sun.

8 August (Monday) St. Paul River After the storm yesterday, the weather cleared with a NW breeze that lasted until 4p when it died down and the blackflies found us. We had an early start and got some digging down before Garland showed up with Sebastien, the reporter, and his son, Felix, an interesting fellow who is an aspiring singer and musician. Sebastian was fun to work with because he was willing to engage on lots of subjects and levels as he went about documenting the dig, and he had a nice interview with Saraí in French, the preferred language for his story on the Quebec Lower North Shore. He is covering the entire region from Blanc Sablon to Kegashka, so I gave him a picth to visit our sites in Petit Mecatina. He spent a couple hours with us and then buzzed off with Garland to catch a few mackerel. Among his possessions was a \$6K drone that could fly 17 miles away line of sight. His visit was followed in the afternoon by another from Louis Abbott and Niels documenting our new discoveries like the Basque spike, the baleen plates, and our first ceramic find, a green glazed piece from the bottom of 15S trench. It turns out that what we thought was birch bark is baleen. Eileen and Piercy made a special trip out to deliver a stud-finder (I had hoped for a metal detector) to see if we can isolate more productive areas of the site, since we only have three more days left for digging. It works fine for iron, but not for non-ferrous metal. Saraí and Francisco—working in what Garland now calls the 'Spanish Diggings' came up with another batch of baleen, and I, in the Locus 2 'American sector,' found quite a bit in my 15S OW fire pit unit. I finally got to the bottom, finding lots of broken tile, charcoal, and in the deepest part, lots of cut but unworked wood. The tile, charcoal, clayey deposts east of the central wall are

different from the cinders, tile, and burned rock in the midden west of the wall. By 4pm the flies and approaching rain squalls sent us packing for home. Perry spent much of the day among the bakeapples near the Salmon Bay road and the town dump. Almost all are ripe. Now that the journalists have been escorted to and fro, Garland will take his place at the berries, which are now going for ten dollars a pint/pound from the pickers.



Sepastien interviews Saraí for an MRC media story on tourism development; and touring St. Paul River island locations with his son Felix and Garland.

**9** August (Tuesday) St. Paul River We had another early start and reached the site before 8am with Saraí doing the driving honors. We had no visits from Garland or the Abbotts, who were preparing to leave for Montreal on Wednesday. Wind was light in the SW and died to calm in the afternoon and it grew fairly hot, prompting talk of swimming, but none of us had the courage to actually dive in. I finished up my 15 South trench and decided not to trowel to the base of the western two squares as a bit of scratching around convinced me it was just going to be try-work midden debris. I shifted to a new unit on top of the mound south of the 'Spanish Diggings' to see if the mound was a furnace or some other type of feature. There are no kettle pits, and there was a tile and charcoal layer beneath the peat that looks like a tile dump, and there was a piece of baleen at the very bottom of the tile layer, on sterile gravel. The bottom deposits were very hard-baked. I don't really have a clue about why this mound is here, but it does not seem geological. Saraí and Francisco found lots more baleen in their 2x2 m unit. The pit in the northern part of their unit kept getting deeper, with charocoal and tile and baleen stratified between layers of sand and gravel, indicting multiple firings in what is starting to look like a fire pit. There are lots of larger rocks in the western side of the unit, but we can't yet make out the structure unless it was something enclosing the firepit. Francisco drove us back to the dock in a near flat calm. Perry had a good but buggy day at the bakeapples. He had a meal of fried mackerel waiting for our return, and for desert, ice cream and—guess what!—bakeapples.





15S trench showing the stone wall, the ditch between the wall and hill ledge, and midden west of the wall; cut wood from the lower levels of the ditch; and a fragment of a hide garment with fur from base of the ditch.

**10** August (Wednesday) St. Paul River Another fine day with almost no wind. Today there were few families out to pick bakeapples on the outer islands. Some wardens passed in a fast zodiac, and in the afternoon a plane with a tail antenna flew an east-west grid pattern numerous times as though doing aerial surveys or search and rescue. I finished the 9S2W 1x1 m on top of the mound and did profiles and a map. There was no indication of a trywork pit, but there were lots of burned tile fragments, one small dump of clay in the SE corner, and many broken tiles in the NW corner. A strip of baleen lay of the bottom of the tile layer, on top of gravel and sand that was very hard as though heat-indurated. I can't figure out how this gravel got up on top of the mound through normal beach activity.



Francisco working on the deep layers of the baleen fire pit and showing 8S/3W and 9S/2W units on the corner and top of the E-W mound.

With not much clarity on the mound, I helped Saraí get started on a 1x1 m north of the baleen pit where she had got a signal with our borrowed 'stud-finder'. That signal disappeared when she got the peat layer off, but later she found a nail head, some marmite cookware ceramics, and a piece of chalcedony-like flint that probably came from a Basque fire-starting kit. While looking at it, I managed to slice my thumb. Her tile layer was on sloping bedrock, so it would appear that there was not much vegetation present when Basques were here, or they had removed it. On the other hand, I dug a 50 x 50 cm test pit (TP-1) in the flat area 7 m north of the 0 m mark and found tile fragments and cut wood beneath 40 cm of peat, so we may expect 15/1600s Basque activities being deeply buried everywhere along this shore for about 100 meters. Perry had another fine dinner for us—chowder with whelks and scallops, and some separately fried scallops—all from Garland. Perry made reservations for us on the ferry Saturday afternoon; then we will drive to Jill's in Corner Brook for the night. I got five gallons of gas for the boat at Barry's corner store for which I paid \$50 and got an earful from Barry, who lives up to his wife's descripton a few days ago about her husband 'who likes to talk,' to which her daughter added, 'a lot.'



Saraí operates her drone over her 'ledge' pit (1S/2W); and excavations in 'site central' (Locus 1).

**11 August (Thursday) St. Paul River** Saraí made a mushroom omelette and fried spam, the latter from our old Pitsiulak cache—I wonder how many years that can has been ferried back and forth between Perry's home and *Pitsiulak*? But good nevertheless because it fueled our last full day of digging. Despite the high pressure weather holding and wind staying moderate SW, we did not see a single boat pass Chenal Shallop. I did some touch-up work on 8S3W and found more cinder and voids between the construction rocks—indication that the entire feature was constructed and not natural. It's purpose must be for trying blubber, but the method used, and where pots were placed and fire was made escapes me. I took some elevation readings on the 15S trench and tested the western trench refuse to a depth of 30 cm, finding burned tile, cinder, and charcoal all the way down, resting on sterile yellow sand. It did not seem worthwhile excavating this debris further.



Unit 8S 3W is at the NW corner of the oval mound, south of the baleen fire pit, and contained large amounts of cinder, charcoal, and voids between mound construction rocks; Saraí's 'ledge' 1x1m (1S/2W) produced tiles, baleen, two nails, and small pieces of marmite ceramics.



Test Pit 1 at the north end of the site had a Basque layer below 20-30 cm of peat; Saraí records Test Pit 2 on the 'upper' terrace at the north end of BE-4.

Saraí finished her 'ledge' 1x1 m unit (1S/2W) north of the fire-pit, where most of the artifacts were from the very bottom of a thick peat over-burden, just above a sloping bedrock surface. I did some finishing work on Test Pit 1 at 8N/3W, the lower (western) flat areas north of the datum that seemed suitable for habitation, finding a 10-15 cm thick charcoal-stained layer below 10-15 cm of sterile peat, and took samples of wood, charcoal, tiles, marmite ceramic, flint, baleen, and others. It seems strange that other than the fox jaw found in 2019, we have not found a single animal bone—even whale bones that should be large enough to be preserved. Could whale bone and baleen have been burned for fuel? Later in the day I started Test Pit 2 on the next level area, a few meters east of TP1. Once again, beneath 30cm of peat I came to tiles and wood, but time was too short to excavate to sterile soil. These tests show that all areas surrounding the tryworks have Basque occupation (and no one else since then), and that the

north end of the site may be particularly interesting as a possible domestic residence or activity area. While this work was happening, Francisco completed excavating the 'baleen pit', now nearly one meter deep, to the very bottom, finding fairly well preserved, ax-worked wood timbers laid down in the deepest part of the pit. Toward the end of the day I back-filled the 15S trench and 9S/2W on the top of the mound. We collected our dig gear and tidied up, with only back-filling the baleen pit left to do in the morning.



Francisco and Saraí at completion of the baleen fire pit, with wood timbers at its base; and large rocks bordering the south side of the pit. Views NW and SW.



Layered baleen pit deposits of charcoal, cinder, baleen, and wood in the unit's east profile.

Perry prepared a dinner of beef, mashed potatos, carrots and peas. After dinner we set to cleaning up the baleen samples from the pit and packed them and the 7-layer baleen stack in one of the Canadian Post's shipping boxes, ready to mail to Anja Herzog. We'd like the stack to be prepared for display and need to have it inspected by a baleen expert (Brenda McLeod?) for species identification, and some assessment of the whale's size based on the width of the baleen plates. The stack was at the very top of the cultural layer, just under the surface, while the long strip (which fell apart into multiple segments when excavated) was from the bottom of the pit. While we were packing the baleen, Eileen and Piercy came by for a goodbye and 'results' briefing. Piercy is very tuned into local history and has a wealth of knowledge on regional geography and history. He was interested to hear about our Inuit sites on Grand Isle. He has seen possible house depressions on one of the seaward islands we should check out in the future. No one seems to know how Esquimaux Island got its name. He was well acquainted with the archaeology done by Charles Martijn's crew in the 70s at the southern tip of Esquimaux Island. He and Eileen supplied us with another batch of halibut. We thanked them both for the support they have provided the project—food donations, the free use of the teachers' residence, information, and helping find the 'stud finder'. Next time I will be sure to bring my metal detector. Maybe that will help find a non-trywork activity area.

12 August (Friday) St. Paul River The final day on-site. Garland showed up at 7am and gave Saraí a package of frozen bakeapples, and he recruited Francisco as a berry-picking partner when we depart, since Francisco will be staying on in St. Paul River for another few weeks finishing interviews with local people. Francisco surprised everyone when he presented Garland with a No 10 soccer T-Shirt a a 'thankyou' for supporting his research and fieldwork. Garland wanted to see the site before we filled it in, so we followed him out, and as I was getting out to off-haul the boat I slipped and fell in the water up to my waist. Nothing got wet but me and my pride, and I got the boat off the rocks and securely anchored. I guess something like this was bound to happen on the last day. I was surprised how warm the water was. Anyone looking carefully at the crew picture we then took will wonder why my jeans are wet. We said our goodbyus to Garland, who zoomed off for berry-picking and turned our attention to the backdirt pile. It's always amazing to see how much dirt can be removed from a 2-meter square excavation. We lined the pit with a tarp to facilitate next year's dig and finished filling the deep baleen pit and Saraí's 1x1 test in under an hour and were on our way to the fish plant in Salmon Bay where we met Perry and got the boat on the trailer. Perry drove us back to the residence and then departed for Blanc Sablon, where he planned to spend the mid-day with Florence. However, as it turned out, when he drove through to Blanc Sablon to check on his afternoon ferry, he discovered there was space available on the morning crossing, so he grabbed the chance and missed saying 'so long' to Florence. He also discovered that she had been out picking berries all on her own, steadying herself with a cane—a pretty good trick to do in a lumpy berry bog! After Perry's departure we cleaned up the residencce and made a catalog of the SPR finds, ate the last of the halibut for dinner and got ready for Saraí's and my departure in the morning. But plans changed when Perry called from St. Barbe to say he was at the motel and would drive to Port Saunders to pick up the lobster pots he was buying from Gordon Lowe, and suggested we try to stand-by for the morning ferry, which required our being their by 9am Newfoundland time—7:30 our Quebec time. Adding the hour's drive from SPR top BS, we'd have to be on the road by 6.



