The Gateways Project 2017

Surveys in Groswater Bay and Excavations at Hart Chalet and St. Paul River, Quebec

William W. Fitzhugh



Gateways 2017 team excavating Grand Isle-2 (EiBk-54).

Produced by Mary Maisel Assisted by Alexandra Castellanos, Nancy Shorey, Iris Wang







Direction de l'archéologie

Québec, le 17 juillet 2017

Monsieur William W. Fitzhugh

Smithsonian institute: National Museum of Natural History

Department of Anthropology MRC 112

P.O. Box 37012

Washington DC. 20013-7012

United States

Objet: Informations manquantes, permis 17-FITZ-01

Fouille archéologique sur le site du Chalet Hart (EiBh-47) et inventaire

archéologique entre Belles Amours et la rivière Saint-Paul.

Monsieur.

Pour faire suite à une première vérification de votre dossier, nous constatons que des informations sont toujours manquantes en vertu de la Loi sur le patrimoine rulturel (LPC) et du Réglement sur la recherche archéologique (RRA).

Documents manquants

- Les pages 1 et 2 du formulaire de demande de permis de recherche archéologique n'ont pas été transmises.
- Le consentement du propriétaire (Ministère de l'Énergie et des Ressources naturelles - MERN) et l'entente avec celui-ci n'ont pas été transmis
 - Concernant le consentement du MERN, celui qui a été délivré en 2016 est toujours valide jusqu'au 30 juillet 2017. Cela dit, l'intervention prévue doit déborder en août 2017 et le Ministère re sera pas en mesure de délivrer le permis actuel avant le début anticipé de l'intervention, de sorte que l'intervention prévue risque d'être décalée en août. Un nouveau consentement est donc nécessaire.
 - o Bien que Mme Florence Hart soit propriétaire de son chalet, le MFRN demeure procriétaire du terrain, et donc du site EiBh-47. Le consentement du MERN devra donc inclure non seulement l'inventaire archéologique réalisé entre Belles Amours et la rivière Saint-Paul, mals également la fouille sur le site EiBh-47 (voir consentement reçu dans le cadre du permis 15-FITZ-01).

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Mortifel Britisge, harda 600 100, Coo. Brail Lairen, Martifel (Gusped 1-27 3Y7 Tylispione 1514 864-8136 Tottopicur (114 814 0221 Dans la section portant sur l'historique des recherches antèrieures vous indiquez qu'une liste des publications réalisées entre 2001 et 2017 est jointe à la demande, mais ce n'est pas le cas. Veuillez donc nous transmettre le document dont il est fait mention.

Cartes et plans

- Pour la fouille du site du Chalet Hart (Eißh-47), nous souhaitons obtenir un plan plus détaillé qui montre clairement les limites du site archéologique, l'emplacement des opérations dé à excavées par les années passèes, ainsi que l'emplacement des opérations qui seront excavées en 2017.
- Pour l'inventaire entre Belles Amours et la rivière Saint-Paul, les cartes transmises ne permettent pas de déterminer l'emplacement exact des secteurs qui seront inventoriés, ni d'avoir une idée de la superiore qui sera couverte. Des plans plus précis devront être transmis.

Équipe d'Intervention

- a) Responsable(s) d'intervention.
 - En fonction de nos orientations actuelles, seul M. William W. Fitzhugh possède les qualifications requises pour être responsable d'intervention et supérviser les interventions archéologiques prévues. Nous n'allons donc pas considérer Florence Hart et Garland Nadeau comme des responsables d'intervantion.
- b) Assistant(s) de terrain
 - Après analyse des dossiers de qualification des cinq assistants qui ont été
 proposés, seul Patrick Jolicoeur peut agir comme assistant de terrain.
 Il faut également comprendre par là qu'il n'est pas qualifié pour superviser
 l'intervention archéologique comme un responsable d'intervention.
 - Jacob Marchman, Iris Wang, Alexandra Gastellanos et Haley Adams ne possèdent pas la scolarità ni l'expérience de terrain nécessaire pour agir comme assistants. Ces dernièrs ne pourront être que techniciens uniquement.

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Budget de l'intervention

- Dans les promoteurs du projet, il est indiqué qu'un montant total de 3 000,00\$ est alloué par les Universités Notre Danne et Danmouth College pour couvrir les frais de voyage de trois étudiants. Afin d'intégrer adéquatement de montant dans notre base de donnée de gestion, nous avons bésoin de savoir quel montant est fourni par Notre Dame, et quel montant est fourni par le Dantmouth College.
- La ventilation budgétaire ne comprend aucun montant pour la maind'œuvre et la rédaction du rapport. Pouvez-vous nous confirmer si les frais associés sont couverts par les institutions universitaires auxquelles chacun des participants est rattaché. Si tel est le cas, nous aurions besoin d'une estimation de ces montants alleués pour la main-d'œuvre puisqu'il s'agit d'une composante importante de l'intervention archéologique.

Autres questions concernant la projet

Dans la section por ant sur l'historique des recherches antérieures, vous mentionnez avoir découvert en 2016 le site Grande-Is.e-2 (EiBk-54). Vous semblez également indiquer que vous prévoyez fouiller de site en 2017 (« Isla-2 that we plan to excavare in 2017 »). Est-ce bien le cas? Si oui, des informations supplémentaires devront être transmises concernant les interventions prévues sur ce site.

Rapports antérieurs non conformas

- Le rappor, associé au permis 15-FITZ-01 a été jugé non conforme au Réglement sur la recherche archéologique. Un courriel à cet effet précisant les éléments manquants vous a été envoyé le 25 septembre 2016, et un rappel a été effectué le 14 juillet 2017.
- Le rapport associé au permis 16-FITZ-01 a été jugé non conforme au Règlement sur la recherche archéologique. Un courriel à cet effet précisant les éléments manquants vous à été envoyé le 14 juil et 2017.
- Nous vous rappelons qu'un rapport jugé non conforme est considéré comme un rapport non remis. Ainsi, le Ministère ne peut procéder à la délivrance d'un nouveau permis tant que les dossiers de permis antérieurs n'auront pas été formés.

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Identification du demandeur et du mandataire

- Depuis 2016, le Ministère exerce un suivi plus serré concernant l'identification du demandeur du permis en fonction des ressources professionnelles, matérielles et financières allouées au projet afin que l'individu ou l'organisme identifié soit en mesure d'effectuer de façon complète et satisfaisante le projet présenté dans la demande de permis de recherche archéologique.
- Dans le cadre du projet actuel, il apparaît évident que c'est le Smithsoman Institution qui possède la majeure partie les ressources professionnelles, matérielles et financières allouées au projet. En effet, c'est l'institution qui assume en grande partie les coûts associés à la main-c'œuvre et qui fournit près de 90% du budget de l'intervention.
- Ainsi, nous vous demandons de déposer la demande de permis de recherche archéologique avec comme demandeur le Smithsonian Institution, et comme mandataira William W. Fitzhugh.
- Afin de compléter la demande de permis, vous devrez également transmettre une résolution faisant état du faire que le Smithsonian institution vous autorise à présenter une demande de permis en leur nom.

Ces informations sont nécessaires pour permettre d'évaluer votre demande de permis de recherche archéologique. Veuillez nous fournir ces renseignements dans les meilleurs délais afin que nous puissions procéder à l'analyse de votre cemande. Nous tenons à vous rappeler que la présente ne constitue pas un permis de recherche archéologique au sens de la Loi sur le patrimoine culturel.

Pour toute information, n'hésitez pas à communiquer avec M. Olivier Roy, à la Direction de l'archéologie, à l'adresse courriel permis.archeologie@mcc.gouv.go.ca.

Veuillez agréer, Mons eur, l'expression de nos sentiments les meilleurs.

La directrice.

Isabelle Lemieux





* see supplementary

AIDE-MÊMOIRE AUX TITULAIRES DE PERMIS

(Résumé du contanu du repport annual de rechercre archéologique)!

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Supplementary Information for PERMIT REPORT 17-FITZ-01 June 12, 2018

The following provides supplementary information for my 2017 archaeological permit for research on the Quebec Lower North Shore between Blanc Sablon and St. Paul River. These data do not follow the article-by-article sequence in the reporting requirements, but provides responses to some permit requirements that may be difficult to find in the full report. I include the sheet indicating the pages numbers where other information can be found. Sites covered are Hart Chalet Inuit winter site, and Grand Plain-1 Groswater and Grand Isle-2 sites in the St. Paul area, and a few sites identified during surveys near Belles Amour but which were not excavated.

Article 7.1 Ancient and Environmental Framework

Pintal (1998) has provided information on Lower North Shore environmental history. The region was clear of glacial ice ca. 12-14,000 years ago, and as the land rose a series of raised beaches and terraces formed, of which the highest follows the course of Rt. 138, where perched boulders left from glacial ice have not been removed by the 'rising' ocean. Shrubs and then boreal forest following the initial tundra vegetation, and modern vegetation conditions have prevailed for the past 8000 years. The Lower North Shore displays prominent raised terraces and beaches where ancient peoples settled, over time adjusting their camps to lower elevations as the land rose, providing a relative chronology for archaeological sites. Both the Brador-Blanc Sablon and St. Paul areas have been extremely productive resource zones for the aboriginal peoples who settled there, ensuring these areas with deep cultural history. The Hart site is located a kilometer west of the mouth of the Brador River, in the midst of a spruce forest, partly cleared by the long-term tenants, Clifford and Florence Hart. Photographs from the early 20th century show the area as a grassy clearing; over the years it was overtaken by spruce trees, except right around the Hart cottage. Little land clearance has taken place along the Lower North Shore except where communities developed, and in these areas spruce forest has been replaced by grass and shrubs. For the period in which these sites existed, the environment was similar to today.

Article 7.2 Culture History

Pintal (1998) also provides the most comprehensive culture history for the Lower North Shore region. The first human settlers were Late Paleoindians and Early Maritime Archaic people. Early and Middle MA cultural materials are found on high beach terraces, but little is known about their cultures except their stone tools: stemmed quartz points, bipointed bifaces, and endscraperes. About 2000 BC, longhouse dwellings began to be used, and red ocher graves with tool kits like those at Rattlers Bight in Labrador and Port au Choix in Newfoundland have been found in Tabatiere and a few other places, but without bone preservation. From this time to the present, a continuous sequence of cultures can be traced at the Hart Chalet, which was then a sandy beach, until the present day. Maritime Archaic is followed by Intermediate Period Indians, and during the past 3000 years by cultures ancestral to the Innu. Paleoeskimo peoples of the Groswater culture arrived from the North about 3400 years ago, occupying the LNS as far west at Cape Whittle until 1200 BP. Dorset sites are rare and found only in the easternmost part of the LNS. The Groswater Paleoeskimo occupation was followed by almost 2000 years of Indian occupation until Labrador Inuit settled here, sporadically, from 1580-1740, but were pushed out by Innu and Europeans by 1750. Signs of all these groups have been found in wall and floor deposits at the Hart Chalet site. A summary of the findings at the Hart site, Grand Plain-1 and Grand Isle-2 is found on pp. 8-10 and 71-78.

The Hart chalet area seems to have attracted Native settlement for a very long time, and its attractions (shelter, wood, fresh water, fishing and sealing, and caribou, bear, and numerous land animals) were also of interest to the Inuit. However, perhaps a more important incentive for the Inuit was the presence of Europeans ships and trade. In the 16th C. Basque whalers and fishermen arrived, setting up posts and try-works. In the 17th C. they were replaced by the Dutch, and then by the French. Brador Bay was an important harbor and after 1700 became the location of Courtemanche's Fort Ponchartrain. The archaeology and environment of this general region has been well-described by Pintal (1998). Courtemanche's and Brouague's diaries and reports provide valuable information on Native contacts during this period. Basque tiles and ceramics and other European materials form a major component of the archaeological finds from the Hart Chalet.

Surveys in the St. Paul area revealed numerous archaeological sites that are summarized also in the descriptions on pp. 71-78 in the report. They include the Grand Isle-2 site (Eibk-54; pp. 73-75), Grand Plain-1 Groswater site (EiBj-51; pp75-76), and survey sites including Belles Amour Harbor North (pp. 76), Isthmus Bay (p. 76-77), and Belles Amours Blowouts (pp. 77).

Article 7.4 History of Research

A large amount of cultural resource management research was conducted on the Lower North Shore in the 1970s in response to Rt 138 highway, town development, reservoir building and other infrastructure. Charles Martijn and his associated mapped many sites, but excavated few. Jean-Yves Pintal conducted several years of research on the Blanc Sablon River which resulted in its designation as a provincial historical site and trail. Relative little academic research was conducted on the LNS east of Cape Whittle until the Smithsonian began surveys and excavations in 2001, concentrating especially on the outer coast and islands not included in previous surveys. Little was known about the extensions along the LNS of the Maritime Archaic, Dorset, Groswater, and Labrador Inuit cultures. Smithsonian work made progress in all of these areas, especially in identifying and excavating the Basque-Inuit site at Petit Mecatina where several seasons of work on land and underwater produced finds of two chronologically distinct Basque occupations: one on the late 16th century and a large operation in the late 17-early 18th C. We also discovered Maritime Archaic longhouses and Groswater sites and for the first time found evidence of several Labrador Inuit occupations not been previously identified. One of these—Petit Mecatina—indicated co-occupation by Inuit who were collaborating with Basque whalers and fishermen. Other Inuit winter villages identified, tested, or excavated were found at Jacques Cartier Bay, Belles Amour, and most extensively at the Hart Chalet site in Brador.

8.1 Summary of Work

2017 research focused on finishing a few excavation units in the Hart Chalet Inuit House 3, excavations at the St. Paul River Grand Isle-2 Inuit qarmat, Grand Plain Groswater site and the survey sites Belles Amours Blowout, Isthmus Bay on pp. 70-79. Short summaries are found on pp. 77=78.

8.2 Fieldwork Activities

The nature of the work is described in the Strategies for Intervention on p. 12. Formal excavation procedures were conducted at Hart Chalet, Grand Plain-1 and Grand Isle-2. Cursory reconnaissance surveys were conducted at the Belles Amour sites.

8.3 Permit Number

Work was conducted under permit 2017-FITZ-01.

8.4 Sponsorship

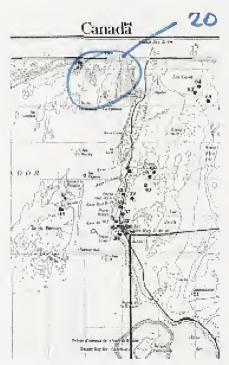
The Quebec research was sponsored by the Smithsonian Institution and by William Fitzhugh's personal funds because institutional support was not sufficient (see p. 11). Student support was provided by Dartmouth College and Notre Dame University.

8.5. Composition of The Crew

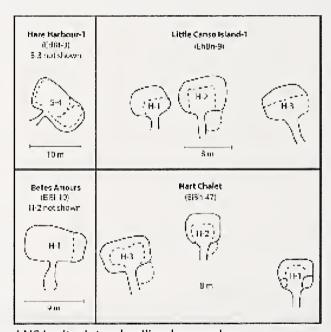
See Acknowledgments p. 11. W. Fitzhugh, P. Colbourne (skipper), J. Marchman, Iris Wang, A. Castellanos, H. Adams.

8.6 Localization of Work

See map in front matter providing site locations, names and GPS locations.



Hart Site Location



LNS Inuit winter dwelling house plans

8.7 Site descriptions and interventions

See pp. 70-79 and pp. 28-41.

8.8 Methods of intervention and registration

See page 12 for information about surveys procedures, excavation, and artifact registration.

8.9 Preservation and Conservation

As in previous years, the collections were processed and catalogued by Anja Herzog in Quebec; any needed conservation will be done by MCC. Site preservation is handled by restoring the site environs to the condition before intervention occurs and adding stabilization when necessary to prevent future erosion by water, wind, or humans.

9.8 Importance and Value of Each Site

I have excavated at the Hart site for several seasons and published several reports in peer-reviewed journals. The site has been mapped and tested with small 50x50cm test pits (see previous reports). Portions of Houses 1 and 2 were excavated previously, and in 2017 we excavated several units along the house wall and east of its doorway. Although organic preservation of wood and bone artifacts in House 3 is generally poor we recovered a small amount of food bone (caribou). Our 2017 work completed the full excavation of House 3—the only one of the Hart site's three Inuit houses for which complete excavation has been possible.

The site is close to the Courtemanche settlement and dates to approximately the same period. House 2—still to be excavated may be the best preserved of the site's three houses. There is good possibility of excavating and recreating the site as an early contact Inuit village closely connected with the first permanent European occupation of the Blanc Sablon-Brador region, and as such could be an important historical and tourist attraction.

Our 2017 work complements early results. Hart Chalet site heritage values include (1) better organic preservation of bone artifacts and faunal remains (marine mammals, birds, fish, shellfish) than other LNS Inuit sites; (2) presence of artifact types and materials not found in the other LNS Inuit sites (Hare harbor, Little Canso island, and Belles Amours) like stone beads and an Inuit woman's ivory needle case; (3) a different type of Inuit winter house than known from contemporary dwellings of the Central Labrador coast Inuit; and (4) proximity to European bases, including Fort Ponchartrain, which had major advantages (trade/scavenging) and disadvantages (hostilities) compared to more distance Inuit village locations. Its midden materials provide environmental evidence on the subsistence economy of the LNS Inuit, showing a heavy emphasis on winter caribou hunting; whether the Little Ice Age was a factor in the expansion of Inuit south of central Labrador; and whether harp seal hunting in the Gulf of St. Lawrence was important in the economy of the southern Inuit remain open questions. The most important feature of the Hart Chalet site is its proximity to the Courtemanche fort site in Brador, making it an attractive location for touristic and economic development as the most important and well-preserved Inuit site in the Brador-Blanc Sablon region.

Work at the Grand Plain Groswater site provided a good assemblage for this Paleoeskimo period on the LNS. More work will be done to excavate a possible hearth that could not be done in 2017 because of weather and lack of time. This site, like the surface collection from Belles Amour blowout provides another component of this earliest Paleoeskimo culture, which is surprisingly robust in this area. The finding of chert nodules in the blowout suggest a possibility that Groswater people obtained chert from this location, not only in Newfoundland, as previously believed.

The Grand Isle-2 site is important as the first Inuit site positively identified in the St. Paul area, and because it is a fall or spring 'qarmat' type of dwelling, not the usual winter dwellings known from other locales. Finds of Basque tile and soapstone pot fragments confirm both Inuit identity and trade with Basques. The partially-constructed winter house nearby was abandoned before completion, suggesting the possibility that the Inuit were not able to establish full residency in St. Paul, possibly because of prior occupation by Europeans. Further excavation in 2018 will be done to explore why Inuit were not able to sustain residency here.

10 Recommendation:

- (1) The Hart Chalet has excellent potential for continued archaeological. House 1 was only sampled but had been damaged by Hart cottage construction; House 3 has been fully excavated; and House 2, only known from a single test pit, could provide the best sample of all the Hart Chalet houses. It was here that we found a woman's ivory needlecase several years ago. All of the houses (1, 2, 3) and eventually could be developed for tourism since it is the most completely excavated Inuit village south of Cartwright. At the moment, its full potential still is not known since House 2 has only been sampled by a single test pit.
- (2) Grand Plain-1 needs to have a hearth excavated, which may provide the best opportunity for expanding knowledge of GW domestic life, which is sorely lacking on the LNS—where only the tools provide information on this culture.
- (3) Grand Isle is a VERY interesting prospect for more archaeological research. We have only excavated 2.5 2-meter units in the eastern half of the interior floor. The sleeping platforms and walls need excavation. This is important because the front wall of the house and its midden have been lost to coastal erosion. We also need to excavate the entry passage of the unfinished winter house, and its exterior hearth, full of caribou bone. The qarmat is the only non-winter house dwelling known on the LNS. Research here at in the boulder pit houses at Grand Isle-1 (MARTIJN'S REPORT) may provide clues about other types of Inuit dwellings whose identity has not been recognized, solving the question, "where are all the expected Inuit tent rings on the LNS?"
- St. Paul and Salmon Bay are the most intriguing locations on the LNS that may add substantially to knowledge of Inuit-European interactions at the southernmost extent of Inuit occupation, where contact with Europeans and Innu was most intense, and most destructive.

See the artifact catalogs and radiocarbon dating report at the end of the field report volume.

Article 11. General Site Information

Site information forms were submitted for all of the sites studied in 2016. In addition, the 206-page 2016 field report contains extensive information on the Hart site, its location, the work conducted, maps and diagrams, photographs and drawings of artifact finds, a complete artifact catalog and all field notes, all relevant site and excavation photographs, and detailed reports on zooarchaeological and radiocarbon analyses. It also contains a complete description of the sites identified and surveyed in St. Paul River and Salmon Bay with GPS readings and photographs.

Published reports including information from the 2015 research are found in the following publications:

Fitzhugh, William W. 2017. The Gateways Project 2016: Surveys in Groswater Bay, Labrador, and St. Paul River, Quebec, and Excavations at Hart Chalet. 222 pp. Edited by William Fitzhugh. Produced by Patrick Jolicoeur, Cara Reeves, Skye Litten, Chelsi Slotten, and Igor Chechushkov. Arctic Studies Center, Smithsonian Institution.

Jolicoeur, Patrick, and Fitzhugh, William W. 2017. Excavation and survey along Quebec's Lower North Shore. Provincial Archaeology Office 2016 Annual Review, pp. 123-135.

Article 11.2 Field Notes, Plan, and Drawings

The 2015 field report contains 48 pages of detailed notes on the excavations at Hart Chalet. In addition there are ten pages of site descriptions for survey sites visited in Salmon Bay, St. Paul, and Old Fort. These pages contain drawing and photographs of all artifacts, by 2x2 meter excavation unit, all profiles, general site views, and 90 pages of detailed artifact catalogues for sites from which we made collections. The report contains 212 figures and photos covering all aspect of the research, as well as interpretative illustrations.

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- ture. Naised beliefles he to east and west of the focks.
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1 - 2017 Project Goals

As in 2014-2016, the 2017 field plan called for activities in two locations: surveys and excavations in outer Hamilton Inlet, Labrador, and along the Quebec Lower North Shore. Research was divided between work on the LNS in the past two weeks of July and in the Rigolet area of Hamilton Inlet in the first three weeks of August. Midway through the summer, Fitzhugh had to return briefly to Washington DC for the opening of the exhibition "Narwhal: Revealing an Arctic Legend". Work on the LNS was dedicated to excavations at three sites: Hart Chalet Inuit winter settlement (completing excavation of House 3, EiBh-47), excavation of the Grand Plain Groswater Paleoeskimo site (EiBi-41), excavation of the Grand Isle-2 (EiBk-54) Inuit/ Innu site, and whatever other survey activities time would allow. Following completion of the LNS work around 5 August, we planned to travel to Hamilton Inlet for surveys of Groswater Bay, the Narrows, and Eastern Lake Melville with Jamie Brake of the Nunatsiavut Archaeology Office until about 20 August, at which point we would return to Lushes Bight, Newfoundland. Work on the LNS was conducted under a permit from the Quebec Ministry of Culture and Communication and the Quebec Ministry of the Environment and Natural Resources. Work in Hamilton Inlet was done under a permit from the Government of Newfoundland and Labrador issued to Jamie Brake of the Nunatsiavut Archaeological Office. Only the narrative portion of the Labrador work is reported here because its archaeological results are being submitted separately by Jamie Brake to Newfoundland. Summaries of the LNS and Rigolet projects have appeared in the Newfoundland PAO report for 2017 and in the Smithsonian 2017 Arctic Studies Center Newsletter.