Francisco's T-shirt gift to Garland; and Saraí, Garland, and Francisco before back-filing the site.

**13 August (Saturday) St. Paul River to Corner Brook** We were up by 5 and Garland was in by 5:30 to pick up Francisco for bakeapple duty. Saraí and I left at 6:00 and got in the standby line at the ferry terminal by 7:30 (9:00am Nfld time). We were 13th in line but made it on with plenty of cars to spare and had a foggy but smooth crossing to St. Barbe. Fog burned off halfway across the Strait and the rest of the day was gorgeous and sunny as we drove down the 'Viking Highway'. Perry had warned us that Bill and Ilene Lowe were sick with covid, so we did not stop even for a rushed 'hello-goodby'. I hope they both recover quickly. Saraí and I broke the trip with a visit to the Parks Canada Lobster Cove Lighthouse Museum at the northwest corner of Bonne Bay, where we found a very engaging (and talkative) guide full of local information. The displays in that tiny lighthouse are really informative and creative—the best I've ever seen and a great model for what could be done at the Whiteley Museum. We stopped for steamed mussels and a milkshake at the Fishermen's Lnding restaurant in Rocky Harbor and then drove through Gros Morne Park, swooping around the curves, up and down through the hills, with the mountains lit up in bright sun, surmounted by huge, billowing, white clouds-certainly the most memorable drive through Gros Morne I've made. Perry had the same experience, we learned, although the boat and trailer gave him a scary push from behind when the truck was going down big hills. We stopped for gas in Deer Lake and proceeded to Jill's house on the south side of Corner Brook. Dinner was at the old standby, Jungle Jim's. There seems to be a need for some more creative restaurants in CB! Back at Jill's, I learned there are no openings for me to book my ferry ticket to North Sydney between now and the 18th, meaning I could not get to Fairlee until the 20th, the day before Ben and Larissa, arriving on the 17th, leave. I only have two options: call daily for cancellations or go for standby and take my chances.



The Parks Canada Lobster Cove Museum at the entrance to Bonne Bay; and its friendly interpreter.

14 August (Sunday) Corner Brook to Lushes Bight Another early start—this time to get Saraí to her 6am Air Canada flight. We had to negotiate the route through downtown Corner Brook in the dark and find the right entry to the TCH (Trans-Canada Highway). Somehow I managed it and got her to the terminal at 4:30. Last night she had a message from Francisco, who found her drone in her bedroom and will mail it to her. We'll see how Air Canada does with her checked pack this time, after losing it on the way in. I did not want to drive in the dark to Perry's and encounter a moose, so I slept for a couple hours in the Deer Lake Irving station waiting for their breakfast call. Then I drove to Long Island in some serious rain that gave me a scary car ride because the TCH macadam is badly grooved from tire wear, and I was planing and had to drive on the ridges and plow through puddled places. Perry did not arrive until after 1p, and Louise and Jane had spent the night in the Grand Falls Hospital waiting for a doctor to see about her gall bladder problem. There has been a shortage of doctors there and elsewhere in Newfoundland resulting from covid slowing down the training of new doctors and the backlog of postponed elective surgery. It turned out that her problem has been an infection, not gall stones, so her cure is antibiotics, not surgery, and when she arrived home she was feeling fine for the first time in weeks. Perry had no problem with the highway puddles because his truck and boat trailer—now loaded with thirteen wire lobster traps—are heavy enough so they don't float. I helped Perry unload and unpack our gear and fixed up a small package of Quebec collections to mail to Anja. Dinner was fried codfish and Kay's delicious bakeapple cheesecake. After dinner, Jane arrived with a very grown-up Cassie and her endearing younger sister, Cami. While we were goofing around with the kids a news show on television appeared profiling Long Island and its future—whether it will go the way of Little Bay of Islands and opt for resettlement and compensation (ca. \$250,000 per family) for moving off the island, or stay and relay on the ferry, which according to the report is one of the few that run in the black, though probably with a major subsidy. Now that no schools operate on Long Island, all families with children, like Jane and Lee, have moved to Robert's Arm.

*Monday (15 August) Lushes Bight to Port Aux Basques* After considering options I decided to try to talk my way onto tonight's ferry to North Sydney, hoping that a few people might not show up for their reservation. Perry had given me a picture of his financial situation which would require he give up the truck this fall. This summer we had counted upon a Quebec MCC grant for his salary and to operate

*Pitsiulak*, and when that did not materialize, we shifted gears to work with the speedboat from shore. Even if we can't use *Pitsiulak* next summer, we will still need the truck to tow and launch the speedboat; and if we can use *Pits*, Perry will still need the truck for preparing the boat, so I need to make sure Perry can keep the truck through the coming year.

Louise has an appointment with the Grand Falls doctor this morning, so all four of us lined up for the Long Island ferry at 11am and said our goodbyes on board. During the crossing I found Ruben and Valerie Flowers, parents of Nicholas Flowers, on board, down from Hopedale for a family gathering with her Long Island relatives. I met them and their son, Nicolas, here in 2019 during Long Island Day festivities. Nick and his sister have been on a Ramah chert project in the Torngats this month and are due back in Hopedale soon. Meeting Ruben and Valerie was interesting because last night Jane was showing me Nick's activities on the web, including news of his presentation at the recent Inuit Studies meeting in Winnipeg. While passing through South Brook I mailed our small box of Quebec finds to Anja and let her know that Saraí would email her the catalog. I had to leave out two of the heavy cinder samples to meet the package weight limit and will take them to DC for analysis by our Museum Conservation Institute analysts.

The drive to Port aux Basques was uneventful. I arrived about 4pm and immediately went to the ferry office to enquire about standby status, but I was told just to keep phoning in for cancellations. I had done that a couple days ago and got my reservation advanced to the 6 :30am departure on Wednesday, but there were no earlier opportunities. So I grabbed some lasagna from the local Italian joint and called around to hotels and B&Bs asking for a room. No luck—all were booked. Like the ferry, this summer has been super-busy because of Nfld's 'Come Home Year'. I did some snooping by car to see if I could find unlisted B&Bs, also without success, and was preparing to sleep in the car in some quiet nook. I bought food at the Coleman's grocery, and while there, an attendant was kind enough to make a few more calls, also without success. On my way to the far corner of the St. Christopher Inn parking lot, I decided to bug the ferry ticket office one more time. There, the lady I had met earlier took pity on me and called the supervising ADM: 'He's been here twice now and has no place to stay, can I put him on the 'noshow' list?' And that's how I got through gate-keepers to be the first of two cars in 'Lane 4, the no-show line. When all the other cars, trucks, campers, busses, vans, and trailers were loaded, there we were the only two cars left on the huge lot. After some tense moments, I got a thumbs up and rolled up the ramp on to Deck 5 with only inches between my rear bumper and the rear ramp gate. The other car also found space. I found a place in the lounge and was asleep on the floor before the 11:45 departure.

**16** August (Monday) Port aux Basques to Fairlee VT The ferry arrived at North Sydney at 7:00am, and I was on the road at 8 in a long line of trucks and cars that gradually dissipated as we left Bras d'Or and crossed Canso Strait to the N.S. mainland. Traffic was light over the entire route through N.S. and New Brunswick. At the US-Canada border I stopped for some Ganong's chocolate gift boxes in St. Stephen, spoke briefly with the U.S. Customs official, and arrived in Bangor about 3pm. I decided to take Rt 95 south to Portsmouth rather than Route 2 across northern Maine to avoid getting lost or stopped by road construction at night. Driving the Maine Turnpike seemed endless before I finally reaching Portsmouth and the route to Manchester; but once there, I was sure of the way and knew I would arrive in Fairlee without trouble, since on this trip I was alone with a dead iphone and no front-seat navigator. I reached home around 8p and found son Josh had flown up from DC in his little plane a few hours earlier, as a surprise for Ben, Laada, Larissa, and me. For the next couple of weeks I was busy catching up with family—especially grand-daughter Larissa's Keewaydin canoe trip to Hudson Bay and the family's college swing—preparing reports and files, illustrating this dairy account, and helping Lynne through laser eye surgery. Thus ends the 2022 field project saga.



Back in Fairlee, son Josh and Lynne and the Adirondack Guide Canoe she built; and dinner and story round-up with Lynne, Larissa, Ben, Laada, and Josh.

#### Summary

The Quebec project was more directly archaeological than the Newfoundland survey for historical Inuit sites as it involved excavations at Bonne Epérance-4, one of two small tryworks on the west side of Bonne Espérance Island on Chenal Shallop, a narrow channel separating the southern extension of Grand Island and B. E. Island. Tests is 2019 recovered organic deposits that suggested domestic activities as well as rendering oil. We lost one week waiting for a MERN permit that had been delayed because I had also requested permission for a small excavation at Belles Amours near Brador. To expedite approval I cancelled the Belles Amour request and immediately received MERN approval for BE-2,3, and 4. The Ministry of Culture and Communication was extremely helpful in helping us get MERN approval for the St. Paul River work. With only one week remaining, we concentrated on BE-4. Excavations consisted of a 1-m wide trench across a mound feature parallel to the shore, a second oval mound perpendicular to the shore, the central site depression tested in 2019, and three locations at the north end of the ledge on which the site is located. Basque selection of this location was due to its narrow level terrace, a deep-water approach, affording boat access at any tide, and protection from wind and sea swell.

The 1-meter trench across the mound parallel to shore revealed a constructed wall with several layers of rock one meter away from a ledge at the base of the hillside behind the wall. In the depression between the wall and the ledge were 30cms of deposits containing charcoal, cinders, roof tile, and at its waterlogged base, preserved wood, leather, charcoal, baleen, and fur, some of which were garment remains. Between the wall and the shore, the trench contained a 30cm deep midden of burned tile and rock, cinders, and ashy soil. The constructed wall may have been used as a way to support a platform from which to operate the furnaces built into the hillside above. A 1x1m unit on top of the oval mound perpendicular to the shore revealed more pyrotechnic and rendering activity, and another 1x1m unit at the western (shore) edge of this mound showed it as a constructed feature built of large rocks capped

by sand, gravel, and clay—probably as a base for trying activities. The 2x2m 'baleen pit' in the depression west of the central mound contained nearly a meter of alternating deposits of charcoal, gravel, burned tile and rock, baleen, and at its waterlogged base, more baleen and wood timbers. Large amounts of baleen were found throughout this fire pit, including a 7-layer stack of baleen plates from a very large whale. A 1x1m unit north of this pit produced the same types of materials with the addition of small ceramic cooking pot (marmite) sherds. Two 50x50 cm test pits at the north end of the site produced similar deposits in an area that may have been for domestic rather than industrial use.

Bonne Espérance-4 is an ideal site for exploring the activities of a small-scale Basque whale oil processing operation that has both industrial and domestic components. Underwater finds adjacent to the ledge include a small pile of ballast rock. The site provides an opportunity to investigate the activities and settlement plan of an early phase of Basque whaling on the QLNS when large baleen whales were still available and baleen was not yet a commercial commodity judging from its abundance throughout the site. The site would make an excellent target for a major excavation in 2023.

# Bonne Espérance-4 (EiBk-61) Field Report

On 29 July we concluded work in Newfoundland, crossed the Strait to Blanc Sablon by ferry, and prepared for work in the St. Paul River Municipality. Our initial plan was to conduct test excavations at two small Basque whaling stations we identified in 2019 and excavate one of the boulder pit-houses at the Belles Amour site near Brador which we suspected might be either an Intermediate Period Indian or Groswater Paleoinuit winter site. However, delays in the permit approval process at the Ministry of Energy and Natural Resoures caused us to cancel the Belles Amour project in order to expedite approval of the MERN and Ministry of Culture permits. As a result we restricted our work to a single Basque whaling station, Bonne Esperance Island-4.

The St. Paul River project was part of our long-term St. Lawrence Gateways Project, begun in 2001, which had evolved from an initial survey of the Quebec Lower North Shore between Blanc Sablon to Mingan, to excavation of a large Inuit-Basque site at Petit Mecatina including its underwater Basque deposits, and to location and excavations of several other 17<sup>th</sup> century Inuit winter sites. In 2017 surveys in St. Paul River led to excavation of 17<sup>th</sup> century Inuit summer and winter sites on Grand Isle, and in 2019 underwater surveys located Basque tiles and discovery of two small Basque tryworks at BE-3 and BE-4 on the west coast of Bonne Esperance Island at the narrows between it and Grand Isle. Our interest in these sites was linked to the Inuit sites on Grand Isle, less than a kilometer away, in which we found artifacts and planks from Basque ships. Might evidence of Inuit contact be found at the nearby Basque trywork sites?

With the necessary permits in hand but a week late, we began work on 6 August, clearing vegetation and setting up an excavation grid at BE-4, the northernmost of the two tryworks identified in 2019. The site is on a narrow strip of level ground between a hill rising steeply on its east side and ledges dropping into deep water at the shore. Deep water access to land was crucial for whale processing, as was the protection from Gulf seas and storms offered by shoals offshore and location on a narrow channel between Grand and 'Bony' Islands. Whales taken nearby could be brought alongside the steep shore ledge for flensing and removal of blubber

strips for rendering in pots just a few meters away. Unlike the 'industrial scale' of Basque Red Bay operations with scores of tryworks, BE-3 and 4 were small-scale operations that may have been operated by two crews from a single whaleship harbored in Bony Harbor nearby. Our intent was to explore such a small Basque operation, identify its layout and activities, and search for possible Inuit involvement from the family that had established residence on nearby Grand Isle.

One of the distinctive features of the site was its vegetation—covered with a dense growth of high grass, horsetails, and other ground cover. High organic nutrient levels from whale oil and human activity had kept the area from becoming overgrown with woody vegetation that covered the nearby shores and hillsides. This type of human soil enrichment can persist for hundreds of years and provides the archaeologist with a clue for site discovery.



Bonne Esperance-4 site with central mound and 2019 test pit area, viewed to south and the Gulf in the distance; northern part of the site viewed toward Grand Isle.

BE-4 was discovered in 2019 after our divers found tiles and ballast stone a few meters offshore. A subsequent test pit in the middle of the site produced Basque tile, charcoal, small animal bones, baleen, and a seed casing looking like pumpkin or sunflower. This material was intriguing as it suggested domestic activities as well as oil rendering. Could Basques be living on-site while they whaled and boiled blubber? This was not known at Red Bay and would add an new element to the Basque whaling story.

The site runs north-south along the shore ledge for about 80 meters. The south end is blocked by a cliff and a small stream gully. From here a low mound runs north about 2-3 meters away from the rising hill paralleling the shore to the west. This linear feature intersects an oval mound whose axis is perpendicular to the N-S mound. North of the oval mound is the small depression where our 2019 test pit was located. Further north, the narrow site terrace broadens to 6-8 meters wide and ends at the edge of a small cove. Deep water is found beneath the shore ledge along its entire length. We elected to excavate a 1x4 m trench across the top of the N-S 'wall' mound at 15S/OW and a 2x2m unit (5-7S/2-4W) in the test pit depression north of the oval mound in the center of the site. We also excavated a 1x1 m unit at 1S/2W and two 50cm test pits at the north end of the terrace, finding a continuous cultural layer that extends throughout the site 30 cm below ground surface and a few meters up the nearby hillslope. Various stages of the work were recorded with drone flights.

## **Excavation Description**

**The Wall Trench** (15-165/0-4W) After the vegetation was removed with a weed-whacker we found a low mound running north-south beneath the sod paralleling a rock ledge at the bottom of the hill. Between the wall mound and the ledge was a 1 meter wide depression 50-60 cm deep. Immediately beneath the sod a line of rocks appeared, and as excavation continued these rocks were found to be the top of a 50 cm high stone wall built of flat rocks and earth. The depression between the wall and this hillslope ledge outcrop was filled with wet deposits, beginning at the top with a layer of peat that was underlain with wet sphagnum overlying black charcoal-filled earth containing broken tiles, charcoal, burnt cinder, a fragment of green-glazed ceramic, and in the better-preserved lowest level, worked and unworked pieces of wood and a piece of hide with short fur—perhaps part of a sealskin garment. The deposit appeared like a midden, with wood, baleen, and tile dumped into a trench between the stone wall and the hillside ledge. West of the stone wall the ground sloped down toward the shore, and excavation of the top 20-30cm revealed the entire deposit was a cinder-filled midden filled with burned rock, charcoal, tile fragments and little else. With time short and little prospects of finding structures, features, or artifacts, we left the deeper deposits in place.



The N-S wall crest is beneath the left tape and the N-S trench follows the right tape; 15S excavation trench across the wall showing the depression between the wall and hill ledge at bottom and the burnt midden dump beyond the wall.

The purpose of the stone wall was not apparent. It parallels the hillslope ledge for 15 meters to ca. 2S/OW where it merges with the large oval mound that we later found was itself a tryworks construction. At first it seemed the wall had been built to create a trench between it and the hillslope serving as a burning chamber over which try-pots could be placed, but the presence of unburned wood and cultural materials as well as cinders and charcoal did not seem to fit with a several meters long fire pit. Another option is that the wall served as the foundation for a wood platform on which people would stand to work blubber pots built into the hillside above. The question remains: what was the purpose of this wall and trench and how does it square with trywork sheet midden on the western downslope side of the wall?



*Cut and worked wood from the waterlogged bottom of the 15S/OW depression between the wall and the hill ledge.* 

*The Oval Mound (Unit 9S/2W)* The stone wall feature described above intersects an oval mound (ca. 3x2 m dimension) at ca. 11S/OW. To investigate the mound and determine if it was a natural or cultural feature, we excavated a 1x1m unit at 9S/2W in the middle top of the mound. Excavation revealed hearth deposits immediately beneath the sod composed of the usual burned rock, cinder, charcoal, burned and broken tile, and baleen. Tile was concentrated in several locations in the top of the deposit. Patches of clean sand and gravel were present, as well as patches of hard indurated burned soil. Excavation ceased about 20 cm below the surface when the deposits showed no sign of changing, and no *in situ* ground or ledge was encountered. No artifacts or bone was present.



foreground before excavation began, and the Gulf of St. Lawrence in the distance.

*Northwest Mound Edge (Unit 8S/3W)* This unit lies alongside the southwest edge of the the 2x2 fire pit unit 5S/2W, at the northwest edge of the oval mound. It was excavated to see if the oval mound was a natural outcrop or a cultural feature, and it prooved to be the latter. No bedrock was encountered; instead, the mound is an unconsolidated pile of rocks, gravel, beach sand, mixed with charcoal, burnt rock, cinder, and tile. Excavation in toward the center of the mound revealed unfilled voids between rocks and cinder lumps, indicating the mound had been constructed quickly without water-saturation as in beach or underwater processes. Large 10-15 cm diameter lumps of cinder composed of congealed sand, gravel, charcoal, and other materials were present, especially around the side of the feature. As in the case of the wall trench, we have no clear explanation for what purpose it served in a blubber-rendering operation. More excavation is needed to establish the larger picture.

*The Baleen Pit (5-75/2-4W)* This pit and the oval mound lie at the center of the BE-4 site. This 2x2 m pit is adjacent to the north side of the oval mound and is bordered on its east (uphill) side by a meter-high vertical rock ledge. In 2019 this area seemed like it might be the floor of a small dwelling structure or tent site based on the test pit finds of bone, charcoal, and seed casings. Instead, excavation revealed it is the top of a 2 meter wide pit bordered along its north side by a 1-meter high granite ledge outcrop, and on its western (downslope) side by large blocky rocks, in no apparent order. The pit contains stratified lenses of charcoal-filled soil, burnt rock, large pieces of baleen, tile fragments, and a few small pieces of ceramic. These materials were found in 10 to 12 distinct layers ranging from 1-15 cm thick from the top of the deposit to ca. 178 cm below ground surface. This pit is the result of different episodes of activity and use of fire in a well-defined area that corresponds to the NE quadrants of square 6S2W and the NW quadrant of square 6S4W. The extreme south of the unit—SE quadrants (8S2W) and (8S4W)— contains blocks of pink and gray granite more-or-less square or rectangular in shape. These blocks do not seem to have been purposefully constructed to contain the fire pit, but they are close to each other.

At the bottom of the pit several long strips of baleen were found together with worked and unworked lengths of wood. Why baleen was preserved in a feature so filled with burned materials is unknown. Baleen materials were present from the top to the bottom of the pit, and none appeared to have been burned. A 25cm wide stack of several plates of baleen was just below the sod at the top of the pit. The size of these pieces indicate they came from a large whale, almost certainly a bowhead. Although the edges of the pit lie beyond the excavation edges, there is no surface indication of a wall containment for the pit, or of internal structure such as a rock border or bottom pavement.



Baleen Pit at the center of the site showing stratified deposits in the east wall, wood and baleen near the base of the pit, and beyond, the oval mound with 1x1 m units in its top and side. To right: a view of the east wall profile showing pit stratigraphy 50-60cm deep with charcoal, baleen, and wood layers.

In general, the bottom of Layer I and the top of Layer II are characterized by the presence of well-preserved baleen fragments. A 25 cm wide stack of seven slabs of baleen was found just below the turf in the top of the pit. The size of these fragments indicate they came from a large whale, almost certainly a bowhead whale.

Other large pieces (120 cm long and 13 cm wide) were found during the excavation of layer II, at a depth of 120 cm to 135 cm bd (below datum). On one of the baleen pieces we recovered a piece of twisted cordage 5 mm thick which seemed to surround two fragments of baleen (below). These baleen fragments do not appear to have been burned and lay at the interface between L-I and L-II, which eventually becomes a thick, black layer of burnt earth with a high concentration of wood charcoal in Layer IV. The bottom of layer IV was followed by successive layers of reddish brown to orange soil with fragments of tiles and some scattered fragments of baleen (see stratigraphic profile for more details).

At the bottom of the pit, around 25 to 30 cm below baleen Layer II, fragments of worked and unworked wood (160 to 165 cm bd) were found. These wooden pieces most likely correspond to cooperage waste; axe cut-marks were visible on the surface of a few pieces. In the same location of these finds, four wood pieces were unearthed during the last day of excavation at 178 cm bd (below). Their shape and size suggest they are barrel staves. These wooden pieces remain *in situ* awaiting future excavation.