Surveys of Groswater Bay and the Narrows

In Hamilton Inlet, our objective was to continue research in the islands of southern Groswater Bay and, pending approval by the Rigolet community, to excavate a stone feature on Mason Island discovered in 2015 and survey the islands and shores of Eastern Lake Melville. In particular, we planned to investigate Etagaulet Point where we had recorded Inuit-looking tent-rings in earlier years at a location where Inuit reported hunting seals in the spring and caribou in the Mealy Mountains. We also planned to survey the many raised beaches that might have been inhabited by early Indian or Paleoeskimjo groups. Work was to be of a reconnaissance nature since there was little time for excavation.

Brador and St. Paul River Research in Brador was designed to complete excavations at House 3, one of three winter dwellings at the Hart Chalet Labrador Inuit village located west of the mouth of the Brador River. This site was originally identified by René Levesque in 1968 and is located where Clifford and Florence Hart of Brador built a cottage a few years later. At the time it was thought to be a Basque site on the basis of roof tiles and large spikes and nails found there. The Smithsonian investigated the site at the request of the Harts in 2003 and returned to tested it several times in subsequent years. We soon recognized the foundations of three Inuit sod houses and found that the Basque materials were present only as contact goods. In 2013 we excavated a trench through the middle of House 1. In 2014 we tested a midden between H1 and H2 and excavated test pits in the H2 entryway. Both houses had been disturbed and the H2 interior was grown over with mature spruce. In 2015 we cleared the forest cover and began excavations in the interior of House 3, which had not been disturbed by land clearing and cottage construction. Because of time constraints we were only able to excavate three units within this house and two test pits outside. We returned to continue excavations in this structure in 2016 and spent a week conducting an initial survey of the St. Paul-Old Fort region. This survey resulted in the discovery and testing of the Grand Plain Groswater and Grand Isle sites. We planned to excavated at these sites in 2017 and to conduct other surveys as time permitted.



Fig 1.1 Research in Groswater Bay in 2017 with the Nunatsiavut Archaeology Office. Map Data @2015 Google.



Fig 1.2 Map of site on the Quebec Lower North Shore. Map Data, 2017 @2015 Google.

Pitsiulak team serves for as reenactors at the L'Anse aux Meadows Norse site for a few days while waiting for sea conditions to improve for their trip north to Labrador. Pictures courtesy of Dark Ages Recreation Team and ExArc 2017.



Figure 1.4 Dr. William Fitzhugh makes his first bead at LAM while Neil Peterson keeps the fire hot using the bellows. Emily Dykeman of Parks Canada and one of the Fitzhugh's archaeology students, Alexandra Castellanos, looks on. (Photo: Kelly Probyn-Smith)



Figure 1.5 Daryll Markewitz, Birgitta Wallace, Alexandra Castellanos, William Fitzhugh, Jacob Marchman, and Boyce Roberts at Dark Ages event at LAM, July 2017. (Photo: Kelly Probyn-Smith)



Figure 1.6 Dark Ages Recreation Group at L'Anse aux Meadows in 2017. Iron smelt team with the finished bloom. From L to R: Darrell Markewitz, Kevin Young, Mark Pilgrim, Iain Pilgrim, Ethain Arsenault (Photo: Kareu Peterson)

2 - Acknowledgments

As in previous years, the 2017 season owed its success to many individuals and organizations, and to a good span of good mid-summer weather. Our research sponsors for the Rigolet project included the Arctic Studies Center, the Archaeology Office of the Nunatsiavut Government, University of Notre Dame (which provided support for interns Haley Adams and Alexandra Castellanos), Dartmouth College which provided support for intern Iris Wang, Perry Colbourne, skipper of the Pitsiulak, ensured the safety and success of our travels and provided much-appreciated companionship, as well as moose meat for our larder. Perry's wife, Louise, created a home for us at the Colbourne enclave in Lushes Bight. Boyce Roberts was our host in Quirpon, and at the Parcs Canada L'Anse aux Meadows site we were invited to become 'junior interpreters' for several days by Matthias Brennan while we awaited better cruising weather. In Brador we enjoyed the hospitality of Florence Hart, who opened her home, cooked meals, and facilitated domestic bliss via showers and laundry. Most importantly, she allowed us to excavate in her chalet back-yard. We appreciated interest in our work shown by the government of the municipality of St. Paul and the extraordinary assistance provided by Garland Nadeau and the Whiteley Museum in St. Paul. We thank the Quebec Natural Resources Department, and the Quebec Ministry of Culture and Communication for permits. In Rigolet, Joyce and Ozzie Allen, Lorraine Allen, Sarah and Belinda Oliver, Sandy Michelin, Bert Allen, Charlie and Jean Tooktoshina, Mary and Jack Shiwak, Charlotte Wolfrey, and many others made our field research pleasant and productive.

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Figure 2.1 Field Crew in Rigolet. Perry, Jamie, Haley, Iris, Allie, Jake.



Figure 2.2 Crew at Grand Isle -2. Allie, Iris, Jake, WF, Haley.

3 - Strategies of Intervention

Excavation Procedures for EiBh-47: Following several visits to the Hart Chalet site in the years between 2003 and 2014 when we mapped and made several small test pits, and in 2015 and 2016 exeavated most of the interior of House 3, in 2017 we returned to excavate some of the House 3 wall areas and the mound at the entryway. The previous grid was extended to include the new excavation units and the datum was re-established for depth readings. Following photography, gridding and topographic mapping, 2x2m units were excavated in 8N26W, 10N26W, 12N22W, 16N22W, and 16N26W. All excavation was done by trowel and all features, rocks, soil patterns, and artifacts were plotted in three dimensions. Detailed profiles recorded stratigraphic levels, and site data were recorded photographically and on paper map grids. At the conclusion of the work all excavated areas were lined by tarps, back-filled, and covered with sod.

Archaeological Research in Salmon Bay and St. Paul: As in 2016 our work in these regions was invited by the Whiteley Museum and its board of directors, with most of the coordination facilitated by Garland Nadeau. Garland accompanied us on our excursions, provided us with fresh fish, and assisted with survey work. Our work in Salmon Bay took place at the Grand Plain-1 Groswater site we had found and tested in 2016. Here we gridded out a 2 x 5 meter trench and excavated the thin cultural layer just beneath the mossy vegetation cover. All work was with trowels and artifacts were recorded in two dimensions (because of there was no soil stratigraphy). Finds consisted of lithic flakes and artifacts and a small amount of charcoal; no organics were present. The site was back-filled when we were finished. A second excavation was conducted at the Grand Isle-2 site found last year. The site was photographed, gridded out, and 2.5 2 x 2 meter units were excavated inside the middle of the low sod-walled dwelling. Elevations were taken from a triangle datum. At the end of the excavation the site was back-filled and sodded. A community meeting was held at the Whitely Museum at the end of the survey. The group expressed interest in our return for more extensive work in 2018.

Belles Amour Harbor Peninsula Survey: En route from Salmon Bay to Brador we became weathered in at Belles Amour Harbor and took advantage of the time to make a survey of the terraces and raised beaches west of the harbor and near its connection with the mainland hills. Only a few hours were available, but during this time we located three sites: a boulder pit site at the north end of the peninsula, a recent Inuit? tent ring site on the shore of Isthmus Bay, and two small Groswater sites in the large blowouts near the western shore of BA harbor. 50cm test pits were excavated in the Isthmus Bay site; nothing was disturbed in the pithouse site, and the blowout site was surface-collected without artifact plots because all materials had been eroded out of a soil horizon several meters above the gravel bottom of the blowout.

Processing, Analysis, and Reporting: All artifacts recovered were traced, plotted, numbered, and described in field notes, and interesting objects were photographed at the time of excavation and in lots by 2-meter units. A field catalog was prepared and everything was packaged and delivered to the Quebec to be cleaned and catalogued by Anja Herzog, after which it would be placed in the Quebec Conservation Center. Materials needing conservation will be discussed with the QCC. All maps, and relevant photos and illustrations are reproduced in this field report. Cataloguing and technical analysis of faunal and materials is on-going at the time of this report and will be published in future reports.

4 - Summary of Results and Interpretation

This summer's project produced excellent results. We had a fine team, completed three excavations, and surveyed new territory.

Hart Chalet (EiBh-47), House 3: Excavations at the Hart Chalet site, House 3, completed work on this large and unusual dwelling. Like other Inuit winter structures on the Quebec Lower North Shore, House



Figure 4.1 Hart Chalet House 3.

3 had a short 3-4 meter long entryway that was more like a porch than a tunnel. was floored with planks rather than stone slabs, and had an external cooking hearth on the left as one exited the structure rather than inside the dwelling. And like most other LNS dwellings, the entry lacked a cold trap, had a plank floor, was framed with wood rather than a stone post and lintel doorway. A mound of sand, rock, and turf mixed with food bone, tile fragments, and a few artifacts, including an early 17th century French coin, bordered the east side of the doorway. The inner floor was paved with wood planks rather than stone, as demonstrated by numerous small nails, plank remnants, and charred wood. Around the central floor of the

house, the interface between the cultural level and sterile soil sloped up to the wall without the stone-fronted sleeping platform found in Inuit houses in Labrador (and at Little Canso Island in Jacques Cartier Bay); so House 3 must have had a wood sleeping platform. In addition, the house did not have the usual rectangular shape but was slightly oval; it lacked well-defined wall boundaries, and stone was present only along the sides of the entry and around the door area. Bone and artifact midden was dumped around the outside wall, mostly around the front of the structure. The lack of clear wall definition and the three superimposed hearths found in the cooking alcove in 2016 suggest the structure had multiple re-building episodes. Features that distinguish House 3 from others excavated on the LNS are its oval shape, lack of a stone paved floor, and absence of a lintel doorway.

Excavations in 2017 explored the hearth mound and southwest, northwest, and northeast walls. Finds were relatively few; in addition to the usual nails, tile fragments, and glass, we found a 17th century French Louis XIII 'double tournois' coin (1632-34), a whalebone knife handle, a bear tooth toggle (both badly preserved), an iron deer spear, fragments of a large stoneware vessel, stoneware and painted faience ceramics, a lead-wrapped jigger hook, a fragment of a cast iron pot, and lots of caribou bone. The coin helps explain the absence of clay pipes and Basque earthenware—the site was too early for common use of clay pipes, and too late for Basque earthenware. The site also produced several prehistoric Indian and Groswater Inuit artifacts dating to the last 2500 years made of Ramah chert and local chert varieties.

Grand Isle-2 (EiBk-54): For many years we considered the St. Paul River region as the most likely territory for Inuit settlement on the LNS, especially after discovering and excavating Inuit winter dwellings at Petit Mecatina, Jacques Cartier Bay, Belles Amour, and Brador. Why would Inuit have chosen not to occupy St. Paul which is one of the richest resource zones on the LNS? When our 2016 survey failed to reveal Inuit winter settlements or any sign of graves or summer tent-rings, it seemed that the region could have been

avoided because it was already occupied by Europeans when Inuit appeared here in the early 1600s. Our 2017 excavations forced us to reassess this view when a rectangular house foundation found in 2016 (Grand Isle-2, Fea. 1) turned out to be Inuit rather than Innu. The structure was eroding at the edge of a shore-side terrace on the north side of Grand Isle and had lost its north wall and part of the interior to the sea. Its low foundation made it barely distinguishable from the surrounding tundra. The foundation encloses two lateral sleeping benches and a slightly lower central floor area. When it was discovered in 2016, the house was



Figure 4.2 Grand Isle-2.

interpreted as an early Innu dwelling based on the presence of dark chert flakes, bits of rusted iron or tin sheeting, and a c14 date on charcoal of AD 1415-1455. These data suggested the site might have been occupied by an early European-contact period Indian (Innu) site. However excavation of three 2x2 meter squares in the center of the structure in 2017 produced clear evidence that it and most of its contents were Inuit: Basque roof tiles, Inuit soapstone pot fragments, iron sheet metal, and large iron spikes. These materials were found on the partially preserved remains of a woodfloor. Below the floor a thin peat-humus level

representing the original vegetated ground surface contained flakes of dark chert, Ra-

mah chert, and charcoal (dated above). Apparently Inuit had built a small rectangular dwelling at a location previously occupied by prehistoric Innu. The rectangular shape of the structure and its low sod walls and excavated interior suggested that it was an Inuit qarmat-type structure used during the fall when summer tents did not provide sufficient protection, but before winter pithouses were occupied.

In 2017 we also discovered a second Inuit structure (Grand Isle-2, Fea. 2) on a raised beach about 75 meters up-slope and south of GI-2, F1. Tests in this roughly circular feature about 20 meters in diameter revealed an excavated paved entry passage and a hearth pile containing fire-cracked rock and caribou bones. This structure at first seemed to be a typical Inuit semi-subterranean winter house excavated into the raised beach, but when we tested the house interior we found no sign of a floor or cultural level with artifacts, bones, or charcoal. What we thought was an excavated house pit turned out to be a natural declivity in which Inuit had begun building a winter house. The interior had not been excavated, and no walls were present. The site appears to have been abandoned after creating the entry way and hearth. It seems likely that both the rectangular L1 feature and the L2 unfinished winter dwelling were seasonal expressions of a single Inuit group that occupied this area for a brief period in the 17th C. The Grand Isle-2 site complex is our first evidence of Inuit occupation in St. Paul, but it appears to have been a short-lived occupation. This group may also have contributed to the nearby boulder structures where Charles Martijn (1974) reported human remains and an Inuit snowknife at Kettle Head (Grand Isle-1) at the top of the hill a few hundred meters south of Grand Isle-2.

Both L1 and L2 sites need more work next year, but they begin to flesh out the history of Paleoeskimo and Inuit occupations in St. Paul River. The lack of substantial Inuit settlements such as found elsewhere on the LNS may result from Europeans having established prior 'ownership' of this important resource zone. Future work on the LNS advanced during discussions with François Guidan and Garland Nadeau and the Whiteley Museum.

Grand Plain-1, L1 (EiBj-41): Grand Plain-1/L1 is located about a kilometer east of the Old Salmon Bay settlement at the southwestern edge of a huge series of raised beaches north of Wild Cove and above Point

Scramble. We found the site in 2016 from flakes of Groswater chert in one of the RV paths. Tests revealed in situ deposits beneath a thin veneer of caribou moss, lichen, and birch shrubs, and we returned in 2017



Figure 4.3 Grand Plain -1.

to obtain a sample of tools and charcoal. We excavated a 1x8 meter trench in sandy beach sediment on top of a low rocky ridge. Flakes and tools were scattered evenly across the excavation area. The site produced endscraper, side-notched and box-based points flake scrapers, microblades, and ground and spalled burin-like tools. Endscrapers were the most abundant finds, suggesting skin-working was an important activity. No internal features were noted and no organics remained other than eharcoal stains and chunks. Two meters west of the excavation trench there is a small 30-centimeter high mound of fire-cracked rock containing burned chert. Time did not permit its excavation of this hearth feature. Grand Plain-1 (called "Crossroads Groswater" site in Fitzhugh 2017:74) produced a small but fine

collection of Groswater Paleoeskimo artifacts that probably date ca. 2400-2200 BP. Several other sites were identified at GP-1/L2 in a clearing west of GP-1/L1, including another Groswater site and probable Indian sites exhibiting a variety of chert types but no diagnostic artifacts.

Belles Amours Harbor North A large field of boulders at the point where the Belles Amours Harbor Peninsula joins the mainland (northeast of Isthmus Bay) contains a score or more of boulder pit structures, some of which are caches while others may be dwellings. We photographed some prominent features and



Figure 4.4 Isthmus Bay.

took GPS readings but did not have time to make a map or hunt for diagnostics. The boulder field is 10-20 meters higher than the highest sandy beach terrace between Belles Amours Harbor and Isthmus Bay.

Isthmus Bay (Middle Bay) On a grassy point on the south side of a small peninsula at the northeast end of the L'Anse de Isthmus (Bay of Isthmus, part of the Middle Bay complex), Jake

found tent ring structures that contained 18/19th C. white and blue print ceramics and whale and seal

bones. Whale bones seem more likely to be present in an Inuit than in a European site. We did not have time to do more than dig three test pits and take a GPS reading. The site is located on the northwest side of the Belles Amours Harbor peninsula.

Belles Amours Isthmus Blowouts A foot survey in the blownouts in the raised beaches west of Belles Amour inner harbor, produced a small collection of Groswater implements that were



Figure 4.5 Belles Amour Blowout L-1.

eroding from a buried soil horizon exposed for a distance of 20-30 meters and on the gravel bed below. We collected charcoal from the soil horizon and designated this area as L1. In addition to scrapers, side-notched points, and microblades, was the smallest ground burin-like tool I have ever seen, measuring less than a centimeter on a side. Several hundred meters away in the southern extension of this blow-out we found a smaller concentration of Groswater implements and fragments of mottle tan-brown chert nodules. This chert closely resembles the material used in Groswater technology could explain why Groswater sites are found in the blowouts—a possible source of raw material.

The finds (artifacts and bones) from the LNS sites have been sent to Anja Herzog for processing in Quebec

City.

Rigolet, Labrador In Rigolet (not part of our Quebec permit work), we identified previously unknown structures at the Hunt and Henley trading post in Snooks Cove. We surveyed Caravalla Cove and the southeastern shores and eastern islands of Lake Melville, where we found both Inuit and Innu sites. We identified winter Inuit winter and spring dwellings on St. John's Island, making this the farthest west of any Inuit winter occupation known in Hamilton Inlet. At Punchbowl, south of Black Tickle, we tested three small circular stone pavements previously known from similar features on the Indian Islands in Groswater Bay, finding nothing to date or indicate cultural attribution.

5 - 2017 Labrador-Quebec Diary: Surveys in Labrador's Hamilton Inlet and St. Paul, Quebec and Hart Chalet House 3 2017 Fieldwork

8 July, Saturday. Fairlee Vt. to St. John, N.B.

Another in a string of beautiful days in Fairlee, following some severe flooding that occurred on the day I left Washington and drove to Vermont. I had been dodging rain squalls all day, and when I crossed the Massachusetts-Vermont border, the black clouds massed to the north belched rain. Near Mount Ascutney the storm clouds were moving east of the Connecticut River and a deep blue sky appeared to the west, while the hills were still covered with swirling patches of fog. Quite a spectacular and memorable scene! Meanwhile the radio announcers were beginning to tally up the disaster scenes in the central Vermont valleys, and even closer, in Bradford and nearby New Hampshire. A big washout had developed on Rt. 25A, and there were other roads that had to be closed as streams and rivers chewed into them. For a while the 4th of July parade in Orford was cancelled because of the 25A problem, but they managed to get it opened, and the usual parade route on Rt. 10 in Orford, then across the bridge and along Rt. 5 in Fairlee was reinstated. As I reached our Bald Top Road driveway I feared the rain might have damaged the re-surfacing we had done a year ago, but there was only minor gullying and a morning's work the following day fixed things up. Overall, the regional flooding was considered severe, although it was less than the disaster caused in central Vermont by Hurricane Irene a few years ago. But unlike Irene, the present storm was a surprise and had not been predicted.

I spent the week in Fairlee finishing edit inputs on the Far East chapters of my Bark and Skin Boats of Northern Eurasia manuscript and having consultations with Doug Harp, Jennifer Fisher, and Peter Mittenthal about the cover design for Narwhal: Revealing an Arctic Legend. Meanwhile, Lynne prepared a grant proposal for the Town of Fairlee and worked on garden projects. A couple dinners with my sister, Portia, and her husband, John Karol, and walking our husky dog, Rosie, rounded out the social scene. I had a reprieve from SI Books until 1 October to get the final boat mss to them, illustrations and all. My co-author Harri Luukkanen was not happy to learn that the book is still not at the printer, but given the huge number of editorial queries I had to resolve, many dealing with citations for Harri's references, he should not be surprised. I finally got the edited work for the whole manuscript off to him, with a plea to go over everything with a fine-toothed comb by 1 September, when I will make the final pass and get all the illustrations into publishable form.

I picked up Jacob Marchman and Iris Wang in Hanover at 9am. Jake was with our summer project in 2015 and last summer had his "sophomore summer" at school. While I was teaching my Arctic course at Dartmouth this winter he was in DC, living at our house and working on our Labrador radiocarbon date files at the ASC. We are planning to publish these as large data files in the near future. Jake got a good dose of the Smithsonian and DC. In the coming year he will be a senior and has been considering a thesis on some of our Labrador date, perhaps a Koliktalik monograph. Iris has just finished her freshman year at Dartmouth and comes from a Chinese-American family in the San Francisco area. She (and I) received a Dartmouth Anthropology Goodman research grant (all the writing was hers) supporting this summer's project. The grant provides her with field equipment and travel, with the remainder covering our field costs. She has to be back in Hanover by 28 August to lead one of the Dartmouth Outing Club freshman orientation trips.

We returned to Fairlee, where Lynne had prepared breakfast. Within an hour we had eaten, collected our bags, said goodbyes, and were on our way north. Jake GPS-navigated us across to Rt. 2. We chased thunderstorms between Mount Washington and Bangor and arrived at the US-Canada border about 8pm. Appar-

ently the US and Canada are having a honeymoon following President Donald Trump's meeting this spring with Canadian Prime Minister Gary Trudeau, because we scooted through customs and immigration in fifteen minutes. A bit north of St. John we pulled into the Fairway Inn in Sussex, N.B. A good run for a day that will leave us with plenty of time tomorrow for a visit to Louisbourg Fortress, which I've never visited and is only 45 minutes from the North Sydney ferry terminal.

9 July, Sunday. Sussex, N.B., to North Sydney, N.S.

The next morning we were ready for breakfast when the Fairway's diner-style restaurant opened at 6am.

Their décor was 1950s art-deco, with license plates from all over North America and other kitschy stuff. We had a brief stop at the Nova Scotia Parks Canada station that provided Iris with a bit of local history about the expulsion of the Acadians—some of whom ended up in Havre St. Pierre on the Lower North Shore. Then across the N.S. interior to the north coast and the several inlets and river mouths (Viking "hops") where I imagine Vikings explored from the L'Anse aux Meadows "gateways" settlement. Then to the Cape Breton bridges and causeway, through the several Bras d'Or Miq'maw villages, the Graham Bell home and its Parks Canada Visitor Center—sorry Centre—and

Canada Visitor Center—sorry, Centre—and fi- kitschy art-deco decor. nally to Louisbourg, which we reached at about 2pm. This year, as a 150th birthday to Canadians



Figure 5.1 The Fairway Inn's restaurant's kitschy art-deco decor.