Although the edge of the baleen pit lie beyond the edges of the 2 x 2 m excavation, our current results did not show a clear surface indication of a pit containment wall or internal rock structure or bottom pavement. It will be necessary to extend the excavated unit beyond its current east and west limits to better understand this feature.

Ledge Unit (1S/2W) This is 1x1m unit was excavated to explore the northern limit of the fire pit area. The hillside slope extends into this unit from the east, and at its bottom the excavation encountered bedrock sloping toward the shore. This unit had two layers: a layer of sod and peat that extended 10-15 cm below the surface; and a second dark brown water-saturated cultural layer containing baleen, charcoal, tile fragments, a large iron spike, fragments of flint fire-starter flakes, several fragments of marmite ceramics, pieces of cut animal hide (some with short fur (perhaps seal?) adhering, and increasingly toward the bottom of the unit, fragments of water-saturated wood. The lowest levels contained wood remains. The cultural layer bottomed out on bedrock. The unit suggests a combination of baleen trywork deposits and other activities including domestic and maintenance.



Locus III unit north of the baleen pit (1S2W), view east.

*Test Pit 1 (8N/3W)* This 50cm test pit is located in the level 'most habitable' extension of the site ledge 13 m north of the baleen pit and several meters south of the northern edge of the site terrace. The purpose was to test the northern extent of the site and what types of activities it might have supported. Beneath 20-30 cm of peat was a black earth cultural layer containing a few rocks, tiles, charcoal, flint chips, baleen, wood, and marmite ceramics. Indications are that the north end of the site contains similar materials as the rest of the site, but without the presence of cinder and burned material. Time did not permit the expansion of the until or excavation down to sterile ground.



TP-1 showing Basque layer below 25cm of sterile peat; and Saraí recording TP-2, view SSW.

*Test Pit 2* This 50cm test pit is located a few meters east and upslope from TP1, also in thick low ground cover on a gently sloping surface that would be conducive for site activity. The deposits were similar to those in TP1: 20-30cm of sterile peat overlying a black earth cultural layer containing the same materials as in TP1. Again, time did not permit expanding the test or excavating to sterile soil. Both test pits suggest that the north end of BE-4 was an area of Basque activity related to but not including trywork production.

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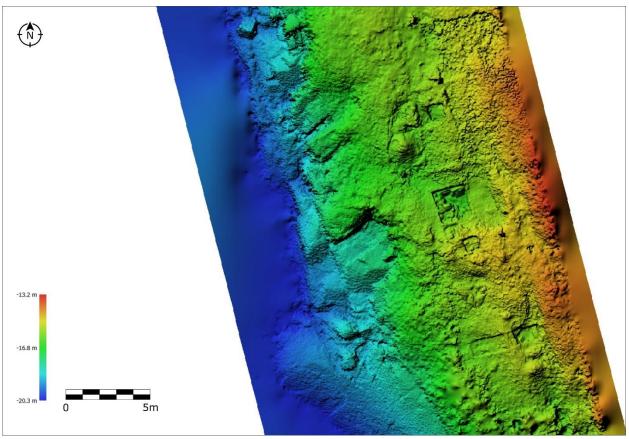
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Field Notes, Data, and Photographs

Google map showing location of Grande Isle Inuit site (EiBk-54) and Bonne Espérance-4 (EiBk-61) sites.

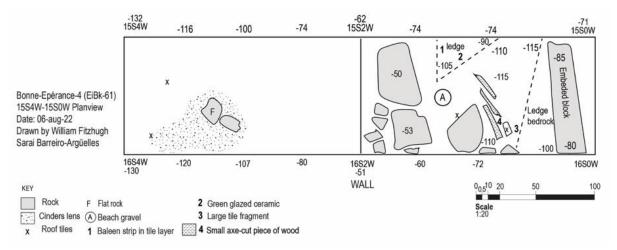


Drone shot of the west side of Bonne Espérance-4 (EiBk-61) showing the water's edge, shore ledge, site topography, and excavation units. (photo: F. Rivera Amaro)

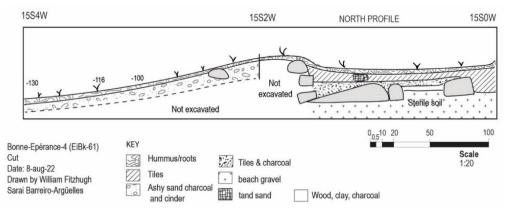


Drone photo of the 15 South 1x4 m wall trench showing east-end cultural deposits, wall, and west-end tryworks cinder midden. (photo: F. Rivera Amaro)

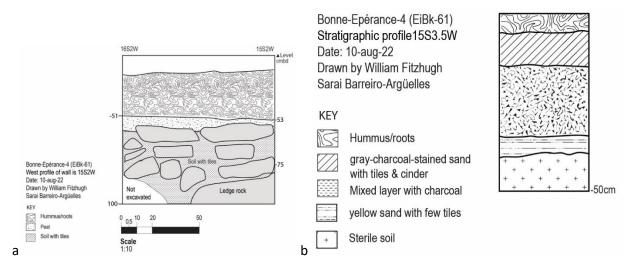
# 15S/0-4W Wall Trench (GPS Station # N 51.39963', W 057.67163')



155/0-4W 1x4 m wall trench top plan with cultural materials found in a depression between the wall and the hillside ledge, and tryworks midden containing burned rock and tile, charcoal, and blubber cinder on the downhill slope between the wall and the shore. The cinder midden was not excavated to sterile soil after the upper 20 cm produced no useful finds.



15S/0-4W north wall profile showing the tryworks midden deposits to the west and cultural deposits in a depression to the east of the wall.



*a) Profile of the east side of the rock wall between 15-16S at 2W; b) General profile at 15S/3.5W. Notes on the wall trench:* 

NW corner of 15S/1W has 3 tiers of rocks and a layer of broken tiles mixed with clay and charcoal and a small patch of clean sand in the wall. A small glazed ceramic fragment was in this clean sand near the bottom of the wall. A [circled] Beach gravel was laid in as a foundation for the wall at -120 BT.

Grass was limited to the top of the wall ridge, with other types of vegetation on the west slope. Beneath the surface vegetation is a layer of grey-black soil with cinders, tile frags, burned rock. A plastic rope fragment was found in the sod near the 15S 4W corner. In the tryworks midden west of the wall the culture level begins 5 cm below the surface and continues to ca. 35 cm below surface, above another 10-15 cm layer of yellow sand.

The eastern part of the trench descends from the wall ridge at the 2W line into a depression filled with peat overlying 10 cm of sphagnum moss. Below that is a layer of tiles, some soft and decomposed from water saturation. At the 0W line a vertical ledge rises sharply, creating a wall along the east side of the depression. Is this a backstop for the blubber hearth? If so, why all the tiles and cultural material in the depression? The rock east of the wall probably fell in from the top of the wall.

Peat and sphagnum was the upper layer in the depression between the wall and ledge. Below the sphagnum was the tile layer, and below that a charcoal-stained sandy layer, and below that a clayey layer with preserved and sometimes sawn and ax-cut wood. Below this, the bottom layer was a hard layer with many pieces of small sticks, hide with fur adhering, and below this sterile sand.

Artifact #s: 15 cm long baleen strip in the tile layer; 2, a small triangular green glazed ceramic sherd; 3, a large tile fragment in the lower tile 'floor' with a raised lip at its proximal end; 4 sawn and ax-cut piece of wood in the bottom of the cultural layer at -120 BT.

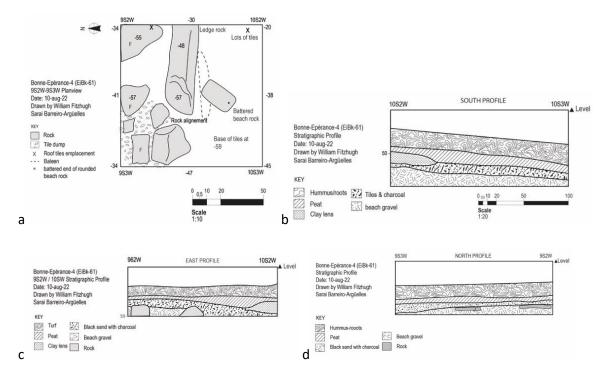


Drone view of the oval mound and baleen pit at the close of excavation. North is up. (photo: F. Rivera Amaro)



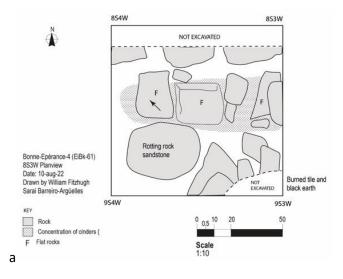
Map of the two 1x1 m units on the oval mound (right) and the 2x2 m unit in the baleen pit (left).

# 1x1 m Unit at 9S/2W in the Center of the Oval Mound



The above shows the top plan and profiles for the 1x1 m oval mound, which could not be excavated to sterile because it is on the top of a large tryworks deposit or structure. This unit is in the middle of the oval mound south of the baleen pit. Lots of fire activity: burned tiles, charcoal but no structure on top indicating its construction, which turned out to be related to a trywork furnace. Some basal deposits were very hard and fused by oil and heat. Tile-charcoal level is directly on hard-packed sand/gravel level containing baleen. The large, rounded rock has the battered end of a beach rock.

# Excavation unit at NW corner of the Oval Mound at 8S/3W



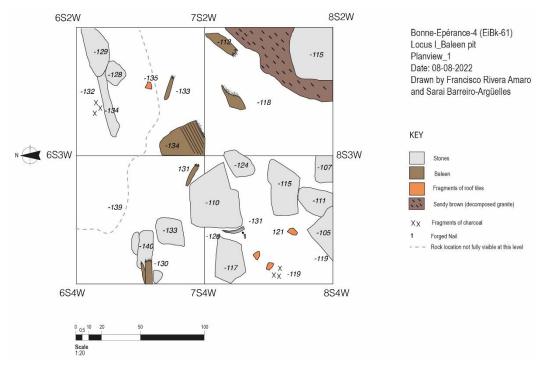
**853W:** This unit is at the NW edge of the E-W oval mound in the center of the site. Excavation at 9S/2W on top of the mound did not resolve the nature of the mound's origin, but that question was answered

by this new excavation which shows clearly it is a construction with rocks piled up and filled with sand, gravel, and some clay from the shore. Lots of angular rocks with voids between them which could not happen if this was a natural feature. Cinders, burned tiles, and some charcoal is also present around the north side of the unit at the base of the mound.

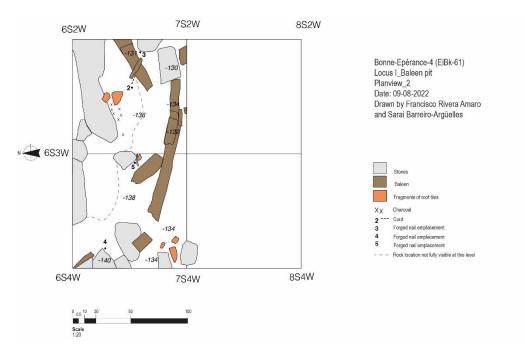
Baleen Pit 2x2 m unit at 6S2W



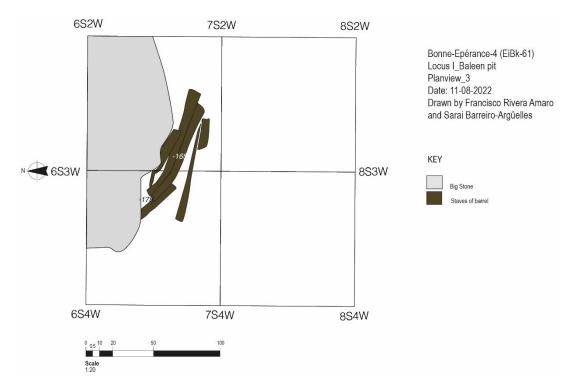
View of baleen pit toward the west, excavated to 160 cm.



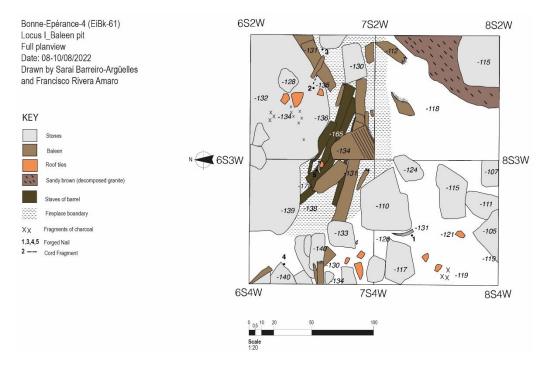
Map I of the upper baleen fragments and granite rocks found in the Locus 1 baleen pit.



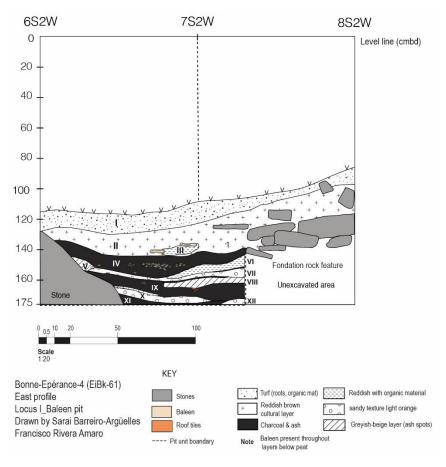
Map 2 of Baleen Pit 6S/2W showing large pieces of baleen at the bottom of the pit.



Map 3 of the baleen pit showing the wood barrel staves near the bottom of the pit when excavation ceased before sterile ground was reached.



General plan of objects found in the Baleen Pit excavation. Bold numbers represent found objects while gray numbers are depths below datum of rocks and other key elements.



East wall profile of Locus I baleen pit

# **Description of Baleen Pit Stratigraphy**

**I.** Topsoil (turf). This layer is 10 cm to 12 cm thick and consists of organic material of natural origin, moss, lichens, and herbaceous plants (crowberry, cloudberry, Labrador tea) with a large amount of rooted stems mixed with colored sand. Reddish brown (Munsell 2.5YR 4/4 reddish brown).

**II.** Layer two measures 15 cm to 20 cm and is distinguished by a dark brown color (Munsell 2.5YR 3/3 dark brown) with gray color spots (7.5YR6/1 gray) (ash) and reddish-brown inclusions. This stratum presents finer roots with an increased presence of baleen pieces, fragments of tiles and some forged nails.

**III.** Reddish inclusion (2.5YR 4/4) containing organic material; baleen fragments and very fine roots. This inclusion correlates with Layer II.

**IV.** Layer of blackish earth (7.5YR 3/1 very dark gray) with remains of coal and burnt stones, this layer is mixed with a large quantity of small fragments of tiles and presents some ash lenes with small fragments of fire-cracked rock colored beige to gray.

V. Sandy layer of grayish-beige color (10YR 5/2 Grayish brown) with some tile fragments.

**VI.** Layer of fine texture reddish-brown color (10YR3/4 dusky red) with some gray and black color broken rocks and fragments of baleen and tile.

**VII.** Light orange color layer (7.5YR Reddish yellow), fine texture with some small gray pebbles, baleen and fragments of crushed tile.

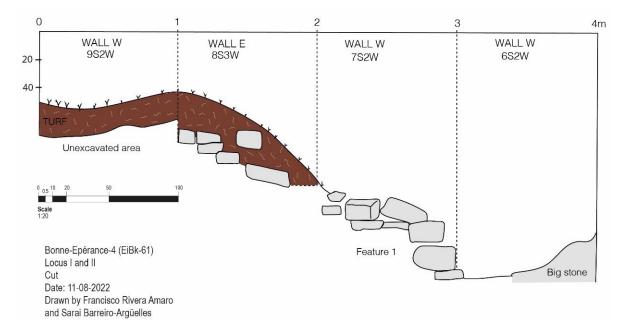
**VIII.** Grayish-beige color layer, similar to layer V (10YR 5/2 Grayish brown) and correlated with layer IX, this layer present in the upper part, a thin black layer of charcoal mixed with ash; thickness varies from 4 cm to 8 cm.

**IX.** This layer is similar to layer IV, blackish color with an increased presence of charred wood, thickness of 10 cm. It is in this layer that we find fragments of wood cut with an ax and wooden planks (barrel staves).

**X.** Thin layer of light orange color (7.5YR Reddish yellow), similar to layer XVII, sandy texture, with small fragments of burned and crushed tile, a thickness of 2 cm to 6 cm.

**XI.** Thin layer black color (7.5YR 3/1 very dark gray) similar to layer IV with gray color spots (ash) thickness of 4 cm to 2 cm.

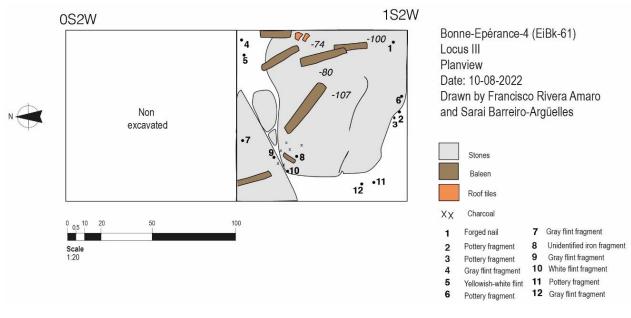
**XII.** Layer of fine orange soil (7.5YR Reddish yellow), the same texture as layer X with a thickness of 3 cm to 4 cm.



Unexcavated oval mound and excavated baleen pit north wall and bedrock after excavation, as viewed to the west.



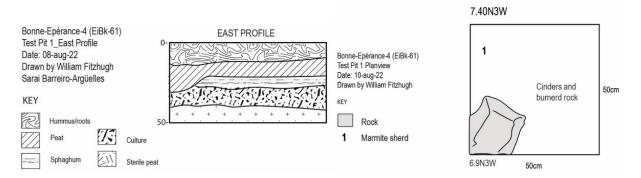
Drone photo of Locus III 1x1 m unit and its sloping bedrock base. North is up. (photo: F. Rivera Amaro)



Map of Locus III unit on sloping bedrock 5 m north of the baleen pit, showing the location of artifacts found.

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# Test Pit 1 at the North End of the Site



**Test Pit 1** has a culture layer 15-20 cm thick with baleen, charcoal, flint flakes, birch bark, and wood. No bone was present. Excavation ended before reaching sterile soil.

# **Preliminary Finds**

The BE-4 explorations in 2022 provided a glimpse into the activities of a small-scale Basque tryworks that may date to the early period of Basque whaling in the Grand Bay region. Although evidence is as yet not conclusive, the large quantity and size of baleen suggests that baleen was not yet the commercial commodity that it turned out to be later on. Other chronological indicators are the presence of undecorated marmite ceramics and a single piece of greenglazed earthenware, fire-starting flakes, and absence of clay pipes, glass beads, stoneware, and other post-1700s material. The large proximal width of baleen plates might suggest early whaling years before the stock of large baleen whales were hunted out. These and many other questions require research on the 2022 collections and further excavations in the coming years. BE-4, BE-3, and perhaps more habitation-friendly BE-2 site, can provide an alternative picture of small-scale Basque whaling compared to Red Bay and other large sites. BE-4 appears to have a different method of rendering blubber than documented at Red Bay, and it seems likely to have a range of related activities including domestic crew maintenance. Research would be greatly enhanced if written records could be found relating to Basque activities in the St. Paul River region. Finally, more extensive excavation may reveal evidence of Basque interactions with Innu or Inuit peoples who may have been attracted to the novel appearance of outsiders with desirable materials and products.

# **Provincial Archaeology Office Journal Manuscript:**

**A Small Basque Whaling Station in St. Paul River, Quebec** (William Fitzhugh, Saraí Barreiro-Argüelles, and Francisco Rivera Amaro, submitted to NLFD PAO Journal for 2023 publication)

To date, much of our information on Basque whaling in Labrador and the Gran Baya region comes from Red Bay and a few other locations (Barkham 1980,1987; Azkarate *et al.* 1992;

Grenier et al. 2007; Loewen and Delmas 2012). This seems unusual considering the large number of Basque stations now known from Nova Scotia and New Brunswick, Newfoundland, southern Labrador, and the western St. Lawrence Gulf. Basque materials are common finds in Inuit winter villages between Brador and Petit Mecatina on the Quebec Lower North Shore (QLNS), but the tiles, ceramics, metal, wood, and other European materials have never been linked to specific Basque sites. The large quantity of European materials including fragile objects like wine glasses and tableware in the Inuit sites indicates that exchanges must have been conducted in person at Basque shore stations or from floating trade rather than by scavanging from abandoned or seasonally vacated Basque stations. With very little literature available describing these contacts, we have to rely on archaeological evidence.

To date most of this evidence has come from Inuit winter houses and middens from four sites: Hare Harbor (EdBt-3), Little Canso Island (EhBn-9), Belles Amours (EiBi-12), and Hart Chalet (EiBh-47), ranging geographically from Harrington Harbor to Brador and Brador (Fitzhugh 2019a). A fifth site recently excavated on Grande Isle in St. Paul River (Fitzhugh et al. 2019b) provides an opportunity to investigate possible Inuit-Basque exchange with a small Basque whaling station located less than a kilometer away on Bonne Espérance Isle. The Grande Isle site has two components: a rectangular tent (qarmat) structure which was found half-eroded from a beach terrace a few meters from a partially constructed sod and earth winter structure. Both structures contained Inuit soapstone vessel fragments together with forged nails, roof tiles, and other European materials. The winter house had part of its floor paved with a wide sawn plank from a European ship. This settlement appears to have been occupied by an Inuit family who may have been the first of their people to settle in the St. Paul region. And as far as we know, they were also the last to do so, as their house was burned and an Inuit male was buried with his harpoon and snow-knife in a make-shift grave a few hundred meters away.

While we were excavating the Grand Isle site in 2019, University of Montreal divers conducted an underwater survey of the Basque anchorage between Bonne Espérance and Grand Isle, known today as Bonny Harbor. The divers found tiles and ship ballast in deep water along the western shore of Bonne Espérance, and a land survey at these locations revealed two small trywork mounds hidden beneath surface vegetation. These sites, BE-3 (EiBk-60) and BE-4 (EiBk-61), are on a narrow channel separating the southern extension of Grande Isle from Bonne Espérance and are within a kilometer of the whaling grounds in the Gulf. Only a few hundred meters apart, separated by a high bluff, both sites are sheltered from wind and surf and have ready access to whaling grounds nearby in the Gulf.