(and visitors), Parks Canada has waived admission fees to all its parks, so we were soon in free and after taking a short bus ride to the fortress (a "fort" is a military base; a "fortress" is a fort with a town inside). The physical approach to this magnificent historieal reconstruction is imposing. The site is at the southern corner of Louisbourg Harbor, whose entrance has a few small islands constricting the channel. The fortress guarded this entrance with a 270-degree arc of cannons that could waste any intruder who tried to enter. During the 18th century, the town's inhabitants were mostly cod-fishermen living around the bay shore next to the fortress while the military, the governor, soldiers, and support people lived inside. The fortress guarded the harbor and, by extension, the southern, main entrance to the French territories in the wider Gulf of St. Lawrence. This was France's bastion for maintaining its New World colony. However, it was not invulnerable, and in 1745 it was besieged and taken by the British after a siege of a few weeks, but then was given back to France following a treaty. In 1758, the Brits took it again by approaching the unguarded south side of the fortress that was thought to be proteeted by marshy ground guarded only be a few cannons. The Brits then proeeded to demolish most of the fortress's buildings and it was never reoccupied until Parks Canada archaeologists began excavations and reconstruction in the 1960's.

Today the fortress is a wonder—a huge walled complex of buildings, arsenals, soldiers' barracks, gardens, stables, bakeries, kitchens and other facilities including a governor's palace with a huge "King's Chapel" and a military commander's residence—all reconstructed following the archival documents and archaeological work. Furnishings, artworks, paintings, and period artifacts of all kinds fill its buildings and sheds, and pigs, sheep, turkeys and chickens occupy its pens. It boasts being the one of the largest reconstructed historical sites in the world and is staffed by professional re-enactors who stage musket-firing demonstrations, concerts, and courtly dances several times a day. During the fortress days the harbor exported huge amounts of fish to France. Today the site attracts several hundred tourists each day. We spent three hours and found it fascinating. What was less clear from the displays and other information was the role of the Miq'maw.

Presumably, they were deeply involved in regional fur trade and military alliances. After our visit we had supper in town and found the harbor alive with fishing boats and fish plants. We arrived at the ferry terminal about 7pm and rolled aboard about 9:30. The Highlanders (named after a N.S. military brigade) sailed on schedule into a calm night with us sleeping in the upper lounge on the floor, illegally but comfortably.

10 July, Monday. Port aux Basque to Lushes Bight.

A thick fog greeted our arrival in Newfoundland about 7am. Docking was so smooth we were



Figure 5.2 A view east from the hilltop of Louisbourg Fortress.

not even aware of landing. By 7:30 we were on the Trans Canada Highway heading north to Corner Brook, soon leaving the fog behind, as well as the infamous "Point Rosee" Viking that Sarah Parcak thought she had found a Viking site by inspecting satellite images. (While driving yesterday we heard her giving a 'Ted Talk' on the radio—no mention of the Vikings as she is now into satellite archaeology of Egyptian ruins, a bit closer to her original archaeological training with Jesse Cassana. Her schtik now is site preservation and promoting public awareness, a good use of her public speaking skills.

Arriving at Deer Lake we met our University Notre Dame interns, Haley Adams and Alexandra Castellanos, at the Driftwood Inn. Both spent a week with me in DC before coming to Newfoundland and helped gather data on harp seals for my paper in Igor Krupnik's and Aron Crowell's 'Arctic Crashes' volume. Haley has just graduated and is going to spend next year teaching English on a Fulbright fellowship in Poland. Allie's family has a pecan grove at her Texas home and will be returning to ND in the fall for her junior year. As usual, before leaving Deer Lake we bought bulk food at More-For-Less. When I called Louise Colbourne to find out about the ferry schedule I learned that Perry was also on the TCH returning from Corner Brook. He had been visiting his daughter Jill and Brandy Colbourne (Dennis Colbourne's daughter), now out of college and beginning a police career. Jill is still in her laboratory med-tech position at the Corner Brook Hospital. This March, much of the Colbourne clan high-tailed it to Cuba where Jill and her long-term partner, Matthew, got married at a beach resort. After delivering a Smithsonian check to Leonard Harvey's Accounting Services to cover the last half of Perry's salary, we were on our way to the Long Island ferry and an end to the first leg of the summer's travels. All was well with the Colbournes, which included Perry's and Louise's oldest, Tracey, visiting with her teenage daughter, Alyssa, and younger (and feisty) son, Andrew. Grandmother 'Nan' is fine although needs some night-time supervision. But off-island, there has been tragedy: the deaths of Perry's younger brother, Chris, of pneumonia, in Toronto, and Kay's son, Marty, after a long history of drug addiction. And Kay's partner, Gary, who recently returned with Kay to Newfoundland from Calgary, is hospitalized for advanced cancer treatment (he died during the summer). Following introductions we got everyone settled on board Pitsjulak, which Perry had freshly painted and cleaned, and got the low-down from Perry on the muffler system he devised for last year's new Cummins generator (turns out, the new exhaust system is only a wee bit less noisy!). We finished the evening with a meal of steak and crab legs and saw the pictures from Cuba with everyone all fancied up.

11 July, Tuesday. Lushes Bight.

A run-around day. We took the 8am ferry (\$15,00 round trip for a five minute ride) to Triton to pay the Budgell and Marine Center bills. At the Marine Center we found its director, Pete Winsor, pleased with the expansion of his services to fishermen after having taken over the eenter from Jerry's diamond drilling operation. After Jerry tried for years to discourage marine service support (required under the center's government charter) he decided to spin off the marine service to Pete, and boats are now coming in droves for storage and yard work. Pete has given the SI a good deal too, eliminating monthly storage charges and reducing fees. He is occasionally building fiberglass boats and has some specialty items like light-weight



Figure 5.3 Pitsiulak, ready for sea.

aluminum gangways. Budgell's has gone high tech and brute, emphasizing huge 4-wheelers and monster outboard engines, catering to the newly wealthy workers who come home from Alberta or other high-paying oil or mining jobs. Our next stop was Coleman's supermarket in Springdale for groceries where I

almost bought one of their small tanned ring seal skins to use in museum education. On the drive back, men were re-paving the highway and the truck in front of me threw a stone that hit us like a rifle-shot, sending a crack running across my windshield. We spent the afternoon stowing the food, catching up on email, and cutting vegetables for Louise's turkey soup for the Long Island benefit sale tomorrow. Perry scared up some lobsters for dinner. The lobster season is open for another week. Some are even being caught around the pier.

One night when Louise, Perry's brother Melvin, and I were visiting with Nan, the topic of Elmo Parsons eame up. He was mate on Pitsiulak when Uncle Jim Wiseman skippered it in



Figure 5.4 Lushes Bight.

1979, the second year of the Torngat Project. Elmo lives in the last house on the north side of Lushes Bight, and while he is no longer boating (I met him once when I anehored for a night at the abandoned Grady whaling station near Cape North, when he was skippering Sea Rover), he is still active, mows his lawn, but never goes anywhere off his property. Melvin said he's never seen Elmo 'out-and-about' at the store or anywhere else. Elmo is known to have been a good guitar player, so Melvin imagined him sitting at home doing little but house-keeping and playing his guitar! We never saw that side of him in our Torngat days.

12 July, Wednesday. Lushes Bight

Another day of preparations. I got a message from Mayor Fequet in St. Paul River, Quebec, saying I should contact the Quebec Ministry of Culture and Communication for my archaeology permit, apparently responding to some communication between him and Garland Nadeau. Well, of course I had already done that was awaiting results from the MERN land-use permit that had to clear before MCC would act. Once again, the same confusion as the past two years when this requirement appeared. MERN is necessary for building houses, mines, etc. and archaeology is just a nuisance for them. But that's 'the law' even though the Mayor doesn't recall it. I shall have to wrestle with MERN and MCC when we get to Quebec. (As it turned out we

did not even need a MERN permit this year, because last year's is still in effect until 1 August, when we should be clear of Quebec and on our way to Rigolet.) Last year I had to pay \$7000 US for work by the Quebec Conservation Center (QCC) for 'restoration' of one pot, an iron arrowhead, and a couple other insignificant items—mostly because the center was having trouble maintaining its staff. So they levied outrageous fees on the SI, thinking it has lots of money and knowing that I did not want my future archaeology permits to be denied for lack of 'cooperation.' For many years the agreement I have had with MCC was that I would pay the cost of fieldwork and Quebec would take care of the artifacts. This worked fine during the early days of the Gateways Project when we were doing underwater archaeology and recovering important organics.



Figure 5.5 View west from the top of the Long Island gazebo, overlooking Green Bay north of Lushes Bight.

Now the new policy will force me to excavate, document, and rebury artifacts instead of sending them to the archive and building Quebec's archaeological inventory. The present policy is appalling politics, verging on extortion. MCC and QCC should get their act together and find a different way to support conservation and curation. One way would be to charge companies and governments requiring salvage archaeology to pay hefty curation fees, not research archaeologists working on tiny budgets.

Not much happened the rest of the day. The students have been having fun goofing around with Tracy's

kids, shooting water pistols at each other and playing games. Alyssa has been taking in the banter about American college life and talk of students streaking through Baker-Rauner Library and swimming naked across the Connecticut River. The kids went off hiking to the gazebo at the top of North China Head and climbed down near the beach next to the Beothuk cave, without realizing it was there. They were surprised the next day when we took an outboard tour and I showed them the cave's location. While we watched, a bald eagle rose off its nest on the top of the Head. I wonder how that cave got discovered and whether information came from the last of the Beothuk people, who made their 'last stand' in this area. Its entrance is hidden and Figure 5.6 An adventurer gazes into the blue beyond.



you have to climb up a scree slope and behind some bushes. Several years ago Perry took me there and we climbed into the cave, which has a large anteroom and then a shaft that does down 20 feet (or deeper); we never tried to get to the bottom. We saw disturbed rocks where the burials had been opened back in the late 1800s. I imagine some detailed work would reveal more remains. Perry says his father used to say the cave got its name "because if you kept going down that inner hole you'd get to China." A second explanation told was than the cave was discovered by a Chinese person while he or she was picking berries.

Off and on for the past few days I have been working on a 'blog post' for release with the opening of the Narwhal exhibit. I finished it today and send it off with lots of pictures; basically, it's a discussion of the Labrador Inuit migrations and their linkage to climate and sea ice changes that affect the distribution of harp seals, walrus and bowhead whales. Christyna Solhan says she and Laura Donnelly-Smith are doing a blog on the creation of the exhibit based on their article in the book. Otherwise, work is roaring ahead on the installation of the exhibit. Next week the Arctic Research Commission is due for a tour of the installation, getting a tour behind the scenes from Igor and Christyna. Igor had got my draft paper on harp seals and Inuit and farmed it out for review to Stephen Loring, who wrote me a long, thoughtful response. He chided me for my use of acronyms for the various culture periods and terms like "Intermediate Indians"—terms that I used fifty years ago to classify cultural stages and that are not very nice today when people are beginning to be interested in what archeologists or scientists have been saying about their past—rightly so! But what to do about new terminology remains to be figured out.

13 July, Thursday. Lushes Bight.

This was to be our departure day, but when I woke at 5am the rigging was rattling, so there was no way we were going to get off with a bunch of land-lubbers (except Jake) with no boat experience. Perry had reached the same opinion and was looking at the forecasts on his computer when I arrived at his house for coffee. Big red colored patches on the weather map announced gale warnings for Labrador and eastern Newfoundland; our region was one notch down but still had strong southwest wind. Tomorrow looked better. The good news is that we can now visit the benefit sale at the school during the afternoon. There was lots of knitting crafts, cheap Chinese (?) jewelry (\$7 apiece), tupperware, and ring seal products, including rifle cases. I bought \$20 worth of raffle tickets, more as a donation than a desire to win. Louise's soup was gone by the time we were hungry so we had moose stew and biscuits. When raffle-time eame around a big hooting when up when I won a mason jar with Long Island painted on its side, and a Long Island dishtowel. Good articles for a boat trip! By evening I had finished my blog report and sent it in to Ryan Lavery's assistant, Annie, along with a bunch of pictures [I ended up re-writing it completely at the end of the summer after we found the 1632 French coin in the Hart Chalet site]. I also heard that a Washington Post reporter wanted an interview for the coming Narwhal exhibit. During the evening Perry, Barb, Louise, Melvin and I had a nice talk with Nan, 89, in her family picture-studded living room. The whole clan is engaged with her daily household affairs; Louise sleeps over with her and helps with meals and chores. "I wants to stay in my house 'til I'm 90," she says. During our stay in Colbourne-ville I had nice chats with Stephen, whose has a beautiful white husky dog that he walks about every evening. Dennis is within an inch of retiring from his ferry-captain service, and Melvin already has retired. Last year the local scuttlebutt held that Long Island was likely to be lost as a community because of the eost of maintaining services, especially the ferry. That may still be the fate of the community of Little Bay Islands, the other ferry stop across the bay. But now Perry thinks the town has a more positive future since so many retirees are returning and building or refurbishing homes. Everyone is waiting to see what the price of electricity will be when Muskrat Falls hydro power comes on line. It's transmission towers have been erected all the way down the west coast to Port aux Basque, cutting a great swath across the landscape. This year a man was killed when a tower under construction toppled on his truck in a windstorm.

14 July, Friday. Lushes Bight to St. Anthony.

5am. I woke and found Louise and Perry driving down the wharf. Wind was down and we were off by 5:30. We passed several crab fishing boats in the outer part of the bay and around the Horse Islands but saw little sea-life until we reached Fischot Islands at the southern edge of Hare Bay, and outside St. Anthony Perry spotted a school of capelin showing on the sounder. We had mostly light southwest wind all the way. The girls got real excited when we spotted a few puffins on Rouge Island off Conche. The issue that surfaced soon after leaving Lushes Bight was our 'new' Cummins generator; it has been nothing but a headache since we installed it last year. At that time, it was the noise, because we did not want to install a \$1000 muffler and so put in a local version (which was still noisy). But now we have a different and more serious problem:

it shuts down after 30 seconds of operation. This we discovered only while underway; it's been working fine at the pier. Best we could figure was that something was blocking the sea-water intake near the keel. Disconnecting the supply hose showed that some water was getting through, but perhaps not enough. We have a spare gas generator on board but only for emergencies. So instead of running all the way to Quirpon we pulled into St. Anthony to check out the problem in a place where we might be able to get some help. I called Boyce Roberts, our friend from Quirpon and explained that we would be delayed getting to his place, and within the hour he showed up with Jamie, Daryl, Nick and a baby, with Malcolm the St. Anthony harbor (or pier!) master in tow, ready to help out. Meanwhile Perry had got into the generator gear and found some spare rubber impellers, suggesting the problem might lie with the water pump. And so it was: the impeller was mangled, and a new one solved the problem in a jiffy. That impeller hardly had a hundred hours on it—pretty poor quality for a critical part. From Jamie we learned that this is a big weekend at the L'Anse aux Meadows site. Birgitta Wallace is giving a lecture, followed by a fancy buffet dinner, music, and the opening of an iron smelt using bog ore. Jamie has landed a permanent job at the L'Anse aux Meadows site as an interpreter and has quit waitressing at Gina's and Adrian Norseman Restaurant after working there for several years.

15 July, Saturday. St. Anthony to Quirpon.

Today and tomorrow will not be good days for crossing the Strait of Belle Isle. Strong southwest wind. This knowledge resulted in a slow start in leaving St. Anthony. Just inside the harbor narrows a construction crew was blasting and drilling away a rock that borders the south side of the channel—a danger that has been a menace for ships for years. Now, large cruise ships are seeking entry and need a wider channel. (Several years ago we watched an Italian cruise-liner almost eome a-cropper when it got blown out of the harbor sideways in a strong southwest wind.) The construction crew has built a narrow causeway several hundred feet out from the shore and had a crane with a jack-hammer working away underwater, smashing rock and scooping up the detritus. Amazing what machines can do these days! We tied up at Quirpon about 1pm

and soon found Boyce there ready to loan us a car. After a quick lunch we drove over to the L'Anse aux Meadows Viking site and found the parking lot completely full, with a bus and a huge vehicle with Alaska license plates that served both as bus and hotel! Apparently Alaskan ingenuity rivals Newfoundland's! The contraption boasted a tour company name. What a way to see the world!

At the Visitor Center we watched the orientation film, which is much better now than a year ago, when Helge Ingstad and Anne Stine were barely mentioned. If this is a new revision (it is!), it's much better and give



Figure 5.7 The sod houses at L'Anse Aux Meadows.

full credit to the Ingstads and Birgitta, and the lively MC does a good job hitting the important points. We poked around the exhibits and went to the village, where we found Birgitta Wallace and Rob Ferguson (both now retired from Parks Canada in Halifax) working with a team called "Dark Ages" run by iron smithing expert, Daryl Markowitz. Darryl's people were busy preparing clay ovens for making glass beads and smelting bog iron tomorrow. I had not seen Daryl since he worked with the Smithsonian's Viking exhibition in 2000. Since then, he has made a business out of small-scale iron production and medieval re-enactors working with museums and festivals in Canada and the U.S. He told me he recently ran a-foul of U.S. Immigration and has been barred from U.S. entry (perhaps a Trump-inspired border control issue?). Paul and other interpreters were holding forth in the "Norse" houses, so our gang got a good taste of Norse life and

technology, including weaving, iron-making, music, wood-working, and general life.

We got back to Boyce's for his moose stew and blueberry and redberry pies, a taste of 'ever-clear' chilled in iceberg ice, and a lively discussion with Matthias and some friends of his from Ottawa, staying in a trailer alongside Boyce's house. Matthias, a jovial and husky sportsman, was hired as LAM's interpretation manager a year ago and has been enjoying the challenge of building new programs. By all accounts, this weekend's activities are showing his organizational skill; the site is full of lively interpreters and is getting 300-500 visitors every day. (See https://exarc.net/issue-2017-4/mm/dark-ages-recreation-company-lanse-aux-meadows-nhsc-2017)

16, 17 July, Sunday, Monday. Quirpon

These were slow days. We arranged with Matthias to volunteer as interpreters at LAM, assisting the Dark Ages experts in their tasks. I worked on communications with the Quebec permit office. Boyce served up a beef stew he had made and on Monday a mess of codfish he caught. Early on Monday morning he took a family from Idaho out to see a large iceberg three miles off Quirpon Island. We were there when the guy drove up the night before, saying he heard Boyce took people out whale- and iceberg-watching. They arrived at 5am Monday and were lucky to see the huge berg topple. Whales have been plentiful and codfish seems to be moving in to the coast but are not plentiful yet. When I spoke to Garland Nadeau, he said St. Paul fishermen were pulling in large codfish with their bellies full of capelin. The moose-watchers have been successful and saw a mother and two calves that are hanging around the LAM visitor's center.

18 July, Tuesday. Quirpon,

Today we became official L'Anse aux Meadows volunteer site interpreters, "working" for Parks Canada! But before that, we fortified ourselves with Red River cereal and spent the morning walking the coastline west of the LAM site for a couple miles to familiarize my student assistants with vegetation, geology, geomorphological processes, and where to look for archaeological sites. We went well beyond the official LAM trail, which is marked by benches, signs, and pathways. Despite our search, we saw no sites or even traees of any early cultural activity. Moose trails were everywhere. The most interesting find was the bow stem of an old wooden boat—probably a trap boat—with square nails used for fastenings. Our hike back through the interior was equally unproductive except for being a nice walk in the country, which is extremely dry

and needs a good rain. There are many small bakeapples showing, but without rain they will dry up and be lost. Near the end of the trek we met up with the LAM "long walk" trail, much of it a boardwalk, and passed "skin pond" where the people used to soak harp seal skins so the hair could be removed. We had lunch at the Norseman Restaurant. Gina and Adrian's daughter and son were running a sales booth in the parking lot near the door to intercept likely buyers for Gina's 12 Days of Christmas book, souvenir pins, and other items. Young businessmen in training—and with a good advisor handy (their mother!) inside the restaurant! We were the only ones present until a bus tour arrived.

Bonnie, the head interpreter, got us duded up in Norse clothing—homespun garments (ladies with aprons; men and women with pouches (no pockets in Norse clothes!), brooches for the women, knives for the men, and leather shoes. We attached ourselves to Parks and Dark Ages pro interpreters. The Dark Ages people are well-informed and experienced at working with the public and make Norse life, customs, and technology interesting to all. We spent the entire afternoon helping, learning,



Figure 5.8 A merry Norse gang- Haley, Iris, Jake, and Allie.

and interpreting. My specialty was "seal-thong" which I found among the props; it had just enough hair still attached to give a clue about its origin, a harp or bearded seal. They also had a bunch of horse-hair rope. My technical achievement was learning from Erik how to make a glass bead. This is done by melting a drop of glass on the pointed tip of an iron mandril over the funnel-shaped opening at the top of a beehive-shaped furnace powered by charcoal and a twin bellows. Jake worked with Daryl Markowitz (his Norse persona is "Kettl") learning about iron smelting, and with Mark at the forge, and made a nail. Haley did some bead-making with Mark and the ladies worked with the weavers and kitchen crew. Late in the afternoon I discovered the 'turner', originally British, now Canadian geologist and mineralogist, who spends his spare time demonstrating how to produce wooden plates and bowls with a simple sapling-powered lathe and a loop-shape cutting tool. Some very interesting folks came by the site. Besides bead-making, I learned much from Daryl about the bloomery process and bog ore I did not know (iron can occur in bog ore in as high a concentration as 50-60% and can be produced by biological as well as geochemical action, and its location

can be found by probe rod), and about turning wood. Two of the women produced four-ply braided cordage from heavy thread when the turner's leather thong wore out.

At the end of the day I had an amazing encounter in the LAM parking lot when Perry arrived saying he had met someone who I knew. Out of the second car stepped Ralph Eshelman; he spent a summer traveling with me around northern Newfoundland and on my first visit to the Quebec Lower North Shore. Ralph and his wife were on a holiday trip and had come to see the Viking site. They bumped into Perry in the Visitor Center and my name came up. Ralph, I, and Aron Crowell's younger brother, Hugh, were together on my second research boat, Tunuyak; we had a grand time discovering sites in Degrat Harbor on Quirpon, the Port au Choix 'Groswater 'episode', and my intro-



Figure 5.9 Our motley crew dressed as Norsemen.

duction to the Lower North Shore. In later years we served together on the Board of Maryland's Jefferson Patterson Archaeology Park and Repository. Unfortunately, Ralph's schedule did not permit more than a passing hail, but the encounter was a neat surprise for both of us.

Dinner was at The Daily Catch where we found many of the Parks employees and the Dark Ages folks. On the permit issue, there seemed to be a softening at the MCC; Olivier Roy and I have been having constructive e-mail exchanges that were more optimistic than yesterday's memos pointing out all the information my permit application lacked: among others, waiving the need for immediate closure of my 2015 and 2016 permits, which can be done in September. The weather today was beautiful all day, but windy—fine for interpreters but not suitable for navigation.