Bonne Espérance-4 (EiBk-61) viewed to SW before excavation. (photo: W. Fitzhugh)

For two weeks in August, we tested BE-4 and found it to be a small-scale butchering and blubber-rendering station containing large amounts of baleen, charcoal and cinder, and a small inventory of Basque ceramics and iron. Excavations were conducted in four areas: a stone wall at the south end of the site; a central mound composed of boulders and cinder; a 'baleen pit' full of charcoal and baleen adjacent to the mound; and a residential or general work area at the north end of the site. Time constraints limited our work to a few square meters in the tryworks and exploratory tests at the more open and level north end of the site.

Other than James Tuck's general descriptions of the Saddle Island sites, there are few accounts of the construction and layout of Basque whaling stations. Jean-Pierre Proulx provides the following:

Each tryworks consisted of a granite and sandstone structure measuring around 1.0 m high by roughly 2.5 m deep and comprising one or more fireboxes. An opening situated at the base of each firebox and always facing shoreward was used to introduce fuel for stoking the ovens. Up to six additional circular openings were located on top of the tryworks for installing the copper cauldrons used to boil down the whale blubber....[they] put the ruggedness of the terrain to good use. They began by building a wall opposite a vertical outcrop of bedrock and then set tree trunks on the wall to serve as posts. Next they installed rafters, placing one of their ends on the wooden posts and the other on top of the rock outcrop. According to one historian they laid baleen on the rafters to support the tiles used to roof the shelter (Proulx 2007:1-66,67).

#### **Site Description**

Bonne Espérance-4 lies on a ten-meter wide bench that extends along the shore ca. 150 meters from a sea cliff at the south end of the site to a small cove that terminates the level ground to the north. On its west side the 2.5 m high bench (ledge) drops into deep water, allowing boat accesss at any tide; the site is bounded to the east by a steep hillside. The location would not be ideal for a habitation, but it is suitable for bringing boats alongside, for butchering whales,

landing blubber, loading casks of oil, and assembling barrels. A meter wide linear mound runs through the site's south end, paralleling the rising hill for ten meters, ending in an oval, meterhigh mound in the center of the site. The north side of the mound has a declivity where our 2019 test pit produced baleen, charcoal, seeds, and bone. The north end of the bench has a 4-6 m wide level open area that rises gradually into the steeper hillslope. The 2019 underwater survey revealed roof tiles and ballast rock on the bottom below the ledge, deep enough to be protected from winter sea-ice scour. No underwater work was conducted in 2022.

### **Excavation Procedure**

Time constraints and a small crew called for exploration and mapping rather than broader excavation. We laid out a grid following the north-south orientation of the site, photographed it from the surface and flew drones to establish general layout, local topography, and excavation views. Four areas were selected for test excavation: a 1x4 E/W trench across the wall at the south end of the site; two 1x1 m units on the central mound; a 2x2 m unit in the declivity tested in 2019; and a 1x1 m and two 50 cm test pits to the north.



*BE-4 layout and excavation areas. (photo: F. Rivera Amaro);* Be-4 westward view of the wall trench. (photo: W. Fitzhugh)

# The Stone Wall

We imagined that BE-4 would follow the pattern of the Red Bay tryworks—a 2-meter wide linear pile of rocks, sand, and sod with openings on top for rendering pots and openings at the seaward base for fuel—wood at first followed by cooked blubber wastings. The structure that emerged from the 1x4 m cut revealed something different: a 50 cm thick, 70 cm high wall of 3-4

courses of laid-up rocks with no place for pot depressions. West of the wall, extending to the shore edge of the ledge, the soil consisted of tryworks sheet midden containing burned rock, charcoal, burned and broken tile, and blubber cinder. This deposit contained no artifacts other than tile. In the 2 meter wide space between the wall and the rising hillside was a 50 cm deep cultural deposit ending with a waterlogged layer of cut wood and a garment fragment looking like sealskin. Tiles, a few pieces of domestic ceramic, nails, baleen, birchbark, and small flint fire-starter flakes were present, but no bone was preserved and trywork debris was absent. This deposit appeared like a domestic cultural midden rather than trywork refuse. At this point, the function of the wall and its relation to oil rendering and other activities remains unclear. However, it is interesting that building a wall on the seaward side of a tryworks was a common element of Basque tryworks design as noted in the Proulx quote above.



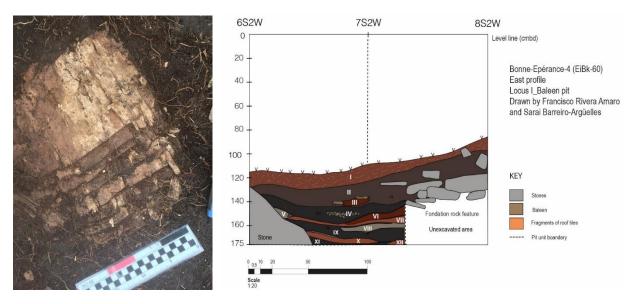
Oval mound and fire-pit excavations. (photo: F. Rivera Amaro); Baleen pit and oval mound to its south. (photo: W. Fitzhugh)

#### The Mound and Baleen Pit

The stone wall ends in the central area in an 3x4 m oval mound that at first appeared to be bedrock. However, excavation revealed a construction of small boulders, gravel, and sand containing tiles, charcoal, and large lumps of cemented cinder. Time permitted only 1x1 m tests into the top and the northwest side of this structure, and toward its inner parts of the latter, we found voids between the rocks, confirming it is a tryworks feature and not of geological origin.

Adjacent and north of the mound was the declivity tested in 2019. Here we opened a 2x2 m unit expecting to find a small tent site or domestic work area, but instead encountered layer upon layer of charcoal and baleen separated by lenses of gravel and sand extending 60 cm below the surface, with large pieces of baleen and partially burned, ax-cut wood. Stratigraphy

indicated we had excavated part of a 2-meter wide pit bounded by the mound to the south and a jumble of large rocks to the south and west. Time did not allow us to reach the bottom or to explore its margins or structure. In addition to meter-long strips of baleen near the bottom, its upper level produced a 20x20 cm wide bundle of baleen plates stacked on top of each other like a deck of cards. The width of the plates indicate they were from a large whale.



Layered stack of baleen plates. (photo: W. Fitzhugh) Baleen pit east wall stratigraphy. (credit: S. B-Argüelles, F. Rivera Amaro)

# **Northern Area Test Pits**

We also explored the relatively level area north of the mound and pit that had no surface sign of construction features and was the only area suitable for trywork support activities such as barrel assembly or domestic life. A 1x1 m unit north of the fire pit exposed, below a thick cover of sterile peat, a culture layer with a few nails and ceramics as well as charcoal and baleen resting on sloping bedrock. And in the likely area for general habitation at the north end of the site, two 50 cm tests revealed a 10-15 cm thick cultural layer beneath 30 cm of peat. This layer produced charcoal, baleen, marmite ceramic sherds, flint chips, and wood—a convincing assemblage suggesting that this area may have seen domestic or trywork support activities.

# Summary

Bonne Espérance-4, like its neighbor BE-3, appears to be a small-scale blubber processing whaling station that required a relatively small amount of labor to construct its rendering oven and related facilities. The central mound may, if fully excavated, reveal a space for a single rendering pot, but the site does not appear to have multi-pot furnaces known from Saddle Island in Red Bay. The site therefore seems to have been operated by a small team who may have worked at the site's north end, and who must have been supported by a ship anchored

nearby in Bonny Harbor. BE-3 seems to have been a parallel operation, and each may have been built and manned by separate chaloupe teams affiliated with a mother ship. A striking feature of the archaeological finds was the large amount of baleen, some from large whales presumably bowheads—found throughout the site, but especially in a deep, stratified, pit in the center of the site next to a mound that may have been the site's single furnace. None of the baleen appears to have been burned, and its casual disposal suggests it was not of special commercial value at the time. Use as shed roofing might explain its ubiquity. Our excavations while quite limited—did not produce many nails or ceramics, but the presence of marmite cooking pots and abundant flint fire-starting chips indicates domestic as well as industrial activity and recalls the type of assemblage found in the 16<sup>th</sup> century Basque hearths at Petit Mécatina near Harrington Harbor. The absence of clay pipes from BE-4 may also be a clue to a 16<sup>th</sup> C. date.

It is not surprising that our limited tests did not turn up evidence of Inuit contact given the few square meters excavated. However, the proximity of the Grande Isle Inuit settlement offers a chance that the BE-3 and BE-4 whalers might have been present at the same time as the Inuit, and if so, each would have been curious about the other's activities and materials. So far, evidence of contact is found only at the Inuit site in the form of tiles, iron spikes, and a large oak ship's plank. We will be curious to see if Inuit soapstone vessel fragments turn up in future work at BE-3 or -4. Even if not, these sites show promise of defining a new type of small-scale Basque whaling station conducted by chaloupe crews. Further work will be necessary to determine if the sites date to the early phase of Basque Grand Bay whaling before the development of the industrial scale seen at Red Bay and other sites, or whether they are small-scale operations contemporary with the larger sites. Proteomic, DNA, and sable isotope studies of the baleen may provide clues to help clarify the age, nature, and history of the Bonne Espérance whalers and their Inuit neighbors.

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Francisco at the helm (photo: SB-A), and Saraí in the puskhi thicket in New Ferolle.



Bill and Francisco dissect the baleen stack. (photo: SB-A); St. Paul visitors arrive to see the site. (SB-A)

# Bonne Espérance-4 Artifact Catalog (by Anja Herzog)

tifac o.	Fiel d Nu mb er	Proveni ence	Dept h (bel ow surf ace or datu m)	Park s Cana da Mate rial Cod e	Material / Type	Object Name	Q ty	Conditi on	Descript ion	Measure ments	Fits with	Cultu ral affilia tion / Date	Comme nt	Dat of d
3k- 9	25	Test Pit 1	37 cm belo w surfa ce	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	1	Fragme ntary	triangula r fragment , light orange paste	7,3 x 6,0 cm; thickness: 1,6 cm	n/a	Histori cal, Basqu e	Note on bag: ca. 7 m North / 3 West	8/1 <sup>-</sup> 0
sk- 10	28	Test Pit 1	40 cm belo w surfa ce	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	1	Fragme ntary	small fragment , lower surface missing, light orange paste	4,3 x 2,0 cm; thickness: 0,7 cm	n/a	Histori cal, Basqu e		8/1 <sup>-</sup> 0
8 <b>k-</b> 11	27	Test Pit 1	40 cm belo w surfa ce	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot?	1	Fragme ntary	small, thin, and flat fragment , possibly from the base of the vessel, trace of reddish (ferrous) inclusion	2,9 x 1,3 x 0,4 cm	n/a	Histori cal, Basqu e		8/1 <sup>-</sup> 0
8k- 12	28	Test Pit 1	40 cm belo w surfa ce	4.1.8	Silex	Flake	3	Fragme ntary	three fragment s of light grey chert with cortex, two fit, possibly flint?	1,8 x 2,5 x 0,5 cm; 2,1 x 2,4 x 0,7 cm; 2,1 x 2,9 x 0,9 cm	two fragmen ts fit	Histori cal, Basqu e?		8/1 <sup>-</sup> C