19 July, Wednesday. Quirpon.

Today we "worked" another day for Parks Canada! It was hot in the morning but the southwest wind shifted to the northwest in the afternoon, bringing cool air and a bit of fog—a break from the prevailing southwest wind that kicks up a mess in the Strait of Belle Isle. We dressed up as Norse, and Perry dropped the students off at LAM while I spent the morning preparing a revised Quebec permit application to correct 'deficiencies' in the original application that listed me rather than the Smithsonian Institution as the permit requestor (unprecedented!) and me as its field representative. Some of the other 'corrections' needed were to list the students as archaeological 'technicians' rather than as 'field assistants', and listing the Notre

Dame and Dartmouth financial contributions separately. One substantive change was to drop the request for widespread surveys of the St. Paul coastal region and replace it with excavations at the two sites we could actually accomplish excavating in the week or so available. Perry says the weather report looks good for crossing the Strait on Friday.

Our 'Norse' crew spent the entire day at LAM and by the end looked—and sounded—like regulars, having learned many of the trades being demonstrated and interacting with the visitors in a realistic manner—not insisting on being 'in character' but taking a flexible approach. It's hard to relate to visitors when there is always a ten century gap. Matthias Brennan, the manager of the LAM educational program, asked me to give a talk for the site staff at The Daily Catch restaurant in their rec room after dinner, so I gave them a Viking talk, with apologies since much of the information (besides the Native American story) was 'old hat' to

them. There must have been 40 people there, all interpreters from the site. LAM is having a heyday this summer, and lots of Parks administrators are showing up, including their CEO. Earlier this morning Benedicte Ingstad arrived leading a group from a cruise ship; she and I met at the Leif Eriksson statue dedication here a couple years ago, after I wrote her about her mother's book, which I enjoyed. She is concerned that her mother, Anne Stine Ingstad, often does not get credit for her role directing the 1961-68 LAM excavations. Back at Boyce's Nick presided over an evening fireworks display including rockets, a Roman candle,



Figure 5.10 The bustling interior of a Norse sod house. One of the L'Anse Aux Meadows re-enactors is stirring a fish stew simmering over the fire, and Iris, playing a Norse girl, is stiching a bonnet (left).

and firecrackers that he enjoyed blowing up under water while we sat around a fire burning in an old washing machine spinning tub., the kind that has lots of holes through the sides, making it a great outdoors fireplace receptacle.

20 July, Wednesday. Quirpon

The weather changed last night, and it started blowing and raining from the east early in the morning, and then poured most of the rest of the day. Perry drove our "Norse" gang to the site at 10:30 while I did permit duty with the Quebec Ministry of Energy and Natural Resources (MERN). Garland Nadeau had rattled some cages there, and so when I called they were aware of my application and referred me to the permit office. Later I learned that last year's MERN permit is good for a year, and last year's permit does not expire until 30 July, so we have some extra time to get the MERN business settled. I also got word from Olivier Roy that MCC was now prepared to give "the Smithsonian" a permit (because the 2016 MERN permit is still valid) as soon as the SI sends its authorization. So I called Laurie Burgess to check on the SI letter, which I thought would be a piece of cake, and found confusion at that end--some idea that I had messed up and not done due diligence with the previous permits (correct!) and that they should not sign on. Laurie says

the NMNH is getting picky about permits and is going over them with a fine-toothed comb. In the past I have not had to bother the museum about my permits, but they get deeply involved with biological permits and have learned to be cautious. I had not expected delays from that end. Hopefully all their questions are settled and a letter can go out tomorrow.



Figure 5.11 Daryl Markowitz using tongs, smithing at L'Anse Aux Meadows.

I got out to LAM about 2:30 and spent most of the day in the smelting shed with Daryl and Mark. Mark is a local guy who has become an expert iron-worker. He, Daryl, and Jake spent the entire day reducing the bloom they produced last Sunday to a small rectangular block the size of a deck of cards. They must have heated it at least fifty times to a bright orange-yellow in the forge, buried in charcoal an inch above the tuyere, and hammered it mightily, expelling sparks of charcoal and slag, until it was relatively pure and ready for forging into implements. I operated the two bellows for an hour, trying to keep the flow of air constant, but not getting the iron too hot or it would start to spark and burn. Then you quickly extract it with big iron tongs from the fiery charcoal bed and quickly start hammering. Within a minute it becomes too cool to shape further. As you hammer the faces, the edges begin to mushroom, so you have to beat the sides back into right angles or cracks will begin to appear that are difficult to fuse shut. You need lots of muscle power to be a smith and have to put up with heat and spark burns. Goggles are an absolute necessity! No less knowledge and coordination is called for in the weaver's trade. Our girls spent most of their day in the spinning and weaving room of the LAM longhouse, learning from Bonnie and other experts who managed several types of machines,

from tablet weaving to different types of stand-up looms. By 5:30 the visitors dropped off, and we returned to Boyee's. He had caught a bunch of mackerel yesterday, and that became our dinner along with boiled potatoes and vegetables. Matthias shared dinner and told stories of his college road trips to Cape Canaveral and other locations. Boyce and Nick returned from their Deer Lake trip to pick up a friend of Boyce's who is staying for a couple weeks to fish and hang out and help. The house got chaotic, crammed up with people playing eards, telling stories, taking showers, washing clothes, and Nick's young brother, Skip, getting into everything he shouldn't. Perry and I had to bail out and return to the boat to avoid getting swept into the soiree. The stars were out, so it looks like the predicted clearing and calm spell is going to happen.

21 July, Friday. Quirpon to Brador

Finally we're moving! The morning looked grim at first when I rose at 4:30 and found the pilothouse windows opaque—I thought from a thick fog, but actually it was just condensation on the windows from our breathy ladies in the galley. It was actually overcast but fairly clear when we untied and steamed out of the harbor at 5:15. The Canadian Coast Guard ships we saw from the Quirpon dock a couple days ago had been laying in a new navigation buoy outside Quirpon Harbor Island to keep boats away from a shoal. It's a tricky entrance and we've had trouble here entering on a foggy night because you have to be so close to the eastern tip of the island that your radar is ineffective. The buoy will help. We had a few good rolls before we turned west across the north end of the Sacred Islands, one of which dumped Allie partly out of her bunk and send books and loose stuff skittering across the deck. But soon we crossed Pistolet Bay and the towns of Raleigh and Cook Harbor and rounded Cape Norman and were heading southwest across the Strait in a light southeast wind, seeing lots of humpback whales, gannets, and murres. Four hours later we passed Blanc Sablon and turned west into Brador Bay; by this time the sea was pretty much like glass. No freighters or fishing boats the whole way. Just before we reached the Brador dock we found ourselves in the middle of eight humpback whales feeding on krill or capelin without any concern for us. We hove to and

spent fifteen minutes in total awe as the beasts—some young, smaller and without much encrustation on their tails and some old with nearly complete encrustation—rose and blew three or four times before gracefully arching their backs, raising their tails, and slipping into the deep. The sonic shock of their first blow is always startling, usually coming as a blast from an unsuspeeted direction. For all of us, I think, this was our first experience being in the middle of such a feeding convocation. One huge whale surfaced within ten feet of our bow and nearly touched the boat as it slipped below. Truly magnificent creatures! It's wonderful to be able to witness such a thing and to realize that at least these whales are coexisting with humans. Later in the afternoon, returning from the Hart Chalet site in the speedboat, we visited them again, still feeding in the same place. Florence says they have been there for weeks. Another outboard group was engaged in even closer observation because they were operating a drone hovering above the whales.

We were tied up barely ten minutes before Florence showed up at the dock, having watched our arrival from her living room window. She looked great! We had not seen her for two years because last year she was busy helping her daughter, Karen, in Petawawa, Ontario, following surgery. There was an old gentleman on the pier when we arrived who came from Twillingate, Nfld. and was on holiday and had spent some weeks here, hanging out—so to speak. He was slowly working his way north to Charlottetown in Labrador, where he had friends. Just taking in the scene in a sort of annual pilgrimage round, a trip he does every year.

Florence had prepared us a great midday dinner of ham, spiced rice, veggies, salad, and bakeapple and 'sugar' pie and cake for dessert. We had lots of fun talking about the past two years' events, especially the 'old fashioned' winter they had around here and in Newfoundland this time: lots of cold and snow. After lunch we took the skiff over to the Hart Chalet site to show the students where we would be working toward the



Figure 5.12 One of our humpback friends surfacing to say hello.

fish plant. Halfway across the Strait I had a brief sat phone talk with Laurie Burgess in DC and learned she had just sent off the Quebec permit letter authorizing the permit under the Smithsonian name. Apparently, it was something of a close call, with some dissenters agreeing only because I have students involved. What were they thinking??? Dinner was soup and leftovers from midday dinner. We were back aboard the boat by 10 (11:30 Newfit time). As usual, the carryings-on in the fo'c's'le (galley) with Jake and the girls carried on far longer than my consciousness.

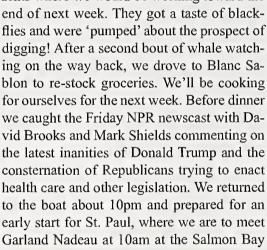




Figure 5.13 A humpback showing individualized tail encrustations.

22 July, Saturday. Brador to Salmon Bay

We were up at 6:30 and got off in a heavy fog at 7:30. Yesterday's whales were nowhere to be seen. We

didn't see land until the Salmon Bay Islands appeared out of the mist at 9:30. We tied up at the Salmon Bay fish plant, and like last year the proprietors allowed me to use their internet connection. I found the final approval from the Quebec Ministry of Communications and Culture after they had received the Smithsonian letter. The MCC usual "conditions" also arrived, and my responding agreement should mean a permit will be issued later today. On the pier I met Tony, whom I remember from last year, offering us water and fuel. neither of which we needed. On-line I edited some text on the Charles Francis Hall collections for the SI PR folks getting ready to launch the narwhal show. Meanwhile Garland had arrived at the Pits with a bucket of mackerel and a bunch of river-caught salmon. We saved the mackerel for tomorrow and ate the salmon for dinner. (I have never tasted anything like it—the salmon tasted almost like lobster—I guess from feeding on krill, a lobster distant cousin. I never tasted a salmon like that before!) After organizing dig gear we drove the speedboat to the Old Salmon Bay settlement's decrepit pier and hiked in to the Grand Plain-1 Groswater site we found last year. Fortunately, the site had not been disturbed by the 4-wheeler crowd that cruises the Grand Plain raised beaches, hunting and partying. We laid out a 1x6m trench along the low ridge where



Figure 5.14 Crew bench on Pitsiulak.

we had found flakes and artifacts. Off and on, we dodged rain showers as the fog rose and a southwest weather pattern emerged. Some blackflies, but not too many. The kids got used to digging and quickly began to find flakes and artifacts in the thin soil cover. By the end of the afternoon we had bagged a dozen nice artifacts and lots of flakesall made of the typical 'Groswater' West Newfoundland chert, except for one piece of Ramah chert from northern Labrador. Everyone had a good time with the excavation and learned a lot about of field and recording techniques. The tool sample was typically Groswater, with ground and spalled burins. The high percentage of end scrapers and relative absence of harpoon points may indicate a winter occupation. We should be able to finish the excavation to-

morrow.

We returned to the Pits at 6:30 with the storm clouds passed and a bright sunset illuminating scores of seagulls hanging off the dock waiting for fishing boat hand-outs. Perry had spent the day with odd chores like sharpening the knives and fileting the mackerel. We had a great dinner of salmon, carrots, calliflower, and riceand a nice bottle of wine. As I writing this, the gang in the galley has finished the dishes and is singing Dartmouth and Notre Dame football songs! I guess the intro to field archaeology has not done any permanent damage.

Before leaving for the dig I was accosted on the dock by George Griffith, Chesley's younger brother. He is the one Garland said had seen Basque roof tiles two miles up the Salmon River some decades ago. George described the tiles as being piled up in a Figure 5.15 Day 1 of archaeology at heap alongside one of the 'steadies' where salmon hang out while Grand Plain-1. Soggy but exciting. ascending the river. He did not think much of it at the time and recently tried, unsuccessfully, to relocate them, wondering why



Basques would haul tiles into the bush and leave them in a pile. George was familiar with Basque tiles from the Basque furnace site at his old homestead in Five Leagues, which we visited with Chesley a couple years ago. Without a tile specimen and a precise location I could not help George much and just encouraged him to re-locate the site. Perhaps someone more recently brought a bunch of tile up there with a plan to make a cabin. I can't see Basque hauling tiles up the river, even if they were using the site for salmon fishing.

23 July, Sunday. Salmon Bay

It's Sunday and there's not much action at the Salmon Bay wharf this morning. It seems that most of the boats here have their cod and crab quotas already and are waiting for the herring to strike in. That's usually in early August. Garland came aboard soon after breakfast and brought more fish. We're still having trouble getting to the mackerel he delivered yesterday. We learned a lot more of his background as we got ready to go off digging. He has several brothers and at least one sister. All of them went off to prep schools like Choate and Mt. Herman in New England, or in Lenoxville, Quebec—all this through the good offices of Rev. Bob Bryan and the Quebec-Labrador Foundation. Most ended up in big jobs, one heading the QLF in Montreal and others in business. Only he remained at home in St. Paul, a fisherman, trapper, and berry-picker. In a good bakeapple year he can make \$4-5,000 in three weeks—big money around here. We talked about getting organized during winter next year and looking for some real money to support an expanded archaeological project here, perhaps in collaboration with Francois Guindon who has started up a community-based project at the mouth of the Brador River. One of our targets would be underwater surveys for Basque and other early fleets in the American Harbor bay between Grand Isle and Bonne Esperance Island where scallop-draggers have pulled up tiles and old pottery, including that rechauffleur Laurie Thomas



Figure 5.16 Grand Plain-1. Archaeologists work, rain or shine.

showed us last year. Garland has arranged for us to do another archaeology lecture this Wednesday evening and has invited Guindon to present on his work at Blanc Sablon.

We got off to Grand Plain, along with Garland, at 10. Right from the start the weather was threatening—a strong southwest wind with dark low clouds. Garland stayed to see the site and the Groswater tools and left about 11 just as an afternoon full of showers began, sometimes with thunder, began. We were all rain-proofed, and there was never any grumbling from the team as they dug with rain dripping into their excavation areas, but it made recording finds and maps difficult. Nevertheless, by the end of the day we had found

and catalogued 43 Groswater implements, including some types we haven't seen previously, like a bifacially ground burin-like tool with remnant burin spall scars (seen only at the Postville site?), a couple of unusual knife blades, a very wide box-based point (a walrus harpoon point?), and others. Endscrapers were common finds, perhaps indicating skin-working and clothes-making. In the end, we were able to finish 12 one-meter squares that aligned with a low granite ridge. We saw no roasting slabs such as found at Postville, and nothing to indicate a dwelling structure. However, a couple meters north of the trench is a pile of fire-cracked rocks and slabs that I briefly tested but did not have time to dig. This would be a good future prospect, along with finishing the survey of the higher raised beaches. We back-filled the site and returned to the Pits, once again, as last year, not having time to even check along the beaches of Old Salmon Bay for 'Brest' signs. Garland told us people used to find roof tiles and other old stuff here at low tide. Another old story—widely believed here—is that the island south of Salmon Bay was the refuge of Marguerite de Roberval, a claim made by most other localities ranging from Harrington Harbor to Quirpon! Baek aboard, the rain clouds cleared and the wind began shifting into the northwest, bringing drier air and auguring a

good day tomorrow. The evening's salmon meal was as good as the first, with leftovers destined for a Perry-made fish chowder. I was too tired to write the days' events and hit the sleeping pad about 10. These days it is getting light at 4:30 because we are at the far eastern end of the Eastern Time Zone.

24 July, Monday. Salmon Bay to Back Harbor

We were up at 7:00 and found a strong northwest breeze blowing. About 8:30 we motored over to Grand Isle with a plan to anchor near the Grand Isle-2 'mystery' site found last year a couple hundred meters east of Uncle Leonard Thomas' cabin. The site is a low rectangular foundation roughly 4x8 m eroding at the edge of a sandy bank, having already lost its front wall. But the wind was on-shore, making an outboard landing impossible because of the boulder barricade. So we went around the backside and anchored in Back Harbor ('Back' because it's on the back side of Bonne Esperance). Perry put us ashore and we walked 20 minutes over the hill to the site following an old footpath. As we approached the site we came across a depression in the middle of the raised beach that could be nothing other than a subterranean Labrador Inuit winter house. The doorway and entry tunnels were clearly defined with stones, but the rest of the structure was hidden by birch bushes; there was also a stone pile that seemed like it could be an outdoor hearth like the ones at Jacques Cartier Bay and Hart Chalet. Later in the day Garland and I returned to test this site and found a pavement in the doorway area and cracked caribou bones in the hearth. Strangely, we found no artifacts in three test pits—atypical for the other LNS Inuit houses we've worked at. Perhaps this dwelling had

not been completely finished before the residents departed. There were also signs of a tent ring in the flat area north of the excavated part of the dwelling. I think this has to be an Inuit dwelling, which makes it the first we have found in the St. Paul region—a major find! Having seen it, reminded Garland of other similar places. Perhaps this will lead to others being identified. Its location only a few tens of meters upslope from Grand Isle-2—itself resembling a 17th century Labrador Inuit fall dwelling with lateral sleeping benches would make sense. Now all we need to do is find artifacts to eonfirm GI-2 is Inuit.



Figure 5.17 Grand Isle-2 (H2) Inuit pithouse.

No one is currently at the two cabins

at Unele Lenny's place (including Uncle Lenny), which has a shallow passage to the west known as Uncle Leonard's Tickle. His cabin is neat and has only a glass front door with a lock on it, so you can see inside. He is the one who, besides Garland, has been interested in early sites and had dug up some of the boulder pit structures at the top of the nearby hill above Kettle Head, finding the bone snowknife and human mandible Charles Martijn reported in the 1970s. We learned something new from Garland about the Kettle Head collection. Leonard, who is part Innu, has an interest in archaeology as a way to learn about his ancestors, so he rooted around in sites looking for artifacts. The Kettle Head site was on the hill behind his summer cabin, and it was here that he found the mandible and snowknife (the skull had since disappeared). Later on, his son, who worked as a electric linesman, was climbing a utility pole or tower and touched a wire that caused his arm to be blown off. He survived but Leonard decided that the accident was retribution for disturbing his ancestors graves and dwellings. The artifacts he collected have never been seen since, and it is said he buried them to make peace with the spirits.

It was a long day digging. We mapped and gridded out the shore-side rectangular dwelling and started working in the depressed center area of the house, each crew member taking a quadrant. When I got finished testing the Grand Isle-3 pithouse, I began at the east 'platform', perhaps a sleeping area. The structure of the house reminds me of the 17th century Inuit houses in Labrador. So far the finds have been few: some mod-



Figure 5.18 Our Grand Isle-2 (H1) site, gridded out for excavation, overlooking Uncle Leonard's Tickle.

ern stuff in the upper peat (a medicine dropper, a plastic button, rotted fabric), and in the charcoal-stained floor deposit beneath 10-20cm of peat cover, a few small flakes of dark chert and Ramah chert, and small chunks of charcoal. By mid-afternoon the tide was down and a large boulder-strewn flat emerged behind a substantial boulder barricade. The flats produced a large crop of mussels which we schlepped back to the boat for supper. Hiking back to the boat I took the crew on what Jake called "an adventure", walking too far to the west and finding ourselves staring down over a cliff. By the time we reached the shore we could not raise Perry on the VHF, but he finally emerged and

picked us up. Earlier in the day Iris had been talking with him on the VHF about salmon, to which Perry corrected as 'cod' since people around the coast do not talk about salmon on the radio because it might suggest that poaching was going on to fisheries officers listening in on these public communications. Garland then told us a funny story about Uncle Leonard, who was known to poach a salmon of two. He was quite secretive about it, but one windy day he was at his hidden net and got his outboard propeller tangled in the mesh. Just then, a ranger appeared and confronted him, to which Leonard replied, "Those damn poachers are putting their nets everywhere!" The ingenious response drew him a pass from the ranger, and the story came to characterize Leonard's quick wit.

25 July, Tuesday. Back Harbor

We decided not to waste the best part of the day, seeing as the sun rises here close to 4:30. So we had breakfast at 5 and were at the site by 6:00, and what a nice bit of work we accomplished by 6pm! Garland and Eddie showed up as we were setting the speedboat off-haul in the tickle. They had jigged up a mess of codfish for us and taught the girls how to clean them right there on a rock. He dropped back again at lunch-time and entertained us with tales like the one above about Leonard's son, and another about the one-year old harps that return south and are not savvy about winter conditions. Some get caught frozen out of their breathing holes and take to the woods looking for water. First their front flippers freeze and then their rear flippers. Finally they can only move their heads, and when their tracks are found and followed they confront the hunters with those big baleful eyes. A sad end. But if not hunters, wolves and foxes would kill them.

At the site I found wood remains in at the bottom of my square associated with several large iron spikes. The wood were probably roof or floor timbers, because they conformed to the long axis of the structure. A large circular piece on the sand below the timbers looking like it might have been a European barrel top was eompletely carbonized. We also found many small chert flakes; half were fine chert from various LNS sources, and the other half were Ramah chert. Almost all were small re-sharpening flakes; no finished artifacts showed up. They were all in the basal peat beneath the nails and just above the sterile beach sand. This early presence at the site must be Indian, since we have never seen these chert types in Labrador Dorset sites, which almost always could be counted on to have a microblade fragment. The tiny re-sharpening flakes suggest people were hanging out at this location away from their base camp, sharpening their weapons while waiting for game. A big surprise came soon after Perry motored up in the zodiac, which he had spent most of the day getting into running order in hopes of bakeapple forays later in the summer.

Allie was turfing a new square and nearly chopped an Inuit soapstone cooking pot fragment in half. It is a fascinating piece with a long life history judging from all the different mending jobs, including repairs made with iron nails—a first in my experience! The soapstone pot, iron spikes, and fragments of roof tile resolve the question of who made this dwelling—Inuit. The chert flakes indicated an Indian occupation before the Inuit arrived. This time we did not have to hike over the mountain and could take the speedboat, and our 'beyond the boulder barrier' off-haul worked like a charm. While climbing aboard, we found the low tide

flats filled with steamer clam holes. Dinner was the codfish Garland had given us, followed by homemade chocolate chip cookies cooked (burned) by our erratic oven. Tonight the sea is like glass. The Pits' new VHF was squawking all day because the calm weather has drawn out all the crab fishermen. The sea-life is truly phenomenal in this section of the coast.

26 July, Wednesday. Back Harbor to Salmon Bay.

Our last day in St. Paul. We had to finish the Grand Isle-2 site and get back to Salmon Bay in time to meet Eileen Schofield who will take us to the St. Paul teacher residence for showers and clothes washing, and from there to the Whitely Museum for a banquet and talks. I started rattling pots in the galley at 4:30am, and at 5:00 hot Red River cereal was on the table. We got to the site about 6:30. Garland came by at 9:30. He



Figure 5.19 Allie holding up her Basque roof tile find while Perry lounges in his orange drysuit.

had found a lobster nearby to give to Perry, who had lost his chance for a lobster when we departed for Grand Isle before he could buy one from the fish plant.