8k- 13	29	Test Pit 1	35- 40 cm belo w surfa ce	5.2.2	Baleen	Baleen	17	ntary	small, mostly elongate d fragment s	max. 6,0 x 1,5 cm; weight before drying: 5,8 g; after drying: 3,3 g		Histori cal, Basqu e	treatmen t: slow- drying in fridge	8/1 <sup>-</sup> C
8к- :14	25	Test Pit 1	37 cm belo w surfa ce	5.2.3	Wood	Branch	1	Fragme ntary	fragment of natural wood with trace of a branch, burnt and possibly cut at branch junction	5,9 x 3,5 x 4,1 cm	n/a	Histori cal, Basqu e?	Note on bag: N51.399 73' / W057.67 167'; TP 7.00- 7.50 mN, 50x50 cm; coin inf. droit = 3W line	8/1 <sup>-</sup> C
8k- :15	30	Test Pit 1	38 cm belo w surfa ce	5.2.3	Wood	Charco al	x	Fragme ntary	sample of small charcoal fragment s	Weight: 2,3 g (with bag)	n/a	Histori cal, Basqu e?		8/1 <sup>-</sup> 0
3k- :16	31	Test Pit 1	30- 40 cm belo w surfa ce	5.2.3	Wood	Wood, worked	1 2	Fragme ntary	mostly elongate d, flat fragment s, some with cut marks, one, possibly two, partly burnt, one with eroded surface; two elongate d pointed fragment s from natural wood knot	weight before drying: 85,8 g; max. 13,1 x 2,9 x 1,0 cm	n/a	Histori cal, Basqu e?	treatmen t: slow- drying in fridge	8/1 <sup>-</sup> C

Bk-	26	Test Pit	40	5.5.2	Bark	Bark	6	Fragme	small	max. 3,4 x	n/a	Histori	treatmen	8/1
:17		1	cm belo w surfa ce					ntary	fragment s of cut bark, square and rectangul ar shapes, brown colour, smooth; possibly birch	3,0 cm; weight before drying: 3,8 g; after drying: 2,8 g		cal, Basqu e?	t: slow- drying in fridge	C
8k- :18	32	Test Pit 2	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	1	Fragme ntary	elongate d fragment , light reddish- brown paste	6,5 x 3,0 x 1,5 cm	n/a	Histori cal, Basqu e	Note on bag: N51.399 77, W057.67 160	8/1 <sup>-</sup> 0
3k- :19	2	Locus 1 (Baleen Pit), 6S/2W	141 cm belo w datu m	3.1.1 .11	Iron, wrought	Nail, wrough t	1	Complet e	medium- sized nail with large, flat head	Length: 8,0 cm	n/a	Histori cal, Basqu e		8/9/
3k- :20	13	Locus 1 (Baleen Pit), 6S/2W	170 cm belo w datu m	3.1.1 .11	Iron, wrought	Nail, wrough t	1	Complet e	medium- sized nail with large head, covered in concretio n	Length: 8,4 cm	n/a	Histori cal, Basqu e		8/1 <sup>-</sup> C
3k- :21		Locus 1 (Baleen Pit), 6S/2W	n/a	5.2.2	Baleen	Baleen	1	Fragme ntary	thick fragment , cut at one edge, rectangul ar shape	18,0 x 20,7 x 4,2 cm; weight before drying: 591,7 g	n/a	Histori cal, Basqu e	treatmen t: slow- drying in fridge	
8k- :22		Locus 1 (Baleen Pit), 6S/2W	130 cm belo w datu m	5.2.2	Baleen	Baleen	1	Fragme ntary	stack of multiple fragment s of cut baleen of various shapes and sizes, differentl y oriented	27 x 21 x ca. 3,4 cm; weight before drying: 596,3 g	n/a	Histori cal, Basqu e	treatmen t: slow- drying in fridge	8/9/

									(unorgan ized)					
3k- :23 3k-	9	Locus 1 (Baleen Pit), 6S/2W	160- 165 cm belo w datu m	5.2.3	Wood	Wood Fragm ents	3 9	Fragme ntary	wood fragment s, most with cut marks, some partly burnt, and some small fragment s and charred chips (14), one flat fragment with straight, parallel edges with tiny, circular hole (rivet?); one with circular cut border, one possible half log fragment largely charred charcoal	largest fragment (log?): 15,3 x 5,0 x 3,6 cm; total weight before slow- drying: 242,5 g	n/a n/a	Histori cal, Basqu e Histori	treatmen t: slow- drying in fridge	8/10 C
:24		(Baleen Pit), 6S/2W	cm	0.2.0	wood	al		ntary	sample no. 1, collected on 10/08/20 22	(with bag)	11/2	e	Note on bag: Waypoin t N51°23' 58.8" W57°40' 18.8 (sample collected under a stone)	C

Bk-	16	Locus 1	n/a	5.5.3	Hemp	Rope	1	Fragme	thin rope	Length:	n/a	Histori	Note on	8/9/
:25		(Baleen Pit), 6S/2W						ntary	fragment compose d of three strands, U-shape	ca. 15 cm (not fully stretched) , width: ca. 0,5 cm; thickness: ca. 0,2 cm; weight: 0,3 g		cal, Basqu e	bag: « cordage around baleen »	
8k- :26		Locus 1 (Baleen Pit), 6S/2W and 6S/3W	134 cm	5.2.2	Baleen	Baleen	3	Fragme ntary	long fragment (folded), with transvers al fracture, two smaller fragment s	Length: max. 98 cm, without fibres: 74 cm; 2 fragments : 45,0 x 14,5 x 2,5 cm and 27 x 15 x 1,4 cm; weight before slow- drying: 646,0 g		Histori cal, Basqu e	treatmen t: slow- drying in fridge; label indicates length of 120 cm	8/10 C
3k- :27	11	Locus 1 (Baleen Pit), 6S/3W	147 cm belo w datu m	3.1.1 .11	Iron, wrought	Nail, wrough t	1	Complet e	large nail, bent near head and curved, small section of head preserve d	Length: ca. 9,2 cm	n/a	Histori cal, Basqu e		8/10 C
3k- :28		Locus 1 (Baleen Pit), 6S/3W	140 cm belo w datu m	5.2.2	Baleen	Baleen	1	Fragme ntary	elongate d fragment , possibly cut	29,0 x 14,2 x 1,5 cm; weight before slow- drying: 196,2 g	n/a	Histori cal, Basqu e	treatmen t: slow- drying in fridge	8/9/
3k- :29		Locus 1 (Baleen Pit), 6S/3W	n/a	5.2.2	Baleen	Baleen	1	Fragme ntary	elongate d fragment of baleen, mostly compose	45,0 x 6,0 x 1,3 cm; weight before slow- drying: 32,1 g	n/a	Histori cal, Basqu e	treatmen t: slow- drying in fridge	

									d of fibres					
3k- :30	7	Locus 1 (Baleen Pit), 6S/3W	162 cm belo w datu m	5.2.3	Wood	Charco al	x	Fragme ntary	charcoal sample, collected 10 August 2022	Weight: 9,1 g	n/a	Histori cal, Basqu e		8/10 C
3k- :31	10	Locus 1 (Baleen Pit), 6S/3W	160 cm belo w datu m	5.2.3	Wood	Charco al	x	Fragme ntary	charcoal sample, collected 10 August 2022	Weight: 17,6 g	n/a	Histori cal, Basqu e		8/10 C
3k- :32	3	Locus 1 (Baleen Pit), 6S/3W	160- 165 cm belo w datu m	5.2.3	Wood	Wood	x	Fragme ntary		weight before drying: 20,8 g	n/a	Histori cal, Basqu e	treatmen t: slow- drying in fridge; fragment s lost	
3k- 33	4	Locus 1 (Baleen Pit), 6S/4W	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	1	Fragme ntary	large tile fragment with one edge, red- brown paste, largelly burnt on lower surface and along edge, also partly on upper surface; impressi on of fern (?) in paste of lower surface	14,4 x 7,3 x 1,7 cm	n/a	Histori cal, Basqu e	Note on bag: « tile with vegetati on impressi on »	8/9
3k- :34	1	Locus 1 (Baleen Pit), 6S/4W	141 cm belo w datu m	3.1.1 .11	Iron, wrought	Nail, wrough t	1	Fragme ntary	nail stem without head, covered in rust concretio n	Length: 7,3 cm	n/a	Histori cal, Basqu e		8/9/
	•			•	•	•		•	•	•		•	•	•

Зк- :35	6	Locus 1 (Baleen Pit), 7S/2W	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile?	1	Fragme ntary	fragment altered by heat, surface darkene d and incrusted burnt, black residue	3,8 x 2,7 x 1,4 cm	n/a	Histori cal, Basqu e	presenc e of furnace? Identifie d as « charred cinder samples »	
3k- :36	6	Locus 1 (Baleen Pit), 7S/2W	n/a	4.1.3	Granite	Granite Fragm ent	2	Fragme ntary	heavily heat- altered and blackene d, flat and glistenin g (mica?) fragment s	8,4 x 4,6 x 1,2 cm, and 6,3 x 4,0 x 1,4 cm	n/a	Histori cal, Basqu e	presenc e of furnace? Identifie d as « charred cinder samples »	
3k- :37	6	Locus 1 (Baleen Pit), 7S/2W	n/a	4.1.1 3	Rock	Rock fragme nt	1	Fragme ntary	heavily heat- altered rock fragment s, blackene d, sometim es with black, burnt residue	6,6 x 7,0 x 4,3 cm	n/a	Histori cal, Basqu e	presenc e of furnace? Identifie d as « charred cinder samples »	
3k- :38	6	Locus 1 (Baleen Pit), 7S/2W	n/a	4.4.3	Slag?	Slag Fragm ent?	4	Fragme ntary	porous, light- weighed heat- altered blackene d material	largest fragment: 5,4 x 5,3 x 4,2 cm	n/a	Histori cal, Basqu e	presenc e of furnace? Identifie d as « charred cinder samples »	
3k- :39	14	Locus 1 (Baleen Pit), 7S/2W	171 cm belo w datu m	5.2.3	Wood	Charco al	x	Fragme ntary	charcoal sample, small fragment s	Weight:21 ,8 g	n/a	Histori cal, Basqu e		8/1 <sup>.</sup> 0
3k- :40	8	Locus 1 (Baleen Pit), 7S/3W	126 cm belo w datu m	3.1.1 .11	Iron, wrought	Spike	1	Fragme ntary	large, curved stem fragment , head missing	Length: 17,1 cm	n/a	Histori cal, Basqu e		