The morning was calm and beautiful. I continued yesterday's test pit in the winter house, which I guess we'll call Grand Isle-2, House 2, now that we know the rectangular dwelling in Inuit and probably dates to the same period. Still no artifacts, but I did get a bit of charcoal—not unexpected since It was close to the hearth. I also made a measured site map. By noon our units in House 1 were all excavated except the last bit of Haley's and Allie's squares. Then, in almost the last trowel swipe, Haley came up with a thin slab of soapstone from the same pot whose base we found yesterday. This piece had lashing grooves with countersunk grooves, and some interesting incised lines, three of them parallel and certainly intentional. Then, next door, Allie hit a bunch of nails and a complete roof tile that had shattered from frost in place on the house floor. Final tasks included doing the profiles, photographing the complete excavation, and back-filling, assisted by Garland. Looking over the whole site plan, Garland and I thought the cluster of beach rocks in the central 'living floor' might have been a cache for goods left behind when the occupants departed. This seems like the only likely explanation for a rock pile on the 'living room' floor. Allie and Jake both found wood timber traces at the base of the black earth cultural deposit where most of the nails also were found. The flint and Ramah flakes were mostly at the very bottom of this black earth layer and pre-date the Inuit occupation. Even though we don't have any diagnostic chert artifacts, the abundance of Ramah chert suggests an Indian occupation dating to the AD 800-1400. A Dorset possibility can be ruled out because of the absence of microblades. It also seems that House 1 and House 2 are from a single 17th century Inuit occupation dating before the LNS Inuit acquired large amounts of European goods. Their inventory included only iron nails and a single roof tile.

After some of the team did a bit of joy-riding in Garland's skiff on the way to the boat (Garland let Iris, who had never driven a boat before, drive his skiff), we pulled the anchor and returned to the Salmon Bay fish plant, tying up alongside a boat unloading crabs collected from fishermen along the coast. We had missed Aileen's pick-up time, but she returned about three and took us to teacher's residence. In the rush



Figure 5.20 The field team digging away, at Grande Isle -2 (H-1). View N.

to fill the washer I neglected to empty my pockets and my flash-drive went through the wash cycle; miraculously, it survived and came to life again the next day-a huge relief as I have tons of stuff on it not copied elsewhere. At the Whiteley Museum we were greeted by the St. Paul's tourism committee, which includes Vicky Driscoll as well as Aileen and Garland and a few others. Soon François Guindon and Stephen, curator of the Regional Lower North Shore Museum in Sept Isle, arrived with their team excavating the proto-historic Innu site on the Blanc Sablon River. Their group included an Innu woman, a visiting tourist family from Montreal, and others. Their excavation is a community archaeology project with partners up and down the administrative chain. We had lots

to talk about, and Francois, who was meeting Garland for the first time, seems interested in developing a working relationship with the Whiteley Museum and its tourism group. Together with Vicky, Garland, and Aileen, we discussed the possibility of teaming up for a joint project that could provide funds for my continued collaboration for the next few years. Following a great dinner we had an evening of talks, delayed slightly be projection issues that finally got resolved by an ingenious set of internet connections hooked up to my computer powerpoint by Iris and Allie. Garland had arranged publicity, so we had a good crowd, 47. One of the discussion issues was loss of archaeological materials to distant repositories. Everyone was eager to see us continue our surveys and begin some underwater work. Francois was a student of Brad Loewen's so that would facilitate collaboration. We got back to the boat at 10pm with arm-loads of clean clothes and said goodbyes. Another great project episode for Gateways 2017!

27 July, Thursday. Salmon Bay to Belles Amours

Up at 5 to find it relatively clear and seemingly just a light southwest wind, but as soon as we got out beyond the islands there was a big swell and a brisk southwest breeze. The problem was the 40-knot wind in the western gulf kicked up a swell running across the entire Gulf. We had to run out ten miles to get a clear course down-wind to Brador. Some waves were big enough that they required Perry to head up and cut speed. The sleeping fo'c's'le girls were being tossed like pancakes and soon had to migrate to the after cabins. In spite of our careful packing, stuff came tumbling off shelves. And then in the midst of it all, the engine alarm went off. Perry stuck, but it wasn't. He cut speed and dived



slammed the instrument panel to see if the Figure 5.21 Allie, Iris, Jake, Garland, and Haley posing for a 200F reading on the temperature gauge was photo at the Grand Isle-2, House 1 excavation site.

into the engine room. We had a real crisis on our hands if we lost the engine in this sea. Fortunately, at low rpms the temp began to drop and the alarm cut out. We still had an engine, but just barely, and the sea was still building. We needed a harbor immediately and headed downwind for Belles Amour. Now the problem became the speedboat, which was "up short" but still darting back and forth, yanking the short towline so hard that the grump cleat on the stern was starting look like it might tear out, so I tied the towline to the starboard grump if the port one gave way. Every so often a large sea rolling at us from astern would send the speedboat careening into the stern. I tried to fend off the strikes with a boat bumper but was only partially successful. After every seventh wave, a big one would loom up behind the speedboat, lifting her stern and throwing her at us. It was an hour that passed very slowly until we got into Belles Amours Harbor. As we entered the channel, we were met the "mussel" barge coming out to harvest mussels and lobsters; standing on the bow was a small dog playing the part of the ship's figurehead. The captain hollered at us to stay clear of his mussel strings inside the harbor. It was nice to be anchored again in this perfectly protected harbor, ringed by raised beaches and—we hoped—archaeological sites. When Perry explored the engine, his guess was eonfirmed; he found a mangled water cooling pump impeller with all its rubber vanes torn off. This is the second impeller failure we've had this summer, coming right after the generator impeller failure. On the other hand, this impeller had a pretty good history; it had not been changed since the engine was installed in 1989. Fortunately, we had a spare on board, and the installation was successful, apart from breaking off a single eover bolt.

While Perry was making the repair, the dig team went ashore and surveyed the north end of the Belles Amours Peninsula, finding a series of pit structures in the high boulder beaches. Then on a grassy point on the south side of a small peninsula at the northeast end of the L'Anse de Isthmus (Bay of Isthmus, part of the Middle Bay complex) Jake found tent ring structures that contained 18/19th C. white and blue print ceramics and whale and seal bones. Whale bone seems more likely to be present in an Inuit than in a European site. We also so inspected the large series of blowouts on terraces along the western shore of Belles Amours Harbor. Allie was the first to discover Groswater artifacts eroding from a buried soil horizon at the west side of a large sand dune. She and Iris recovered several microblades, a Ramah chert box-based harpoon point, and the smallest and most delicate burin-like tool I have ever seen—barely a centimeter wide and long, with polished faces and a spalled burin edge. A few hundred meters to the south, at 6.8m above

sea level, Jake found a second small Groswater site with a couple of microblades. In the pebbly lag deposit nearby Allie found a small nodule of ehert that might indicate a local source of this material and a reason for Groswater folks to be foraging in the area. While this harbor might also have been a place where early European vessels discarded flint ballast, the small size of the nodule makes it unlikely as ballast, also because it was relatively far from where it would have been unloaded from a ship.

The rest of the afternoon was slow. The wind and waves were too high to travel to Brador, so we did odd jobs, wrote field notes, and napped. The team made a fine soup for supper and then experimented making an underwater light in a plastic juice jar to attract fish—"Angler 2.0" they named the instrument. One minnow got curious and followed the light around the boat. I spoke to Lynne on the sat phone and found her



Figure 5.22 The usually cozy quarters under the bow (the galley and the girls' quarters) became extremely tumultuous in the storm.

engaged with groups distributing free food from farms in central Vermont, and working one day at a farm picking and processing vegetables. She is discovering that this food system is supporting a large population

unable to afford high-quality fresh food.

28 July, Friday. Belles Amours to Brador

Up at five to find no wind or fog, only the continuing roar of surf on the western beaches of the peninsula. We pulled the anchor and headed out from this deceptively-quiet harbor and found only a mild southern breeze and swell. Perry had plotted out a passage on the chart along the mainland and behind the islands that we had not tried previously. In shallow places like this you can generally trust the charted depths, and we had no trouble and saved ourselves a rolling passage around the outside. I called Florence when we docked, and she arrived with the terrible news that there had been a boating accident Thursday involving five people traveling to a wedding in a small outboard between Old Fort and St. Augustine. The boat was too small for the group and their luggage and



Figure 5.23 Allie with Groswater artifact she found at Belles Amour Blowout site.

swamped. Two people died and three survived to be picked up at 1 am after twelve hours in the water. All were wearing life preservers and had tied themselves to the boat. This gruesome event took place about the same time we were having our engine mishap in rough seas. Their bodies were located because they had a GPS beacon and were spotted by a helicopter with night vision gear.

After we tied up on the protected inside part of the Brador wharf Florence fixed us a nice breakfast and we got settled in, showered, and got clothes washed. Then we drove over to see what Francois Guindon and this team were up to at the proto-historic Innu site on the west bank of the Brador River south of the road bridge. They had opened up several areas in a site previously excavated by Jean-Ives Pintal that had been designated a registered historical site because of its large size and later prehistoric age. Francois organized the new excavation as a community archaeological dig with partnerships with the Blanc Sablon municipality and local Inuu groups, and they had an Inuu woman in their team, as well as students and volunteers. This year's finds included a small native ceramic sherd, numerous corner-notched points—some made of Ramah chert, some bone remains, and lots of debitage, and several hearths. The project required lots of negotiation with the MCC authorities as to what and how much they could excavate because of the site's historic registry status. They have had good media coverage and plan to expand the project next year. Perhaps we might join them to propose a contact Innu-Inuit-European program.

Following this visit we picked up the rental car I will be driving to Deer Lake, got groceries, and spend a couple hours getting the square units at the Hart Chalet House 3 site gridded out and excavations started. The back-filling from last year looks fine and the flies were not too bad, but rain eventually halted progress, so we returned to Florence's where we found she had prepared a delicious meat pie! As we were unpacking the car a truck pulled up and Donald Wellman hopped out and regaled Jake and me about St. Paul archaeology and history. He had not been able to attend the talk at the Whiteley Museum and said he had information about sites and places he wanted to relay—in particular, a place in Seal Cove, on the southwest side of Esquimaux Island. Our survey last year stopped just east of this place; had we walked a bit further, according to Donald, we would have found "stone houses in a cove with a nice sandy beach". Perhaps this is the site noted by Martijn. Wellman mentioned lots of other places of potential historical interest that we need to follow up on next year. About 8pm François' group arrived for a social evening and display of Florence's archeology collection. Lots of fun, as they were not familiar with the prehistoric culture history or lithic raw materials. I had to abandon the party just as a second round of desserts was broken out to get my stuff together for the early morning ferry to St. Barbe and my "lightning" trip to DC to preside over the

opening of the Natural History Museum's exhibit, Narwhal: Revealing an Arctic Legend, for which I am the lead curator, on Monday.

29 July, Saturday. Brador to Corner Brook

I got up at 4am with first light and hustled to the ferry landing, concerned about getting a ticket and a place aboard, because if I did not get a place on the morning or the afternoon ferry at 3:45 (Newfoundland time) I would miss my Deer Lake plane departure. It turned out I was the first to line up, three hours before the ticket office opened, so I dozed in the car until the lot began to fill up. It was raining so everyone was staying in their cars until the office opened. When I got out to stretch my legs, a friendly gentleman struck up a conversation, and I discovered it was Chris Montague from Northwest River, the founder and former president of the Labrador Metis Association. (The Metis—mixed European and Inuit/Innu people—initiated land claims negotiation with the government when the Labrador Inuit Association decided not to allow people living south of Rigolet to be part of their claim. (This decision was made before the early Inuit settlements in Cartwright were discovered.) The Metis claim is still under negotiation.) Chris and I went to see if the ticket office door was open (it wasn't), but our standing there "started a movement" (as Chris described it), and within a few minutes everyone had piled out of their vehicles and lined up behind us, including the Pageau family whom we met volunteering at François' dig. Our early place in the line-up secured me a No. 2 spot in the 'unreserved' ferry line-up and guaranteed I would get aboard. Chris was on his way to see his brother, Ed Montague, a geologist hospitalized in St. Johns following a stroke. Ed and I had

some correspondence about archaeology years ago. Chris and I talked about archaeology and mutual Northwest River friends like Henry Blake and John Michelin. He also knew Elizabeth and Joe Goudie, the Tooktoshinas, Sam Broomfield, Ike Rich, and others I knew from Happy Valley. Chris taught history and religion in Goose Bay. His history and ethnics background served him well in his political role. When we discussed issues like whether or not the archaeological record could reveal ethnicity and issues like population eontinuity or replacement by different peoples; his view was "follow the data, not the politics". I was surprised to discover that, as a 6-year old, he had met "Commander Nutt" (Dartmouth's David C. Nutt) and the Blue Dolphin science team; he also Figure 5.24 A view from aboard the ferry.



knew the Blue Dolphin's fish biologist, Larry Coachman ("a great sense of humor"), and Jack Tangermann. The Montague connection with Blue Dolphin team resulted from Harvey Montague's work as their local guide for Lake Melville oceanography and related environmental activities. Our conversation continued during the ferry crossing to St. Barbe. It turned out that the Pageaus also made it on board; I advised them on what to do and see during their visit to L'Anse aux Meadows, suggesting a meal at the Norseman Restaurant and a fishing and whale-watching excursion with Boyce Roberts in Quirpon.

Perry had arranged for me to stay at Jill Colbourne's and Matthew's place in Corner Brook for the evening. Since I had plenty of time to get there, I decided to visit my Port au Choix archaeological "birthplace" and its Parks Canada Visitor Center. En route I swung by the Port Saunders Marine Center, finding it much expanded and full of huge boats. The Pitsiulak spent several years here before Tony Morse let us use it for the Torngat Project; and after I hired Perry, he used to drive here from Lushes Bight to get it ready for fieldwork, lodging with our local hosts, Eileen and Bill Lowe. I dropped in to say hi to them but they were not at home, so I left a message and a copy of last years' ASC Newsletter.

The Port au Choix Visitor Center exhibits document the long history of the Point Riche Peninsula with

displays on Maritime Archaic, Groswater, Dorset, Beothuck, and European cultures. Climate change is the unifying theme of the displays and the driver of social, subsistence, and technological change. When I pointed out a couple of minor improvements (two of the mircoblade cores were displayed upside-down) to the staff I had to reveal my identity. This resulted in a stir and led to interesting discussion with Eileen Rumbolt (a lively, long-term local archaeological buff who knew Elmer and Elaine Harp), Josh Thomas, and the center's manager, Katty Gallant. I learned that Priscilla Renouf's student, Patty Wells, had just finished an excavation at a Groswater site near one of the Point Riche ponds and was en route back to her home in Calgary. Katty managed to hook Patty and I up for a brief telephone call. A surprising discovery for me was to learn that the Parks Canada Point Riche site hosts a small group of visitor-friendly caribou!



Figure 5.25 Photograph showing winter ice in Gulf of St. Lawrence in a 'cold' year.

I finished my 'roots' visit with a shrimp sandwich and chowder lunch at the Anchor Café across the road from the fish plant—my last encounter with the plant's shrimp was when I had a tour there with Hugh Crowell (Aron Crowell's brother) and Ralph Eshelman in the early 1980s and was given a bag of prawns. That was the time I got in trouble with the Newfoundland archaeological authorities for digging a test pit (without a permit) that revealed an important new Groswater site on the terrace south of the Phillips Garden Dorset site! Later Priscilla Renouf excavated there and found some amazingly delicate Groswater side-notched points.

The drive to Corner Brook was a rainy three-hour trip. Jill and Matthew, Brittany's friend Dillon (from Roberts Arm), and Jill's man-eating cat (and Brittany's more cuddly feline) presented me with a "Colbourne-style" dinner of grilled steak.

Brittany was at her police job, tending prisoners. We had a nice evening catching up: hearing from Matthew about his work hauling grain and aluminum ingots from the Quebec North Shore smelters to Detroit, and other cargo to Baltimore, and a version of their wedding excursion to Cuba different from the one told by the parents. But soon the hours caught up with me and I was caught dozing off: "Bill, aren't you sleepy? We have a bed for you!" I did not need much more encouragement; during last summer's overnight here, Patrick Jolicoeur and I slept on the floor.

30 July, Sunday. Corner Brook to Washington, DC

I was up and working when Brittany arrived from night duty, dressed in her police uniform and looking pretty smart. We had a chat before she turned in. There was news that the Canadian Supreme Court had acted to ban seismic testing in Nunavut waters, siding with the Inuit claim that high intensity sonic blasting could damage sea mammal hearing, navigation, and feeding, possibly leading to changes in their migration patterns and damage to Inuit subsistence hunting. This is a big victory for sea mammals and Inuit. The decision comes just when we are opening our Narwhal exhibition and should give a boost to public interest in the exhibition. I got to the Deer Lake airport just in time for my flight to Toronto, and the next leg to DC took place without thunderstorms or other complications. Mercifully, the temperature in DC was in the 70s. Here's hoping that holds for the next three days!

4 August, Port Saunders to Brador

Okay. I've had a break from these notes for nearly a week, traveling and in DC. I arrived in Washington Sunday evening to find our house on Capitol Hill in good shape, without undue damage from the invasive

'mile-a-minute' vines that have invaded our front yard. Thirty minutes and I had it cleared up and the yard looking acceptable. The condo complex construction across the street had most of its façade bricked up, and the covered sidewalk was gone. Slowly 8th street is taking on its new look, and the façade on Pennsylvania Ave is done—not very attractively in my opinion. Monday was a quiet day in the office. Nancy got me eaught up on ASC issues: Igor was still in Moseow attending to affairs, especially his father, following the death of his mother a couple weeks ago. Stephen Loring has adjusted more to Joan Gero's death a year ago. I had a peak at the narwhal exhibition, which looks gorgeous and is missing only its final piece—Abraham Ruben's carvel narwhal tusk—awaiting final Canadian Customs approval. Nancy had arranged



Figure 5.26 A beautiful, warm day in D.C.

a small office party in the afternoon, and Ryan Lavery briefed me and Christyna Solhan (the narwhal exhibit coordinator) on press events. These interviews took place all day on Tuesday and included WTOP, Washington Post, BBC, and the New York Times. Martin Nweeia and Pamela were down for the opening events and made important contributions to the press briefings. Tuesday evening we had a cod-fish chowder dinner at my home with Martin, Pamela, Stephen Loring, Margaret ('Skye') Litten, Bernadette Driscoll, and Nancy Shorey. During my absence, Martin and Jenifer Fisher (our editors from Harp and Company) had made the final changes to the narwhal book, which is being sent to the printer this week, following final proof-reading by Tish O'Connor. I was to leave DC Wednesday, but just as the plane was about to take off at Dulles Airport thunder storms caused air controllers to shut down all flights to the north and east. After hours of waiting the flight was cancelled and I returned home. Nancy had been able to find another route in the morning via Toronto with Air Canada. This time the gods were willing and I arrived on schedule in Deer Lake, where I rejoined my rental ear, drove to Port Saunders, and spent a nice evening with Bill and

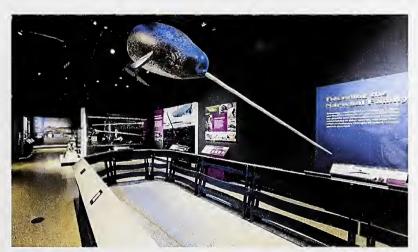


Figure 5.27 The Natural History Museum's Narwhal exhibit. surgery.

Eileen Lowe-friends from the days when the Tunuyak and Pitsiulak wintered at the Port Saunders Marine Service Center. Both are doing fine in their retirement, and I found Bill looking strong, cheerful, and full of stories about his interesting life as an airplane mechanic and armed services survival educator whose work took him to many places I also worked, like Frobisher Bay and Labrador. He had a major heart attack five years ago, but recovered and has not had any recurrences, opting not to undergo further corrective

An hour's drive to St. Barbe got me aboard the ferry to Blanc Sablon and to Florence's place, where I found the crew pleased with their progress on the Hart Chalet site excavations. Their squares had been productive and were finished, profiled, and ready for my inspection. Jake had done an excellent job supervising, and some interesting new finds were made: a bone handle for an iron butcher-knife, a bear tooth with two

perforations (probably a drag handle), the bottom of a large stoneware jar, as well as nails, glass and other materials. Lots of caribou bone came from the hearth mound. Indian artifacts from the wall and fill deposits included two local chert point blanks or knife blades. There were no new earth-shaking stratigraphic discoveries like, for instance, sleeping platforms. Most of the squares included wall deposits showing lots of midden accumulation. (One thing they failed to inform me about was the coin Allie found in her square—more later on about that!) During my absence, Perry had replaced Pitsiulak's cargo boom lines,



Figure 5.28 Haley and Jake at the House 3 dirt pile, in all its glory.

filled the water tanks, and bought 1100 liters of diesel fuel—perhaps enough to get us to Rigolet and back to Lushes Bight.

I had been ruminating about Donald Wellman's mention of "stone foundations all built up at Seal Cove," imagining that this might be the missing St. Paul Inuit village. So, upon arriving at Florence's and finding the weather calm, if foggy, I called Garman and arranged for him to take me to Seal Cove. Meanwhile, the others would backfill the chalet site and clean up Florence's cabin. During my absence Jake et al. had created a huge dirt pile in the middle of House 3, so backfilling from this location would be quick (one hour!) and easy (well, somewhat!).

Garland was waiting for me at 11am at the Whiteley Museum, ready for a wet trip, and I followed suit because the fog had turned to steady rain. We

buzzed off in his little punt around the west side of Esquimaux Island and across the shallows that stretch out nearly a kilometer from the cove. This area is well known as a harbor seal hunting spot. The tide as low, and a long string of rocks extended southwest from Seal Point. He dropped me off at the south end of the point and we searched the cove's grassy flat expanse and even hunted among the tamarack trees for signs of an Inuit village or stone foundations. No luck. Motoring past the seal rocks we saw numerous

seals sunning. Garland had fancied shooting one, but we could not get close enough. This was clearly a fine spot for an Inuit site-but where was it located? Then Garland told me about Dwight Bilodeau having dug near Garland's brother's cabin where the stream meets the sandy beach east of Seal Point. I surveyed this area last year and found nothing among the thick growth of tamaracks. Garland led me to the middle of the trees behind his brother's cabin where Dwight had been digging. I did not have a shovel with me and was depending on finding house pits. But as before, searching for foundations, we found nothing. This is also the place where Charles Martijn spent weeks excavating during the two summers he worked in the St. Paul area. After returning to St. Paul, Garland introduced me to a friend of his who used to take Martin to this location by boat; he con-



Figure 5.29 The team having a wholesome, fun time at the local watering hole, The Auchor, in Blanc Sablon.



Figure 5.30 Melvin Chevalier's maritime Archaic collections from around his house in St. Paul.



Figure 5.31 Melvin Chevalier.