3k- :41	12	Locus 1 (Baleen Pit), 7S/3W	119 cm belo w datu m	5.2.3	Wood	Charco al	x	Fragme ntary	charcoal sample, ca. 12 fragment s	Weight: 10,8 g	n/a	Histori cal, Basqu e	
8k- ∶42	5	Locus 1 (Baleen Pit), 7S/4W	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	1	Fragme ntary	large fragment with one edge preserve d, large groove along edge; orange- red paste, but surface darkene d;	7,5 x 8,5 x 1,8 cm	n/a	Histori cal, Basqu e	
8к- :43	5	Locus 1 (Baleen Pit), 7S/4W	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	2	Fragme ntary	fragment with one edge preserve d, orange- red paste, orange- red paste with very large inclusion s, surface darkene d, lower surface possibly altered; small flake detached	8,5 x 6,2 x 1,5 cm	fragmen ts fit	Histori cal, Basqu e	
3k- :44		9S/2W	64 cm	5.2.2	Baleen	Baleen	1	Fragme ntary	small stack of fragment s, with possible red ochre staining on the surface	15,7 x 8,5 x 2,5 cm; weight before slow- drying: 95,2 g	n/a	Histori cal, Basqu e	

									aaand between layers				
3k- :45	20	Locus II (Trench) , 15S/0W	90 cm belo w datu m	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	1	Fragme ntary	long fragment with part of one end preserve d; dark red- brown passte, surface smoothe d; lower surface possibly altered; edge at extremity thinner	15,0 x 6,1 x 1,2 to 1,8 cm	n/a	Histori cal, Basqu e	
8k- :46	20	Locus II (Trench) , 15S/0W	90 cm belo w datu m	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	1	Fragme ntary	central fragment without preserve d edge, orange- red paste, surfaces eroded; very porous	9,9 x 7,9 x max. 1,8 cm	n/a	Histori cal, Basqu e	
3k- :47	24	Locus II (Trench) , 15S/0W	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	2	Fragme ntary	two large fragment s of one roof tile, one end and one edge present, corner broken off; red- brown paste, end lightly lifted; upper surface smoothe d, lower	refitted: 19,8 x 12,1 x 1,4 to 1,7 cm	2 fragmen ts fit	Histori cal, Basqu e	

									surface of lighter, pinkish color					
3k- :48	17	Locus II (Trench) , 15S/0W	100 cm belo w datu m	5.2.2	Baleen	Baleen	1	Fragme ntary	thin fragment	15,3 x 10,1 x 0,45 cm; weight before slow drying: 43,0 g		Histori cal, Basqu e	treatmen t: slow- drying in fridge	
3k- :49	23	Locus II (Trench) , 15S/0W	115 cm belo w datu m	5.2.2	Baleen	Baleen	7	Fragme ntary	small strips of baleen, mostly with straight, parallel edges and similar lengths and widths, but broken at both ends	Longest: 9,7 x 2,3 x 0,1 cm	n/a	Histori cal, Basqu e		8/10 C
3k- :50	23	Locus II (Trench) , 15S/0W	115 cm belo w datu m	5.2.3	Wood	Wood Fragm ents, worked	2 2	Fragme ntary	one half- log fragment cut at both ends and perpendi cular cut mark on surface, various long fragment s and chips of different sizes, most with cut marks and partially burnt;	log: 12,9 x 5,8 x 2,6 cm; longest fragments : 22,5 x 2,7 x 1,0 cm; 21,9 x max. 5,4 x 1,6 cm; other: 10,9 x 7,8 x 1,0 cm; bark: 13,7 x 3,3 x 0,4 cm	n/a	Histori cal, Basqu e		8/10 C

									one long fragment with square section has a rounded end and a carved- out recess on one side; one bark fragment				
8k- :51	18	Locus II (Trench) , 15S/0W	100 cm belo w datu m	5.5.7	Leather	Fragm ents and straps	6	Fragme ntary	two big fragment s and four small straps; one large fragment with hard « wrapped » core, possible traces of fur (or possibly roots?); one strap with many parallel cut marks along one edge, one other strap also with cut marks	largest fragment: length: 39 cm; second fragment: 16,5 x 12,0 cm; weight before slow- drying: 329,8 g	Histori cal, Basqu e	treatmen t: slow- drying in fridge	8/9/

3k- :52	21	Locus II (Trench) , 15S/3W	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	5	Fragme ntary	one large fragment with one preserve d edge, four flakes that fit at one corner of the fragment ; dark red- brown paste, upper surface smoothe d, lower surface as well as three of four edges altered with black residue	refitted: 13,5 x 10,5 x 1,0 to 1,8 cm	5 fragmen ts fit	Histori cal, Basqu e		
3k- :53	19	Locus II (Trench) , 15S/3W	20 cm belo w datu m	4.1.1	Limesto ne	Ballast Rock	5	Fragme ntary	natural fragment s of beige limeston e with white cortex on part of each fragment	9,6 x 7,6 x 1,6 cm; 7,5 x 4,5 x 2,1 cm; 4,6 x 3,9 x 2,4 cm; 4,7 x 4,1 x 1,5 cm; 3,9 x 1,4 x 0,6 cm	2 fragmen ts fit	Histori cal, Basqu e		8/9/
3k- :54	22	Locus II (Trench) , 15S/3W	n/a	1.1.1 .3	Coarse Earthen ware, unglaze d	Roof Tile	2	Fragme ntary	two small roof tile fragment s, altered by heat, one with several charred black deposits all over the surface	6,2 x 4,8 x 1,7 cm; 4,2 x 2,1 x 1,4 cm	n/a	Histori cal, Basqu e	proximity of furnace?	

8k- :55	22	Locus II (Trench) , 15S/3W	n/a	4.1.1 3	Rock	Rock Fragm ent?	4	Fragme ntary	possible rock fragment s, strongly altered by heat, black and fractured , charred residues on	4,4 x 4,0 x 2,1 cm, 4,5 x 3,8 x 2,2 cm; 4,5 x 4,2 x 2,0 cm; 2,6 x 2,4 x 2,1 cm	n/a	Histori cal, Basqu e	
3k- :56	22	Locus II (Trench) , 15S/3W	n/a	4.4.3	Slag?	Slag Fragm ent?	4	Fragme ntary	surface strongly charred, black, irregularl y shaped residue, two possibly with ceramic or rock inclusion s or metal inclusion s	4,6 x 4,3 x 2,7 cm; 6,3 x 3,9 x 2,5 cm; 4,6 x 3,6 x 1,7 cm; 3,4 x 3,0 x 2,2 cm	n/a	Histori cal, Basqu e	
3k- :57	36	Locus III, 1S/2W	107 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	body sherd, buff paste, quartz and red ferrous and micaceo us inclusion s, soot- stained on outer surface	3,7 x 2,7 x 0,5 to 0,6 cm	EiBk- 61:58, EiBk- 61:60	Histori cal, Basqu e	8/10 C
3k- :58	36	Locus III, 1S/2W	107 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	small body sherd, buff paste, quartz and red ferrous and micaceo us	1,6 x 2,1 x 0,5 to 0,6 cm	EiBk- 61:57, EiBk- 61:60	Histori cal, Basqu e	8/10 C

									inclusion s, soot- stained on outer surface				
3k- :59	36	Locus III, 1S/2W	107 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	body sherd, buff paste, quartz and red ferrous and micaciou s inclusion s, balck residue on inner	3,3 x 3,0 x 0,4 to 0,5 cm	possible ment EiBk- 61:57	Histori cal, Basqu e	8/10 C
8k- :60	36	Locus III, 1S/2W	107 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	surface body sherd, buff paste, quartz and red ferrous and micaceo us inclusion s, balck residue on inner surface	1,3 x 2,5 x 0,5 cm	EiBk- 61:57, EiBk- 61:58	Histori cal, Basqu e	8/10 C
8k- :61	38	Locus III, 1S/2W	118 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	body sherd, buff paste with quartz and red ferrous inclusion s, black staining, inner surface and edges eroded	1,9 x 3,5 x 0,4 cm		Histori cal, Basqu e	8/1 <sup>4</sup> C

3k- :62	38	Locus III, 1S/2W	118 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	body sherd, buff paste with quartz	1,7 x 2,1 x 0,3 cm	Histori cal, Basqu e	8/1 <sup>.</sup> 0
									inclusion s, slightly micaceo us, outer surface missing, inner surface with black staining, possibly partially eroded			
3k- :63	38	Locus III, 1S/2W	118 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	4	Fragme ntary	flakes of cooking pot sherds, one or both surfaces missing (eroded), buff paste, traces of black alteration	< 1,5 cm	Histori cal, Basqu e	8/1 <sup>-</sup> 0
3k- :64	39	Locus III, 1S/2W	140 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	body sherd, buff paste, quartz and red ferrous and micaceo us inclusion s, balck residue on both surfaces	2,2 x 3,3 x 0,5 cm	Histori cal, Basqu e	8/1 <sup>-</sup> 0
3k- :65	39	Locus III, 1S/2W	140 cm belo w datu m	1.1.1 .18	Coarse micaceo us buff Earthen ware	Cookin g Pot	1	Fragme ntary	body sherd, buff paste, quartz and red ferrous	1,8 x 1,8 x 0,4 cm	Histori cal, Basqu e	8/1 <sup>-</sup> 0

8k- :66	34	Locus III, 1S/2W Locus	100 cm belo w datu m 126	3.1.1 .11 3.1.1	Iron, wrought	Nail, wrough t	1	Fragme ntary	and micaceo us inclusion s, grey staining on one corner nail fragment with part of large head preserve d long, thist.	Length: 2,5 cm	Histori cal, Basqu e Histori	8/10 0 8/1
:67		III, 1S/2W	cm belo w datu m	.11	wrought	wrough t		ntary	thick stem fragment covered in large concretio n	9,3 cm	cal, Basqu e	
3k- :68	33	Locus III, 1S/2W	n/a	4.1.8	Flint	Ballast Rock	1	Fragme ntary	small, triangula r flake with smooth outer surface including the ridges, brown, linear staining; possibly under water for a certain time and thus smoothe d from rolling and stains from attack by organism s	2,5 x 1,6 x 0,6 cm	Histori cal, Basqu e	8/10
3k- :69	35	Locus III, 1S/2W	106 cm belo w	4.1.8	Flint	Flake	1	Fragme ntary	large flake of light grey marbled flint	2,9 x 3,9 x 0,6 cm	Histori cal, Basqu e	8/10 C

			datu m										
3k- :70	37	Locus III, 1S/2W	126 cm belo w datu m	4.1.8	Flint	Flake	1	Fragme ntary	thick fragmnt of light grey flint with some cortex preserve d	2,9 x 1,3 x 1,3 cm	ca	stori I, asqu	8/1 <sup>-</sup> 0
8k- :71	37	Locus III, 1S/2W	126 cm belo w datu m	4.1.8	Flint	Flake	1	Fragme ntary	thin fragment of dark grey flint, rust stain on one surface	1,8 x 2,3 x 0,8 cm	ca	stori I, asqu	8/1 <sup>-</sup> C
3k- :72	40	Locus III, 1S/2W	130 cm belo w datu m	4.1.8	Flint?	Core?	1	Fragme ntary	thick fragment , possibly light grey flint, but all surfaces are largely altered, colour is darkene d brownish grey with sooth staining	2,8 x 2,2 x 1,27	ca	stori I, ısqu	
3k- 73	33	Locus III, 1S/2W	n/a	4.1.1 3	Rock	Natural Rock or Fishing Weight	1	Complet e	Flat, ovoïd, black rock with two ridges borderin g central concave band; a second such less concave band seems present at one	4,1 x 3,2 x 1,3 cm	ca	isqu	8/10 C

								end and the rock seems to be of more abrasive texture in between ridges; generally rounded and smoothe d by rolling				
								after prolonge d period in water; possibly two different types of composit ion in the layered rock formatio n or use wear from being attached as weight to a fishing line or net?				
8к- :74	Unknow n	n/a	5.2.2	Baleen	Baleen	1	Fragme ntary	large layered fragment , one straight edge with cuts in four non- parallel superimp osed and gradually receedin g edges, sides and other	Length: 16 - 28,9 cm; max. 33 cm wide, thickness: 3,4 cm; weight before slow- drying: 1522,4 g	n/a	Histori cal, Basqu e	

				end			
				curved			



"Awaiting the whalers' return", we enjoy a tranquil evening at BE-4. (photo: SB-A)