Figure 5.32 Quartz bi-

firmed that this was the site and said Charles had found stone tools here. This does not exactly square with Bilodeau's finds of 'large' iron nails. All agreed that the area had become heavily grown over in the past forty years. This is the site designated EiBk-7 in the MCC records; EiBk-8 is just across the stream to Figure 5.32 the southwest. I guess it's time I ask MCC for the records and find out exactly point. what Charles was up to. I thought maybe Garland could ask Dwight about what

he had found, but Garland begged off, implying that Dwight's recent 'coming out' had strained their old relationship. In conversation with Garland's friend I learned that Martijn had done much more work in the St. Paul region than I was aware of. It is strange that he only published a small bit of this work. Before heading back to Brador Garland and I visited Melvin D. Chevalier who lives up on the high terrace above town next to a prominent rocky knob and had found lots of quartz points in the bull-dozed clearing around his house. I photographed a fist-sized quartz hammer stone and the artifacts he had found—nice small stemmed points with thick cross-sections. Lots of quartz flakes still remain in back of his house and in the bull-dozed soil scraped off the surface. There may be some undisturbed areas in the still-forested areas nearby. Seems like a possibility of grave mounds here as well. Garland found information on the elevation of this terrace: 98 feet a.s.l. The point styles suggest they are about 5-6000 years old, based on Labrador finds. (A couple of weeks after my visit Garland sent me a picture of a beautiful large quartz bipoint Chevalier had found. I hope that this was not dug up following my visit.)

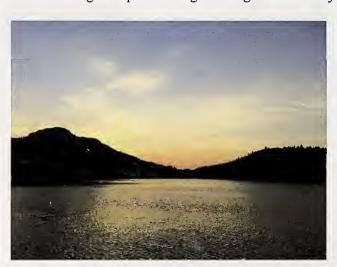
On the way back to Brador through the fog I stopped at the lobster and mussel store and discovered Perry had already been there, telling them not to sell to a 'dirty old archaeologist' who might come by looking for lobsters. Yep, that was a good description of me after my rain-drenched survey. I told the lobsterman that we had found some ancient Eskimo artifacts in the blowouts. He told me he and his wife had been collecting artifacts there for years and were surprised there was anything left for us to find. So I told him the Groswater tools were VERY small, and he was impressed. Back at Florence's we had a 'last supper' of lobsters and fish cakes and did showers, laundry, and spent a couple hours at The Anchor, the local watering-hole, where we found François Guindon and this team having dinner. They are busy now with the Blanc Sablon (which they pronounce "Blanc Saaa-blawwww") archaeology trails—at the moment doing the Maritime Archaic section. Their next task is to 'find' Marguerite de la Roche (né Roberval) in the St. Paul region. Good luck! We moved aboard the Pits at 11pm. I arranged to have my DC-trip rental car picked up at Florence's house. Still foggy, but no wind.

Saturday, 5 August. Brador to Square Island Harbor

Perry and I woke at 4am and got the Pits ready for the trip north. A blanket of fog restricted visibility to a

hundred meters. I fetched the speedboat and got the coffee perked and Perry had the engine running when all of a sudden a string of invectives came from the captain's chair—###22#\$24%!!, and so forth, and continued for several minutes. The Nobeltek navigation system would not start because of a glitch in the computer operating system. For a while it looked like we would not be able to leave the wharf and were wondering what kind of techy person we could find locally for help. One thing, though caught Perry's eye: the date display was wrong, listing today as Friday rather than Saturday. Even more strange was the year: 2057. With no other idea about what to do, we began walking the years back to 2017, and voila! the system kicked in. Did someone sabotage the program by setting a 2057 date? Was it a computer glitch or failure, or a tired computer time-keeping battery? We think the latter. Who knows, but we did manage to get underway at 6am. No sign of life from the crew until the sun began to poke through the fog near Red Bay.

Off Forteau we almost ran down a fisherman jigging cod from a small boat because he did not have a radar reflector. At one point, a group of porpoises started flinging themselves into the air, leaping 6-8 feet above the surface and landing with a loud 'smack'! Otherwise, it was a calm and uneventful trip that landed us at 8pm beside a sturdy fishing stage full of crab pots and lines in Square Island Harbor, halfway down the Labrador coast. There must be 20 or 30 homes and stages here, but only one house seems occupied now. Most of the buildings are kept up. Crabs, cod, and wrinkles are the likely summer resources, but most people probably use the place sporadically for trout, salmon, and bakeapple picking, financed by wage em- Figure 5.33 We docked at Square Harbor at sunset. ployment in William's Harbor inside the bay or jobs in Alberta. Taking leave from the confines



of the boat, Jake, Allie, and Iris explored ashore. Iris, who had injured an ankle while digging at the hart Chalet site, slipped and damaged her 'good' ankle and almost had to crawl back to the boat. She onee was a gymnast champion but had to quit when her ankles gave out. Dinner was "Florence left-overs"—a stew augmented with Perry's moose meat and Florence's strawberry and coconut cheesecake pies. Very few icebergs on the coast this summer. We were fortunate to have almost no wind until mid-afternoon, and then only a light breeze from the south. Hence no speedboat towing problems—Yea! Arriving at Cape Charles from the foggy steam north from Blanc Sablon we really knew we were in Labrador again.

Now about the coin find! While underway I worked on the Hart Chalet notes and laid out the collections to dry out following Jake's washing them at Florence's last evening. Allie's notes for 12N 22W illustrated a 'copper coin' she had found deep in the hearth pile. She had not thought this was important enough to mention when she described her knife handle and "bear tooth pendant". Imagine my surprise when a well-preserved copper (or silver?) coin tumbled out together with a bunch of nails—and with some pretty elear lettering I was not able to read without magnification. "Allie, why didn't you mention you found a COIN?" "Well, it wasn't anything special, just a coin. What's the big deal?" Well the big deal is PLENTY BIG. We've been looking for datable objects from the Inuit LNS sites for years and have been relying on dating on clay pipe and glass bead typology—a very imprecise method; we have not been able to find any specific historical records either. So now a coin pops up in what may well be the last dig at this site. I hope it can be identified precisely by a numismatist, or conservators can pull us a mint date. Exciting! (Flash forward: On our way through Quirpon in late August I sent a picture of the coin to Nancy Shorey and she passed it to Skye Litton. Both Skye and the Smithsononan numismatist, Hillary York, identified it as a French Louis XIII 1632-34 double turnois! So this is what I ended up writing my blog about.)

Sunday, 6 August. Square Island Harbor to Indian Island

Today we made a mammoth run of fifteen hours, from Square Island Harbor to Indian Island in outer Groswater Bay, one of the locations of our excavations over the past two summers. The weather gods were smiling and gave us calm seas and light winds the entire way. We had a gorgeous sunrise leaving Square Island, rolled with a following sea to Punchbowl, crossed Table Bay to Cape North in nearly flat water, and from there passed the Viking "Wundurstrand" to Pottles Cove to our Indian Island harbor. We had pancakes in the Island of Ponds Run and grilled cheese sandwiches off Cartwright. Now we're anchored between the Indian (Spracklin on the maps) Islands in a light southwest breeze. The crew slept much of the way, some in the zodiac or on the cabin deck. Every four hours Perry slowed the Pits and dropped into the 'hole' to grease the bearings and add oil. I worked on Hart site field notes and wrote up a summary excavation report. I left messages on Jamie's office phone about our arrival in Rigolet. The entire way we saw only one vessel—a small outboard outside Punchbowl. Even around Cartwright on a calm Sunday no one was



Figure 5.34 Allie learns to splice rope.

Monday, 7 August. Indian Island to Rigolet

The kids were too tired after watching a movie to try sleeping on the deck last night, even though conditions were ideal with a brisk wind to keep the flies down. But the flies rose in fine shape when we got ready to weigh anchor and leave for Rigolet. Ominous dark clouds were approaching from the south and there

on the go. No whales or porpoises, but more and more birds the farther north we went.

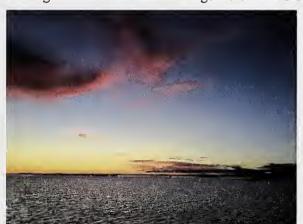


Figure 5.35 The weather gods gave us a gorgeous sunrise.

were splatters of rain as we pulled the anchor. The run to Rigolet was uneventful, with the wind off the land. I spent most of the time annotating Allie's photographs from the Hart Chalet excavation. Very nice profile shots. We arrived in Rigolet about noon and checked in with the Department of Health and Social Development (DHSC) folks, our unofficial hosts for the past couple of years, allowing us to use the nurses residence for showers and laundry. They also let us hook up to their internet service, so there was a blitz of facebook activity, and I was able to check in with the Smithsonian and saw a bit of media coverage of the narwhal show. Ozzie Allen has had one knee replaced successfully and is looking for a second next year. Joyce is fine but lost her mother, Liz, this past spring; Charlie and Jean Tooktoshina spent most of the

winter at her mother's place in St. John's. Bert Allen seems strong and better after his illness and the loss of his wife, Tib. Jamie Brake arrived from Nain in late afternoon. After dinner we took the speedboat to Double Mer Point to see the Labrador Inuit site excavated by Lisa Rankin's Memorial University team. The site was all open and not backfilled because Lisa planned to test further for Dorset and Groswater components, and part of the site might be reconstructed. It's a pretty amazing hole in the ground—three massive houses with long entrance tunnels and large circular hearth stands whose rocks were stained with charred blubber. A huge soapstone lamp was found in one of the houses, perhaps indicating some cataclysm happened that prevented people from returning to collect it. I thought we might be able to test for a Groswater presence in



Figure 5.36 Evening excusion to Double Mer Point. There did not

and leave a family and two children fatherless, and I learned to be more careful in small boats; another outcome—equally positive--was the discovery, while I waited for the sea to calm, of a previously unknown Inuit site. On the way home through the rip we encountered a small company of harp seals.

Tuesday, 8 August. Rigolet to Snooks Cove, to Rigolet

The weather was unsettled this morning so we had a leisurely breakfast before heading for Snooks Cove. Snooks is one of the better known arehaeological locales in Hamilton Inlet as a result of Richard Jordan's work there in the early



Figure 5.38 Discovering new structures at Snooks Cove Hunt and Henley Post.

the vicinity, but seeing the near meter-thick peat profile, it was clear testing the nearby deposits would be a major undertaking. Memorial had not excavated beneath the floor pavement, and that would be the best way to search for earlier deposits. On the other hand, if a Groswater or Dorset site was here before the Inuit, their artifacts and flakes would have been found in the Inuit houses since they were excavated into earlier soil. As we approached Double Mer Point we found the water full of tide rips even without any wind interference. I was here alone in a small boat in 1970 or 1971, returning to Rattlers Bight with a load of gas and groceries, and almost capsized in this rip. There were several outcomes from that experience: I

re in the early Figure 5.37 Double Mer Point Inuit winter 1970s and Brian villiage. Memorial University excavations.

1970s and Brian¹⁷ Pritchard's work for MUN in 2009-

drown

2010. We were curious to see what they found and wanted to search for the unknown location of the Hunt and Henley trading post site that was located here ca. 1861 to 1865, when it was purchased by the Hudson's Bay Company. Pritchard excavated two Inuit-style dwellings that Jordan identified (Pritchard and Brandy, PAO 2010). Jordan's notes also identified an area he thought might be where the post had been located, but he never tested or identified it. Perry anchored the Pits in the cove, and we found a functioning off-haul at the cabin on the south side of the river mouth. We quickly found the Jordan and Pritchard excavations at the edge of the forest a few hundred meters south of the cabin. Then—bush-whacking in the thick forest behind the modern cabin, Jamie located a pit enclosed by part of a low earthen foundation wall near the bank of the river 150 meters inside the river mouth. The pit was grown over with roots and had a eut and colored glass bowl fragment on the surface. A survey stake from Pritchard's work indicated he had identified the location, but

his site report and notes do mention excavation. Testing the terrace edge fifteen meters north of the pit, I found earthenware and a clay pipe. Haley Adams completed TP1 and found 19th century ceramics, bone, square nails, and glass. Allie Castellanos made a test pit (#2) at the intersection of the east and south gravel walls, finding a gravel berm above the old ground surface; Jamie Brake found ceramics in TP3 at the top of the gravel mound a meter north of the pit. Then came a surprise when Jake Marchman announced he had found another rectangular mounded structure in the woods west of Structure 1



and confirmed it by finding a clay Figure 5.39 Approaching Rigolet. pipe fragment (TP4) in its eastern wall. TP 5 in a rectangular clearing between the pit and the modern cabin produced a piece of old bone. These new additions to the Hunt and Henley post are important contributions to the early history of Snooks Cove. We now have a nice site complex consisting of a post and out-buildings, two excavated Metis dwellings, and numerous tent rings. A good morning's work—kof course building on earlier research here by Jordan and Pritchard. Later in the day Sarah Oliver told us how Jordan's crew would return hot and dirty from their excavations at Eskimo Island, strip down to their underwear, and jump of the stage, screaming with shock as they hit the icy water.

After lunch of mega-b.t.u. (double fried eggs and cheese) sandwiches made by Allie and Iris, we returned to Rigolet, finding the Astron, the old local Labrador freighter, pulling away from the wharf. Jamie and I



Figure 5.40 Snooks Cove fishing camp south of the river.

went searching for Derek Pottle but found no one home; his house on the shore south of the power plant is surrounded by works of art, and sports a gun (howitzer?) left from WWII defense. I had a long conversation with Sarah Oliver and learned of Curtis's growing dementia. I found Charlie Tooktoshina in his shop trying to repair a brake line on his truck but frustrated by discovering that the part he had received by mail did not fit. He told me Etagaulet Point was known locally as Deer Point; that Inuit and Innu hunted spring seals there; and that young caribou would be hunted in the nearby hills. I arrived at Ozzie and Joyce Allen's house just at dinner-time and shared a meal of "fish and brewis". The brewis was great, and I heard many tales from Joyce about strange events on the coast, the travels of Tuchialuk people to the

Chicago World's Fair in 1893, ghosts and Inuit graves (her relatives) near Mother Buxo's Rock on the path between Winters Cove and Rattlers Bight, and much more. After dinner, Jamie and I discussed this year's project with Mayor Jack Shiwak, Sarah Oliver, and Eldred Allen (Matt Allen's son) and his wife Christy at

the Strathcona House Museum. The discussion touched on many issues. Jack recalled how the Innu groups

coming overland from the south would split up into family groups when they reached the south shore of Lake Melville; deer were always plentiful in the Mealies in those days and relations between settlers, Inuit, and Innu were cordial.

9 August, Wednesday. Rigolet to Mason Island

Jamie left on the morning plane to Hopedale where he and a videographer are producing a film dealing with cultural heritage. He also has business in Goose and will return to Rigolet Saturday. Yesterday's stormy weather passed and the winds were light. We headed out the Bay to finish our survey of Saddle Island while most folks in Groswater Bay were heading in to Rigolet for the town festival or home-coming—a modern version of what used to be called the 'short rubber' dance, when salmon



Figure 5.41 The Pitsiulak docked at the Rigolet pier.

fishing was done and the fishermen could 'turn down' their hip waders to knee-high length. For the past two days we've seen a man butchering seals he has shot on the rocks by the dock.

We arrived on the north shore of Saddle Island around 10:00 and found a safe place to off-haul the speed-boat. There was almost no wind or ocean swell. We found a circular Labrador Inuit tent ring almost immediately, and during a couple hours located several other Inuit tent sites and boulder cache sites, as well as a recent tent frame. There were deeply trodden black bear trails (but no recent spoor) and good locations for Groswater sites, but nothing materialized. Overall, the island seems to have been used infrequently, perhaps because it is far from the mainland. Last year we found some tent rings that looked Indian rather than Innu on the island's west end.

Back aboard, we found Perry in a stew over the Nobeltec nav system—again. It would not start and had the wrong date. In the end, he managed to trick it into action by telling its clock that today is tomorrow! It's like the computer has started a game of roulette with him, and is winning. A 'fly-by' of the beaches at the west end of Little Black Island did not look promising, so we headed south across the bay to Mason Island. We anchored and went ashore, finding Levi Wolfrey and Ruth Pottle readying to leave for the festival in



Figure 5.42 Saddle Island North L-1 Inuit tent ring.

Rigolet. We showed them the feature we wanted to explore: a circle of flat slabs arranged in a radial fashion around a depressed center. There was a remote possibility it could be a human burial related to the users of the stemmed point we found here two years ago. It's more likely it is one of their opened caches. But if so, why would there be such attention to the slab arrangement? The Wolfreys encouraged us to see what we could find. We gridded out a 6x4m area, mapped the surface rocks and spent three hours opening the eastern half of the mound. At the end of the day we had little to show except a single tiny flake of Ramah chert from the middle of the depression—no red ocher, artifacts, or charcoal. However, there are some large slabs inclined in the central pit, so there is still a chance for something interesting.

The crew has been having knot fests and has learned most of the basics. This evening Jake asked Perry to show him how to weave a net. Perry is a master knot-tier and net-weaver, having learned while fishing with his father. "Father could knit a net so fast you couldn't see his hands move!" Perry had lots of fun providing instruction, and his hands moved very fast also.

10 August, Thursday. Mason Island to Rigolet

Calm all night and we should have got up early, but I was feeling lazy and did not get breakfast going until 7am, and even then it took the foghorn to rouse the crew. The sky was dramatic and the water was like a mirror. By mid-morning the grey sheet clouds were replaced by cumulous and a really nice day took shape. We began with a brief survey of the northwest end of Mason Island. Levi had mentioned there was an Inuit

grave there, and we had no trouble finding it, as described, with the top slab fallen in and no bones or artifacts visible. It was accompanied by a couple of tent ring structures and on the south side of the rocky ridge a shelter built into the ledge on the shore north of a small pond. In the afternoon I found another Inuit tent ring near the opening of the small tidal basin east of the Wolfrey cabin and our terrace site. This TR was unusual for having a clearly defined sleeping partition separated by a line of rocks—the typical form for an Inuit tent ring in northern Labrador but rarely seen in Groswater Bay. The tidal basin would have been a perfect small boat harbor a few hundred years ago.

Our 'cache pit' excavation progressed slowly throughout the day and was interrupted by lunch back aboard the Pits. We cleared and mapped the area surrounding the pit and documented the radial arrangement of flat slabs. This aspect of the of Mason Island. Yegetation and licher several and licher se



Figure 5.43 Inuit grave on northwest point of Mason Island.

vegetation and lichen-covered, pebbly blowout gravel. We gridded out a 4x6m area and cut a trench across the eastern half of the pit to investigate its structure. Haley excavated this section of the pit unit it reached a depth of 70 cm, where we found a nice charcoal sample. At that point, we opened up the western half of the pit and removed a large rock buried in the center halfway down. The pit had been made with rock slabs slanting down on all sides. A few flakes of quartz, quartzite, and Ramah chert were in the fill (prob-

ably unintended inclusions from the surface), but no sign of tools or red oeher. The careful preparation of the feature made it seem like a burial, but the lack of finds, red ocher, or bone was problematic. The pit fill consisted of grey sand stained with humics and had numerous bands of thin peat lenses that indicated the pit was open for a long time and had developed numerous cycles of vegetation and windblown sand lenses. When we excavated the west side of the pit we became excited when two small thin stone slabs set vertically at the bottom of the pit appeared. Below this were rotted remains of two pieces of wood that had collapsed into the pit from higher up. They probably had been part of an internal covering structure. The small slabs seemed odd but were



Figure 5.44 Mason Island -3 pit strcture before excavation.



Figure 5.45 Mason Island -3 cache pit excavated.

out in Groswater Bay lightning flickered, letting us know Perry had made a good decision to find a better harbor than Mason Island Tickle.

11 August, Friday. Rigolet to Caravalla to Rigolet

The Northern Ranger arrived at the pier just as we were having breakfast, on her way to Goose Bay. As Sarah and Garland prepared to embark for visits in Goose and Northwest River they dropped off the key to Kevin's car, which she was letting us use when we were in town. We received a similar gesture from the Nunatsiavut DHSD which gave us their office key so we could use the internet over the weekend. Meanwhile the Rigolet Salmon Festival.

too small to have been intentional. Further excavation below this showed humic stains that seemed to be natural soil features rather than evidence of human activity. In desperation when our time ashore was expiring, I took a shovel and dug another half meter down, but found nothing unusual. All in all, the day ended up being a frustrating one, with the signs going back and forth between cache or burial; but in the end it was just a cache, albeit a meticulously constructed one at that. probably used over a period of time and then left open with its cover rocks thrown aside. At 6:30 we had to leave the site open with the pit's internal rocks not mapped because a storm was approaching and we needed to find a harbor. That turned out to be Rigolet, which we reached through a wind and rain squall while dining in the galley on a lentil stew concocted by Jake and Allie. We reached Rigolet about 10pm after the storm had passed. The town appeared as a wall of lights, and



Figure 5.46 The townsfolk enjoying the Rigolet Salmon Festival.

story-telling, and songs by a Goose Bay singer. Tonight there is a dance, and tomorrow there will be other activities, ending with a salmon dinner, a bingo eontest with a \$2000 prize, and more dancing. Friends and relatives from Goose and Northwest River will be arriving on the Ranger tomorrow morning to take part.

After spending a couple hours on the internet we left for Caravalla Cove, which I had never visited previously and is famous for supposedly being the staging point for an Innu raid on the Eskimo island Inuit. This old story, going back to Gosling or earlier, seems based on reports of human bones scattered about on the Eskimo Island tundra. More likely, the bone scattering may have been the result of sailors and fishermen looting Inuit graves for artifacts in the late 19th or 20th centuries. The day was similar to others, with showers alternating with periods of sun—what people used to fall "fall weather." Jake fortified the excursion with a soup adaptation of last night's lentil stew, and over the VHS we heard Labrador Coast Guard Radio asking calling for information from anyone who might have seen the sailboat Morning Star, last heard from near Hawke Bay, Newfoundland. Perry ferried us to shore since there did not seem to be a good place to set an off-haul since the tide was falling. When he returned to the Pits he had an unpleasant task to attend to:



Figure 5.47 Inukshu at Caravalla Cove.



Figure 5.48 Surveying Caravalla Cave -1, Test Pit 2.

a plugged toilet. Some people have not been saying "Mississippi" seven times while holding the flush button. He later discovered the toilet intake pump was fouled with tampon strings (not necessarily from our present erew!).

We landed at the obvious place—a large green meadow near the mouth of the Caravalla brook—and immediately found a rectangular structure that produced 19th/early 20th century ceramics. Nearby Haley dug a test pit that had the fragments of a nearly complete annular ware bowl (which she later reconstructed with tape), along with a .22 shell, wire, and clay pipe stem. Jake made a sketch map of the field and the location of the test pits; but a proper survey was impossible due to the hip-high grass and huge clumps of raspberry bushes that had grown up on the middens. The attraction of this location for Europeans was the combination of seals—plentiful here because of year-round open water—summer grass for cattle, and salmon. For native people it would have been seals primarily. We did some wandering along the south-side river bank and adjacent cove shoreline but found only a modern hunting camp. We could tell we were following the recent footsteps of a large black bear by the bent grass and large, fresh stools filled with blackberries. Later

we discovered Perry had seen the bear across the river after he landed us, but we were too absorbed on the ground to notice. Just as in Snooks Cove, you are not going to be able to locate Innu or early sites away from the shoreline because of the thick forest growth unless the land gets cleared or opened up by modern activities.



Figure 5.49 Haley with annular ware bowl from T.P. 2.

We returned to Rigolet and spent a couple hours doing showers and laundry. We found the convenience store had hamburger patties, and Perry cooked them up for a hot gravy open sandwich along with pan-fried potatoes and veggies. I made a quick visit to see Derek Pottle and arranged a meeting with him and the students to see his artwork in the morning. He had just returned from Hebron and is finding his summers so

busy even after retirement that he can't get to his artwork. The evening ended with a failed attempt to discover the advertised dance. When we showed up at the rec hall we thought we were attending the adult dance, but found only a few youngsters and a one-man band making lots of noise. My kids were not impressed and opted for more laundry instead. Back at the boat their restlessness ranged from star-gazing, studying the feeding habits of sculpins, and engaging in what most responsibly-inebriated college kids do until 3am on Friday nights.

12 August, Saturday. Rigolet

Other than a few bathroom zombies going to the head and returning to bed, the boat was silent this morning. But outside, the dock was a filled with the sounds of a rattley fork-lift machine run-



Figure 5.50 The crew worn out from nighttime adventures.

ning back and forth between the Northern Ranger and the store shed at the head of the pier. The Ranger had slipped in from Goose Bay and tied up without a whisper. It was another fine day, and people were embarking from Goose to join the annual Rigolet Salmon Festival. Like yesterday, activities took place throughout the day, starting with kids' programs in the morning, bingo and square dancing in the afternoon, and a feast and adult dance party (the real one!) in the evening. The partying last night had laid our crew low except for Perry and Allie. After I retrieved the bushel of laundry from the drier, the three of us awake ones spent an hour talking with Derek Pottle in his fabulous house and grounds on the shore south of the power station. His place is on land that used to be a WWII US military base housing 40 soldiers defending the Narrows with a couple of small guns. Derek said he was told their gunnery practice resulted in the sandbank erosion that has been eroding ever since on the other side of the Narrows. He found parts of their guns in the woods when he cleared the land. His house is full of art, lots by him (soapstone, antler, ivory, leather) but also by his children and wife. We spoke of lots of things: tourism, animals, climate change--"yes...but not all things are bad; for instance the polar bears and seals are thriving. On the other hand, the weather is stormier, less predictable, shorter winters, "squishy" rather than hard sea ice; according to Arctic Inuit, orcas are taking lots of narwhals ("narwhals and belugas used to be seen in outer Groswater Bay." Fewer people are hunting now because village life is making people less mobile. At the same time, technology is allowing people to get quickly to places they could not easily go before, and to take more animals in a short amount of time. He has been one of the advisors to the Parks Canada's Torngat and Mealy Mountain parks. "I'm busier than before I retired." He does lots of tourist cruise speaking. Charlie Tooktoshina had been his hunting and outdoor guide and mentor: "I learned more from Charlie than from anyone else." We had another session with Derek in the afternoon so our "sleepers" could meet him and see his house and art. As we sat talking, seals and a grampus were feeding in the tide-rip outside his living room window. We also got a peek at his carving shed; everything in it was covered with soapstone dust from his sander. He mainly uses soapstone from Hopedale, but adds other varieties as needed. One of his curiosities was a small piece of narwhal tusk.



Figure 5.51 Derek Pottle showing a piece of narwhal tusk in his workshop at Rigolet.



Figure 5.52 A piece of art from Derek's house -- a carved, inked walrus tusk from Russia.



Figure 5.53 Derek's polar bear pelt captivated Iris.

I spent some time in the afternoon at the festival events. Jamie Brake was recruited for the contest to see how fast he could gobble up a terrible concoction of mussels, clams, sardines, onions, hot sauce, and other delicacies; some contestants grimaeed and puked, but Jamie



Figure 5.54 Tree-carving at Derek's house.



Figure 5.55 Allie with the lone bakeapple we found at Square Harbor, We'll miss Allie!

raised shingle beaches north of English River that looked like they might have good archaeological potential. Fortified by Iris's grilled cheese sandwiches, we went ashore at Etagaulet Point and spent a couple hours being eaten by blackflies and mapping and digging test pits in three tent rings. Structure 1 produced white and blue ceramics and a white seed bead. Structure 2 was a tent ring about 15 m. to the east over a rock ridge (the test pit was negative), and Structures 3 and 4 were in the southeast corner of the site area and produced white glazed ceramic and an iron nail. The site was not at all what I remembered from visits in 1968 and 1986 (see my 1989 report in the

we noticed

was stoked and goal-oriented. Other torments included swimming from the boat to ship dock in that cold (and polluted!) water. The following square dance did not attract enough dancers—a pity because Joe (?) Palliser's sometimes off-key fiddle-playing produced an atmosphere of 19th century authenticity. The afternoon was truly delightful because of the musie, the gathered erowd, and the bright, warm sun—the day could not have been more perfect! I had a nice discussion with Johnny and Grita (Allen?) and Belinda Oliver and Garfield, who showed me a piece of seaworn soapstone found by her father, John, somewhere on Ticoralak Island. They had used it for years as door-stop in their cabin. It looked like the corner of an Inuit lamp. The dinner was packed and included salmon and fish cakes and door prizes. Dinner was followed by another bingo episode and at 10pm by a b.y.o.b. (adult) dance. However, by this time we were back aboard and a movie-on-computer-in-the-galley turned out to be more attractive than dancing. Too bad we did not go, because it was Allie's last evening on-board.

12 August. Sunday. Rigolet to St. John's Island Tickle

Last night we decided that Allie would have to leave the Pits today if we were to get any work done in Lake Melville; otherwise, we would lose at least two days running back and forth to get her on her Tuesday morning flight. So she packed up and said goodbyes after breakfast and a crew picture on the front deck. The change of plans was a bit shocking, especially for Allie. We'll miss her energy, banter—and of course her Texas cooking. She will be comfortable for a couple days in the nurse's residence, with Sarah's car, and a key to the social service offices and its internet. The weather had changed and looked unsettled, with a few showers. In the Narrows we met several humpbacks and at least one fin whale.

When we reached St. John's Island the wind died, and we decided to start surveying at Etagaulet Point and work our way east. Charlie Tooktoshina told me this place was known as Deer Point and that people went there to hunt seals on the spring ice and young caribou in the nearby hills. En route,



Figure 5.56 Etagaulet Point, view to west.



Figure 5.57 St. John Island Tickle L3 tent ring containing large iron spikes.

Nfld Museum field report series) when I noted a large number of tent rings, deep middens, seal skin stretchers and komatik parts, and other evidence of recent use by Innu and Inuit. Today the area is rarely visited for hunting, and people who do don't camp because skidoos allow them to get back to town or to cabins closer to their villages. As a result, the site is grown over with a thick layer of shrubs, berry bushes and grass. We were not able to map the tent rings in detail and only noted their presence, GPS location, and small test pit finds. It would take a weed-whacker and several days to produce a good map of the site. After this excursion we checked the mouth of one of the small rivers

entering the beach south of Etagaulet Point—with negative results—and then the next point south, where we found a recent tent frame and a feisty

company of otters playing among the rocks, clearly both curious and disturbed by our presence. A final stop at Frenchman's Point just west of English River was equally unsuccessful, except for the remains of a modern camp where part of a wooden boat had been burned.

We anchored in St. John's Island's eastern harbor and spent another hour at a small historic era camp (St. John's Island Tickle-1) just north of the Narrows, on the St. John's Island side. This area carried a dense vegetation of grass and midden plants. We isolated two areas (structure 1 and 2) that contained historical materials: a clay pipe stem, ceramics, and structural wood in S1, and a pipe bowl fragment in S2. At the shore-side north of the cliff, about 50 m north of S1 and 2, Jake found a small tent ring with three large square nails on beach stones inside the tent space. On the cliff south of this site we inspected a pot-hole that had been carved out by water and was later cut through vertically, revealing a seat-like cross-section in the side of the cliff. We returned to the boat at dark to a fried chicken dinner made by Perry. It was starting to rain and the barometer was falling deep into the 'rain' sector. After dinner. Jamie showed the "Labradorimiut" film done in 1989 with interview of Stephen Loring and me defending our archaeological studies against critical Inuit views of archaeologists by some of our old Inuit 'friends' like Abel Leo, Gary Baik-

ie, and others who were claiming archaeologists were digging up graves and history without proper authority or community consultation. This was the era of strong Inuit political activity that led up to new permitting requirements, community involvement, and Inuit land claims. A second segment of the show featured the schooner Bowdoin's visit to Nain after her refurbishment by the Maine Maritime Academy and Donald MacMillan's work with the community. I was in Nain at the time of Bowdoin's visit and remember her arriving and taking the Inuit elders for a sail around the bay. Andy Chase was her captain. I'm not in the film, but I recognized my voice off-camera in one of the crowd scenes!



Figure 5.58 The Pits and storm clouds spotted from shore.

14 August, Monday. St. John's Island Harbor

The predicted storm arrived during the night as an easterly wind and rain that lasted all morning shifted to the northwest and continued into the evening, with the wind growing quite strong during the later afternoon. Accordingly, we had a late breakfast while we waited to see how the weather would develop. By mid-morning it was raining too hard to survey, so we stayed put and counted on a day for catching up, reading, and lots of talking about all sorts of subjects. One of the favorites was wondering if Allie figured out she should take the Northern Ranger to Goose rather than rely on a chancy airplane ride tomorrow morning when the storm night still be with us. After lunch the storm center passed over and the wind shifted to the northwest and grew stronger through the afternoon. Perry made a nice chicken and vegetable soup with the left-over

chicken stock from last night. After some naps we suited up and visited the grassy tombolo beach at the tickle narrows, finding a deep water approach on its eastern side with few boulders. The spit was less than a meter above the water but we found it to have lots of tent rings and hearth features—some "yesterday" sites like beer can-filled hearths, a complete bed-spring, and the foot of an outboard motor. Of more interest were obvious tent rings throughout the spit and near the beach's connection with Haines Island, a 4x8 meter rectangular tent ring that looks like an early Inuit style summer camp with an internal hearth and a ring of guy-line anchor rocks around the tent ring. The weather was too foul for test pits, and we were nervous being away from the Pits when the wind was strong for fear she would drag her anchor when no one else was aboard to help Perry.



Figure 5.59 St. John Island Tickle -2 tent camps. View North.

We returned handily to the boat, glad to have done something useful and somewhat energetic after a day of lassitude. Dinner was a Jake and Iris stir-fry concoction of rice, carrots, cabbage fortified by moose meat. By nightfall some blue sky began peeking through the clouds, but the wind remained strong, and it's anyone's guess whether Allie is still in Rigolet and the planes will fly in the morning. We designated the spit site St. John's Island Tickle-2.

15 August, Tuesday. St. John's Harbor to Pender Island

Today was a fine day—sunny and almost windless. We pulled the anchor and cruised north along the east



Figure 5.60 Jamie's St. John Island -1 Inuite house from above.



Figure 5.61 New Inuit winter house found on St. John Island's northern point.

side of St. John's Island, whose its cliffs continue underwater to a depth of 800 feet. On a promontory at the northern tip of the island we made an important discovery. The grass-covered surface looked interesting enough to investigate, so I landed a shore party and stood by in the speedboat, expecting a swift pick-up call and a negative report. But as soon as the field party climbed the bank, Jamie shouted that they had an Inuit rectangular sod walled house with sleeping platforms and a sunken entry tunnel. For the next thirty minutes they mapped and photographed the site and excavated two test pits, one in the entry tunnel and

a second on the northern sleeping platform. Every so often I shouted, "Hurry up!", because we needed to get on to Green Island while the weather held, but Jamie stayed hunkered down. Then he suddenly jumped up with his hands raised in a kind of victory stance. I had no idea what this meant until we regrouped back onboard and he showed me a 2-cm arti-



Figure 5.63 Lead figure from St. John Island -1 test pit.

fact made of lead shaped like a swallow-tail late Dorset harpoon—or, alternatively, a stylized human. His Test Pit 1 also produced a white seed bead and seal bones in a cultural deposit resting on a slab pavement—i.e. a good Inuit pavement. Test Pit 2 produced a thick layer of birch-



Figure 5.62 Nothing found on Green Island. Not even any bakeapples.

bark roofing material. The little figure was probably a clothing amulet or decoration. Its form is a bit uncertain because it does not seem to have working marks or a suspension hole. This site makes an important contribution to Rigolet's Inuit settlement history. St. John's Island-I is the western-most Inuit winter dwelling in Hamilton Inlet and the only one known outside the Narrows. This could be the 'mother' site for the Inuit summer and spring camps we found at Etagaulet Point, the St. John's Island Tickle sites, and other locations in eastern Lake Melville. We do not have enough excavated evidence to date it, but the house form suggests 18th century.

Heady with this find, we proceeded with our original mission to survey Green Island. This small, round island is located in the middle of Lake Melville west of St. John's Island. I first became intrigued by this isolated island after seeing its prominent raised beaches from aerial photographs, steamer trips and airplanes. The fossil beaches rise from shore to summit and seemed a perfect setting for "beach-ridge archaeology" like Louis Giddings found at Cape Krusenstern in Alaska. The still weather allowed us to anchor easily, and we spread out and began walking the beach lines, which were cut into soft red sandstone—the only place in Hamilton Inlet where this younger rock exists. Tundra vegetation growing on thick peat covered most of the beaches, while the top of the island supported a stand of spruce and tamarack. It took us only an hour to walk around the entire Island. Much to our disappointment, we found very little sign of human activity—three recent tent rings and one slab hearth and floor (L3); I thought the latter might be Dorset, but no charcoal or chert were present. One of the tent rings at the western end of the island (L2b) had seal-skin stretcher frames and notched pegs used to support a tin trapper's stove. We found no prehistoric signs and supposed the recent occupations were from 20th century goose- or seal-hunters. Perry had carried his pail ashore, pinning his hopes on a last-chance bakeapple-picking excursion, but none of us saw even a single bakeapple—not even a single plant. In short, Green Island turned out to be a total bust. I guess its beachlines were too good to be true; on the other hand, who would want to live way out here in the middle of Lake Melville on an island with no fresh water.

We had better luck when we returned to St. John's Island and found several tent-rings and a probable

Inuit grave on a boulder beach north of the Haines-St. John's Island Tickle. Following this, our speedboat guided the Pits through the tickle, finding the shallowest place more than ten feet deep at high tide. We then proceeded to English River, and anchored while we took the speedboat a few hundred meters upstream. This place has a mystique because of theories that Thorvald Eriksson was killed by "skraelings" near a Markland river that flows "from east to west". English River is the most likely candidate and had the added value to Greenland Norse of stands of large timber that were easy to cut and load. I've visited English River twice before, and this visit, like the others, was archaeologically unproductive. Other

Figure 5.64 St. John Island -2 wood shelter and cairns.

than the attraction of its deep-water entrance and sandbar-protected lagoon (known as a 'hop' in Old

Norse), the area offers little hope that Viking activity could be recognized; the forest growth is too heavy, and the continual re-working of the river mouth by floods, storms, and geological uplift have covered or eliminated all superficial traces of thousand-year-old activity. Today six or seven cottages line the beach front near the river mouth. We did not try fishing, but this is one of the attractions to local people and the occasional foreign visitor. We finished off the day by surveying the large cobble raised beach several miles north of English river, finding three poorly-defined tent rings of no archaeological merit. From there we motored north to Pelters (Neveisik) Island where we harbored briefly last summer. The wind changed to the east and it began to look unpleasant for tomorrow. Our hopes for observing northern lights is fading, but we

did see some spectacular shooting stars in this year's Persaeid display.

16 August, Wednesday. Pelter's Island to Rigolet

There was a strong easterly wind in the morning so we did not rush off surveying. Instead of hot cereal, I made scrambled eggs, bacon, and fries. Then on went our 'oil-skins' and off to see what we could find. The western side of Bear Island has some beautiful coves nested between tan granite headlands, but we found nothing historical until we wormed our way across the shallows to a small low island between Bear and Indian Islands. Here we found two groups of tent rings about 50 meters apart on either ends of the island. Few individual rings could be seen

showed this was an important camp ground, although

ends of the island. Few individual rings could be seen rings we found on Indian Island. View West. distinctly, so we did not try and map them; but they

we could not say whether Innu or Inuit. The wind had abated, so we crossed the bay to Andy Island, south of Burnt Head at the southeast entrance of Valley Bight. We tied up in a small cove on the southwest side of the island near a cliff with strange, blue-tinted rocks on the cove's north side. I have no idea what mineral caused this baby-blue color in the rock. The island's low saddle had a couple of incomplete tent rings, and test pits were unproductive. Back aboard, we decided that a trip across very shallow water into Valley Bight would not produce much result, so we returned to Rigolet. We also hoped to beat the arrival of a northeast



Figure 5.66 Camps at the mouth of English River.

storm that was to begin in late afternoon. In the Narrows, we crossed through a pretty serious rip tide that twisted us from side-to-side. Later, when I asked Harvey Palliser at the Rigolet gas station about boating accidents in the Narrows, he said tide rips like that were never an issue for local boatmen, and that he knew of no drownings that had occurred in them. We got into town just as the wind struck and needed extra lines and Perry's expert boat-handling to get tied up. At the Department of Health and Social Development office, Carlee handed me a fist-full of messages to each of the crew from Allie, who we heard got off to Goose on the afternoon plane yesterday. Included with my thank-you note was a colorful string charm. I collected Kevin's car at the airport, and we all had a round of showers

and clothes washing at the nurse's residence. I made a quick dinner for the crew—a kind of shepherd's pie—and Jamie and I went to the Strathcona House Museum to report on our archaeology results, but no one showed up—probably because of the foul weather or mis-communication. So we spent a quiet, cozy evening getting our field notes ready for Jamie to go off with copies to Nain, while outside a cold, wet northeast wind hammered the other side of the pier. Even so, almost until dark, the Rigolet boys were hauling in sculpins on their fishing rods and bashing their heads in with rocks—just for fun, not food.

17 August, Thursday. Rigolet

The storm lasted all day and into the night, with the wind dropping off only after midnight. This was the day we were going to take the Rigolet elders out for a spin on the Pits, but we had to cancel the trip. We had planned to take them to Snooks Cove and show them the Hunt and Henley post and associated Inuit dwellings—next year perhaps. I had an unpleasant surprise when I went to use Kevin's car. I found it locked with the keys inside. How that happened I have no idea, but it really messed up the day and required a big apology note to Sarah, who will get off the Northern Ranger tomorrow morning to eonfront a problem she did not expect. Everyone in town was hunkered down drinking tea and looking out their windows. That's where I found Charlie and Jean Tooktoshina, who served me toast and tea while Charlie clued me in to

the reason there could be an Inuit winter house at that super-exposed location—the northern tip of St. John's Island: it was a great place for catching seals with nets under the iee. Inuit hunting there would cut holes in the ice with an axe and run a net between the holes, and filled the holes with brush and snow so the water would not freeze. Short lengths of chain were attached to the ends of the net so it would not be cut when chopping it out of the ice to retrieve seals. As usual, Charlie had an explanation for pretty much everything we find and could explain why, when, and how people lived in the past. Jean offered to let me use her truck to carry fuel to the boat, and Ozzie Allen loaned me two barrels and fetched the town's electric pump. We took on six drums, each 205 liters--that should be enough to get us back to Long Island and still have a bit of weight in the



Figure 5.67 Iris, Haley, and Jamie departed on the Northern Ranger.

boat. The rest of the day was clean-up activity. Haley made a bean soup for lunch, and I got in a couple hours of internet. Talks went into the evening with Jamie and the team. Still windy and wet outside. The Northern Ranger is due in the morning and will carry Haley, Iris, and Jamie to Goose Bay for flights home for college. Jamie gathered up the artifacts and field notes for our report to the Provincial Archaeology Office and its journal. Perry's little Nikon took some close-up pictures of the little lead figure from St. John's Island winter house, but we still could not tell how it was made or used, or even if it was made purposefully as a figure.

18 August, Friday. Rigolet to Cartwright

The storm passed to the east early in the morning, and day brought calm but foggy weather. We woke to the sound of the Northern Ranger docking, bound for Goose Bay carrying off Iris and Haley, and at the last minute, Jamie, whose plane did not get in, so he will take the boat to Goose and get a flight from there. Breakfast was fast and the girls scurried around to collect their scattered gear. I left a note to Sarah via Jane Shiwak, apologizing for locking her keys inside Kevin's car and gave her a field report and payment for the rental. Jane was doing a good business selling crafts to boat tourists. Ozzie and others were boating off to outer Groswater Bay in a desperate hunt for bakeapples. From our experience there are not many berries this year and they won't last long now. We said goodbye to the girls and Jamie as they climbed the gangway, and soon after the Ranger pulled out we left too, finding Groswater Bay like a mirror and the fog dissipating. The trip to Cartwright was uneventful. We spied "berry buckets with two legs" (a.k.a. berry-pickers) on Indian Island, large flocks of geese crisscrossing the waterways, and platoons of baby ducks paddling in a meter-wide masses a few miles offshore—a behavior people say provides better protection from the pred-

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Figure 5.68 Canadian Coast Guard ship 'Goose Bay' in Cartwright.

We arrived at Cartwright about 6pm with a copper-colored sun sinking into the western haze and tied up to the fish plant dock where we could access their fresh water hose. We need weight in our stern tanks to have good rudder control in rough weather. This is the easiest water station anywhere along the entire coast. In Rigolet we had to fill with buckets from the excellent purified water station. We found the Canadian Navy ship Goose Bay anchored in the Cartwright harbor taking on military personnel and supplies for a "show the flag" voyage into the Eastern Arctic, a pitch to emphasize Canadian sovereignty in the era of climate warming and Russian claims and military adventurism in the Arctic Ocean. Upon landing we met a friendly fellow who inquired

who we were, and then exclaimed, "Fitzhugh.

atory gulls that pick them off when separated.

Well, I'm be darned! I'm Gerald Saunders, grandson of Maggie and Jim Saunders. I met you at their old place in Davis Inuit when I was just a kid!" I too remembered that visit to their summer home, the former Hudson Bay post building on the south side of Ukasiksalik (soapstone) Island. We went ashore and the next day Jim showed us the place where Inuit used to get soapstone for making lamps and pots. That quarry became an important data point for Chris Nagle's PhD dissertation tracing soapstone movements along the coast. What a nice encounter, meeting Gerald! We had been so fond of Jim and Maggie, whom I also kept in touch with in their winter place in Goose Bay. When Gerald asked what we'd been eating, I bemoaned the absence of a single fish meal during our Rigolet project. He soon returned with a fillet of cod (a few are being caught here), a couple of tasty pieces of smoked salmon (for which he is famous in Cartwright), and

a loaf of his wife's fresh-baked bread. What a dinner this provided the three Pitsiulak "muskateers". Gerald has had an interesting life, living mostly in Cartwright. He worked at the Voisey Bay power plant, but when he was injured in a car accident while being involved in a wage strike with Voisey, he ended up in a wheel chair. Now he is on his legs, but with major disability. It took two lawsuits to get a pension when Voisey Bay would not support his claim because he was "on strike" when the accident occurred.

Gerald had alerted Geoff Martin, whom I have known for years, of our presence, and he brought Jake and me to Wendy Martin's house. I visited with them last when I stopped here while lecturing on an Adventure Canada ship. Wendy was an old friend of Tony Williamson's, and Geoff and I had conferred for years about archaeology in Cartwright. He has a collection of 3500 year old 'Saunders Complex' material from the North River blowouts. We spent the evening talking with Wendy, Geoff and his wife Trish, about archaeology, George Cartwright, Parks Canada's Mealy Mountain plans, and the possibilities for economic and tourist development could provide. Now that Cartwright is connected to the Labrador highway, they need a museum and infrastructure to attract visitors. In addition to the historical assets—now including the Inuit villages Lisa Rankin and her students uncovered, and Packs Harbor and its cod fishery—there is adventure kayaking, fishing and hunting, and mountain hiking. The old church has been proposed as a museum site, so there is progress coming. Among the other topics of conversation was the peculiar small shells they sometimes find embedded in marine clay while digging house foundations. Some of the shells are found in growth position; the shells are hemi-spheres, very thin and fragile. This species of mollusk is not known to people here today. I took some samples and offered to have them identified at the Smithsonian. Geoff estimated their elevation above sea level at about 25-35 feet, so they could be several thousand years old. Speaking of shells, we found fishermen landing sea snails at the plant; they are processed for local consumption, but are also sent to Goose Bay and far off to the Asian market. Perry thinks they are 'tough as nails' but the local people find them tender if not over-cooked. We also learned about the local controversy over the huge transformers that were shipped here last year for transfer to the Muskrat Falls dam's power plant. Local sentiment runs high against the project, and protests in Cartwright stalled their delivery for a year. Now that the courts have ruled against them, a contingent of security police guards the equipment, fearing sabotage.

Our visit with the Martin's was one of the many highlights we've had this summer meeting interesting people. Wendy has just retired from a lifetime of teaching; last year her school colleagues won a million dollars in a Canadian lottery, and her share enabled her to fix up her home. Geoff has a fancy new run-about for tourists and scouting sites. He has his eye on an old boat frame from the Vikings' 'wunderstrand' (Cape

Porcupine) beaches. He is working as a carpenter and involved in local mineral prospecting. Wendy, Trish, and Geoff gave us a salmon and a bottle of wine to help us on our way south.

19 August, Saturday. Cartwright to Punchbowl

The Canadian Navy ship Goose Bay left for the Arctic during the night and we had planned a dawn departure, but some extra snooze-time was necessary because of the several glasses of wine last evening. And Perry discovered a grease line on one of the shaft bearings had broken and needed repair. That took nearly an hour, and it ended up braking for good during the run to Punchbowl. Now Perry has to grease the bearing by hand. Finally, we did get away and found a nice smooth ride as far as Cape North. Then we ran into a SE breeze and swells crossing Table Bay—most always a rough passage going south. By the time we got to Punchbowl we knew we'd have to tie up there to avoid a beam sea and a 20-knot headwind. A couple years ago we got stuck in Punchbowl for four days waiting for a big sea swell to subside. We weren't tied up for more than ten minutes before Perry had his cover-



Figure 5.69 Perry with a pail full of bakeapples!

alls on—not for engine work but to scout for bakeapples. He and Jake went off and returned a couple hours later with half a bucket of berries and big grins on their faces. Finally we found berries! We thought they were gone by, but here many were yet to ripen. There were scads of them all over the tundra surrounding the harbor. Dinner that evening was not bad at all—fried salmon from Wendy and a desert of bakeapples and cream—something close to nirvana! The wind did not abate much and predictions were for even stronger southerly wind tomorrow. I called Lynne on the sat phone and found her busy and well, except for more computer problems and news that dog Rosie seems to have some kidney problems. The national and international news is scary, with neo-Nazis on the rampage and huge counter-demonstrations going on: Trump playing both sides; and exchanging increasingly dangerous swipes with North Korea. (I think Perry

was conjuring the bakeapple gods to keep us here another day and top off a 5 gallon pail of berries!

20 August, Sunday. Punchbowl

A bakeapple bonanza day! There was no question of trying to leave this fine abandoned harbor and secure wharf today. The wind was strong and from the southeast, driving a heavy sea that we could see crashing on the outer islands and shoals. We would have to head directly into this storm, and there was no sense in trying, as we knew from previous visits here. This is the section of the Labrador coast that runs north-south, and a southeast wind and sea cannot be managed by a small boat, while outboards can often worm their way south through shallow back-channels. So, what to do? Well, bakeapple picking of eourse! We suited up and spent three



Figure 5.70 Punchbowl Harbor, west shore.

hours cruising the bogs west of the harbor; they were filled with berries—many of them yellow-colored and gone by, while many others were still not ripe. Maybe 20% were in prime rose-colored condition, and we easily filled a large tub with 20 pounds of berries. This summer the bakeapple price is high, \$8 a pound, so in a couple hours we had picked the equivalent of \$150. If one were to do this for the two weeks you'd make a small fortune. The countryside for miles and miles around is full of bakeapples, so there really is an unlimited supply. For some reason the birds and animals don't seem to touch them. Bear poop is colored blue-black from blackberries, but they don't seem to eat bakeapples. The same goes for birds; you don't see

gulls or other eating them. Most of our picking was in the bogs east of the old Punchbowl fishing sheds, many of which are in a state of collapse, tipping over as if drunken. Perry fished out of here one summer and said the fishermen from Triton occupied the cabins at the northwest end of the harbor. Punchbowl will make quite an archaeological site someday! We spent the afternoon doing chores on-board, reading and writing field notes. I now have most of the Rigolet reports done. Jake collected a bunch of mussels for dinner and I made a salmon stew. Dessert was-can you guess?-bakeapples again with sugar and cream! It seemed strange that so few people are out in the field picking when so many berries are ripe. We only saw one speedboat pass by outside and heard a single dog barking from somewhere on the other side of the hill.

21 August, Monday. Punchbowl

Early in the morning the low passed over and the wind died a bit. We looked at the situation at 5:30 but it was still blowing and nasty. By 8:00 things looked better; the wind had shifted into the southwest, and Figure 5.71 Our fearless Perry.



so we gave it a try. All was well until we broke out of the islands into the open sea and were immediately engulfed in huge swells. At least they were no longer being driven by a southeast wind; but even so, we had to keep the boat headed directly into the seas to keep from rolling dangerously, and could not keep our southwesterly course. Heading into the seas caused violent pitching and pounding—luckily we had the anchor firmly tied down and the anchor chain locker secured, otherwise they would have gone flying about. Although we only have fifteen miles of open sea to reach a protected passage around Hawke Island, we could not get that far. Thinking the seas would abate once we were clear of the land, we carried on for a few more minutes until it because obvious that conditions were getting worse, not better. So we hauled the speedboat up, and when Perry found a break in the waves, made a power turn and headed back to Punchbowl, just as we had to do in a similar sea condition a couple years ago. It would probably take another day

for the seas to subside. Punchbowl offers a secure harbor and a fine wharf, which we always seem to have all for ourselves. We have stayed here so often and so long the name should be changed to Pitsiulak Harbor! There was the brighter side: a day of book-work, engine maintenance, and maybe archaeology.

That's pretty much what the rest of the day turned out to be. Perry tried to slow the engine oil leaks, but with minimal success as he needed new o-ring seals. We are now leaking oil quite a bit. In fact the entire engine needs a major overhaul—not so much because of its engine hours but because of its age and corrosion of parts and attachments. I finished more field notes, and in the afternoon Jake and I did some digging on the cobble pavements found here in previous years. In the middle of that work we were hit by a huge gale of wind from the northwest which came with sheets of rain. We sheltered in one of the barely-standing fishing shacks and when the rain let up went back to the boat. We were now being hit by the other side of the low, and the barometer, which had continued to drop last night, now sprang up. The northwest wind is just what we need to push back the southeast swell, hopefully making possible a departure in the morning. Jake and I went back and finished work on the pavements-finding nothing



Figure 5.72 Our trusty speedboat being towed behind the Pits.

that would let us identify, date, or determine their function—same story as we found on Indian Island in Groswater Bay, and at the Mason Island site. They contain no artifacts, flakes, charcoal, or animal bones, no fire-cracked rock, and their settings are always on rocky ground with no associated dwellings or other features. They are truly mysterious. The only clues are their distribution: they are not found in the Inuit territories north of Hamilton Inlet; only to the south, and there not associated with Inuit sites, so they may be of recent Indian origin.

While we were digging, a home-made speedboat came roaring into Punchbowl carrying three people and a black Labrador. The driver asked who we were and what we were doing, since we clearly were not picking bakeapples like every other same beings on this part of the coast. He identified himself as Al Morse from Port Hope Simpson and said he, his wife, and son were camped south of Punchbowl. It was his dog we heard barking yesterday. "Are there any bakeapples around here," he asked (knowing full-well the answer, since we had seen his footprints where we were picking yesterday). His boat was banging against the rocks, so we could not have a real conversation, but it was nice to have a visit since we've seen no one else since leaving Cartwright. Back at the boat, Perry made moose stew for dinner. Gradually, during the evening, the

northwest wind died back. We had high hopes for the morning and possibly getting to Quirpon or even St. Anthony.





Figure 5.73a (left) and 5.73b (right) Excavating circular pavements at Punchbowl.

22 August, Tuesday. Punchbowl to Camp Island

Today we managed get out of Punchbowl—a sometimes difficult task as we have found previously. The wind finally dropped, but it was still from the northeast. We had to take a chance with it and slipped out of the harbor about 6am. Once out of the islands, we found the sea rough but manageable. The atmosphere was misty and you could barely make out the shoreline. In Sloop Harbor just south of Punchbowl we found a Canadian Coast Guard vessel—probably a buoy tender—at anchor, so we were not alone. There was also a shrimp dragger coming our way with its big searchlight glaring bright even in daylight. For several hours we rolled our way south along this rugged coast, past Square Harbor, Snug Harbor and many other harbors that had been full of ships and cod-fishermen in the 19th and early 20th century, eventually sprouting villages and towns like Port Hope Simpson, Charlottetown, Fox Harbor, Mary's Harbor, and more. Today these are winter places from which families scatter in the summer to the islands and outer coast coves to fish for seallops, sea snails, crabs, trout, and salmon. But fewer and fewer families are thus engaged; more are abandoning the old homesteads and stages; for every well-kept house you see two or three abandoned or in dis-repair. Some, like the family that visited us in Punchbowl come out for a week or two in fast boats and live in tents while picking bakeapples. Salmon, snails, and crabs require stages, ice, and storage for gear. All this used to be 100% for cod, but it looks like that economy, which extended into the fall, will never return. We saw no sign of capelin, whales, or bird swarms during the entire day along the southeast coast. In some of these places, along the southern part of the coast in Alexis and St. Lewis Bays, Marianne Stopp has found Labrador Inuit winter sites; but so far, there have been no reports of Dorset or Maritime Archaic until you reach Battle Harbor, where we found a Groswater site at the front stoop of the Earle's General Store back in the 1970s.

It was with considerable relief that we finally reached Cape St. Lewis at the northern entrance to St. Lewis Sound. That marked the end of the straight shore with no inner passages. From there we crossed to the run behind Great Caribou Island where we stopped briefly so Perry could oil the engine. Oil leaks are one of our major concerns now; they have been increasing over the summer (and years!) as the seals have got old and leaky. Recently there has been a steady drip from one of the lines that Perry tried to stop but found we don't have the right size o-ring, and investigating the problem only made it worse. So now we are running out of reserve oil and have the added problem of having to dispose of the oil that is building up in the bilge and threatening to get pumped over the side by the bilge pump. Although the weather report was calling for higher seas and more northeast wind, we decided to strike out for Quirpon and left Camp Island about 2pm.

Not a good time, as this is the windy part of the day. About half an hour out, with conditions worsening, Perry called a halt and we returned to the safety of Great Caribou channel. Although conditions weren't dangerous, we had the prospect of dealing with the speedboat and needing to replenish oil on a pitching and rolling boat. It wasn't worth the chance of a mishap. Once safely anehored, we all hit the saek for a couple hours. The evening brought a drop in the wind, a niee hot bowl of beef stew, and a dessert of bakeapples. We lost a day but what the heck; we were safe and had prospects for a nicer crossing after the wind dropped overnight.

23 August, Wednesday. Caribou Island to Quirpon

And it did. We were up at 5:00 and underway by 5:30 in a light breeze, still from the northeast, so the low over the Straits had not moved. Perry figured we would run into the southwest wind side of the storm as we crossed to Quirpon, and it would get windier. And it did. The crossing took five hours and passed under the lee of huge, high Belle Isle (Boyee told me there are some OK summer harbors for small boats on its western shore, in addition to Big Joe (some say Joke) at its northern tip). On the way we passed several groups of humpback whales feeding on the surface, not lunging up from below. One appeared to be asleep, lying mostly still in the water, rising slightly every thirty seconds for a breath, and paying no attention to our passing twenty meters away. Between Belle Isle and Quirpon the wind shifted to the southeast and grew stronger, and the seas became more agitated as an east-flowing current met the wind waves from the southeast. Spray started flying and we took some big rolls. All according to Perry predictions. We were glad we did not get a later start or it would have been worse. Finally we were at the Quirpon wharf. I was glad to have this stage of our return behind us. Only one more major leg to go, from Quirpon to Lushes Bight.

We had called Boyce Roberts yesterday when we were hoping to reach Quirpon in the evening, asking if he could buy us some engine oil. After tying up, Jake and I motored over to "Robert's rooms" in the speedboat and found some retired fishermen splitting cod. They were large, good-looking fish, but Boyce said they were lean and under-fed—no capelin in their bellies. Instead, they were eating young cod, and that's not a recipe for a growing fishery! Later, Perry and Boyce had a long conversation about the state of the fishery today compared with the 'old days', especially the absence of capelin and the voracious appetite of fisher-

men with their ever-more-efficient technology. Sometimes their eatches of mackerel and herring in purse seines were many times the capacity of their boats, and the excess would be discarded, dead, or nearly so. One such episode led the boat Perry was fishing on to capsize, fortunately with help close at hand. This type of behavior occurs in all types of mass-catch fishing whether or not the species fished were in a spawning phase.

When we arrived, Boyce was busy making arrangements to pick up the famous Newfoundland author, Earl Pilgrim, who has been spending the summer in the cabin where he was born, in Pidgeon Cove on the northeast side of Quirpon Island, south of the fancy Newfoundland Lighthouse hotel and north of Degrat Harbor. So Nick, his



Figure 5.74 Perry navigating the Strait of Belle Isle crossing.

grandson, was charged with frying our cod fish lunch—and a good job he did with it, getting "Pop's" instructions from time to time. The meal was delicious. Toward the end of "dinner" Boyce left to get Earl and returned saying he could not reach the cove because of all the breakers. Not a good sign for our plan to reach St. Anthony this evening. Perry checked the weather maps and found we would not get a break until Friday,



Figure 5.75 Boyce's grandson, Nick!

two days from now. Jake and I have a ferry reservation that same day. Obviously, that's not going to work. Late August has always been a poor time to travel by water. A few weeks later, in September, "Indian Summer" (also a common concept in New England) is a time when the Newfoundland and Labrador people used to get their "winter fish." Now there's likely no fish to get, at least in Labrador. While tying up at the wharf we had a brief "hello" with Angus Simpson, the Mainer with the white husky we met here a couple years ago ferrying guests to and from the Lighthouse Hotel. He has a fancy zodiac. Angus knows Stephen Loring from fieldwork in Labrador. His husky dog came to him out of the forest where he winters in Maine and never leaves his side.

We spent the afternoon washing and writing at Boyce's and enjoyed a hamburger and hotdog barbecue dinner. I eaught up on email and sent Nancy Shorey a picture of the coin Allie found at the Hart Chalet House-3 site. We spent a bit of time trying to decipher the inscription: DOVELL LOVR9?)OIS 16?? With three fleur-de-lys in the center. Imagine my surprise when, just a few moments later, I got an email from Skye Litton, an assistant in my office, with a tentative identification: a French Louis XIII double tournois eopper coin dating to 1632-34 inscribed with: DOVBLE TOVRNOIS 1643. The more abraded



Figure 5.76 The King Louis XIII Double Tournois coin minted in 1632-34.

reverse is: LVD.XIIID.G.FRET.NAVRFEX. It's worth 32 British pounds and more than 100,000 were struck, so it's not going to finance the Pitsiulak's engine rebuilding or Perry's retirement! Skye's research was confirmed by Hillary York, numismatist at the National Museum of American History. This is much earlier than I would have guessed based on the glass bead dates we had from Petit Mecatina, ca. 1680-1730. But it explains why the Hart site does not have much Normandy stoneware and clay pipes, and how it could have been occupied so close to the Courtemanehe fort of 1705. I'll send the news to Allie, Iris, and Haley.

We had a surprise visitor on board last night: Aude Malaret, a young foot-loose French lady from Normandy who has been wandering about in Newfoundland and met Matthias (the LAM Program Director living at Boyce's this summer) hiking in Gros Morne Park. He invited her to stay for a while at Boyce's, where we met her. She has been wandering about on her own, working a bit as she went to pay costs, while waiting to settle down with her boyfriend permanently in Canada ("Why not the USA," I asked. "No way, US is like Europe now, too many social and political

problems.") She studied political science in university (including a year at UQAM in Montreal) and hopes to start a small business in Quebec, maybe a coffee shop or bakery with arts and music. Her boyfriend is a good mechanie and wants a small farm. How will all that work out??? She seemed like a game lass and had never been on something larger than a speedboat (yesterday, with Boyce!), so I invited her to spend a night aboard the Pits, in one of the empty bunks in the galley. Too bad we didn't meet her on our north-bound leg or we might have had a French chef on board!

24 August, Thursday. Quirpon

By the time we got back to the boat last night the weather had turned warm with a southwest wind. We had decided not to try and leave Quirpon until after lunch so we were not in a rush. I got Aude to open her eyes while I was making coffee at 7am but not much stirred on board until Perry and Jake got vertical. We treated



Figure 5.77 Jake, Aude, and Perry at Quirpon.

Aude to a traditional Pits breakfast-not Red River unfortunately—but oatmeal and bakeapples, now that we had gastronomic riches to dispense. We spent the rest of the morning at Boyce's. For a couple hours he vanished for a dentist appointment in St. Anthony. Perry tidied up the boat, and Aude and Jake made a lunch of the rest of the codfish and curried rice, an Aude specialty with a whopping dose of curry. By 1pm as we were ready to leave, Boyce showed up with Earl Pilgrim, having successfully extricated him—and his bakeapples—from Pigeon Cove. We had met once before in Blanc Sablon, and Perry and Earl had relatives in common: Colbournes are seattered up and down the coast from Triton to St. Anthony, and whomever we meet, there's always a family connection. Earl's main dwelling place is in Roddicton. "Glad to see

you again. I'm a bit older, blind in one eye, mostly deaf, and pretty bald, but still kick'n," he said with a twinkle in his eye. He gave us copies of his latest book, The Adventures of Ernest Roane (book 1 of 3), which I read on the way to Lushes Bight. A great story about a guy who grew up on a Nova Scotia farm, went to sea at 13, and built and paddled a skin canoe from Port aux Basques to Red Bay, Labrador. There he met Wilfred Grenfell, who put him in charge of the new Straits fishing cooperative which he created to bypass the fish merchants. After marrying twice and losing both wives, and sledging to Hudson Bay and back alone, he accepted a contract to deliver mail in four round-trips across the Strait of Belle Isle—in winter, a feat no one had ever done or dared do. He became a celebrity in doing so but has been largely forgotten since, in the afterglow of Wilfred Grenfell's work. Pilgrim's book will help set the record straight—especially with two books about Doane still to come.

The voyage south began with rough seas outside Quirpon but smoothed out around St. Anthony. We wanted to get as far south as possible since the prediction for Friday was for a northeast storm, which would have made getting to Lushes Bight impossible. Everything went fine until we reached the Fischot Islands at the southeastern entrance to Hare Bay. A strong southwest wind and tidal currents from the bay turned the sea into a choppy mess. We needed shelter from the wind, and Perry needed to add oil to the engine. Perry had fished in these waters and knew of the harbor on Fischot and that schooners and boats had sheltered there. Jake and I hurriedly prepared the anchor and stood by on the bow. Without much time to check out the charts, and seeing an opening through the rocks ahead, we ran through a rock-ribbed gut into a small lagoon that almost immediately shoaled to less than a fathom. We were going too fast to slow, and there was no room to turn or anchor. Perry steered left to avoid ledges awash to starboard, but in the glare of the sun could not see how deep it was ahead. Suddenly fathometer went to zero and the boulder bottom loomed up, as if to say, "what do you think you're doing?" Then came the bump and lurch as we struck one, then another, and then a third rock, and with that, the bow rose up and the Pits came to a stop, with a slight list to starboard. Aground! Can it be possible? Is this really happening? Perry checked the waterline and the bow was a foot was a foot out of the water. A quick thrust astern did not budge us. In the midst of all this chaos, Jake called out: "Caribou!" I looked up and could hardly believe my eyes—a caribou was calmly walking along the shore munching grass right next to us. Caribou on Fischot Island! What a way to see my first caribou in Newfoundland! During the next couple of minutes we checked our status: the rudder, skeg, and prop were intact, and there were no broken planks or water gurgling below. So there we were, with gusty winds, wondering if the wind would blow us down onto ledges nearby. Should we put out the anchor? No, we'd have to do it with the speedboat, and there was no assurance it would hold among the boulders. The most

important thing in our favor was the tide; it was nearly dead low and would soon rise and free us.

While we were assessing the situation, a fisherman from Goose Cove, south of St. Anthony, came by in a speedboat. He had figured what our problem and came alongside. There followed an interesting conversation sprinkled with mention of mutual friends like the Bromleys of Lushes Bight who fished out of this harbor for years. We learned that the harbor was NOT suitable long-liners, but fine for trap boats and smaller boats and that the deeper entry point was the northern entrance, not the eastern one we used; and that the deeper water (possibly even for us at high tide) was to the north of the ledges. He left and headed home with a good yarn to tell, while we started watching the tide slowly rise against the rocks on shore. Within a half hour we began to rock and soon after floated upright and started twisting around, still hooked

on one rock. When she came off that rock, I pulled the stern up-wind with the outboard so the Pits was clear to head out the way we came in, toward the gut opening. We cleared the gut and turned south, finally in the clear, but needed a harbor since the wind was still strong. When Perry was convinced the boat and engine were OK, we decided to keep to our original plan to head for Englee, which we knew well and could reach just after dark. The wind died back a bit and we had the lee of the high shore of the Conche hills. South of Conche we met a large group of humpbacks feeding along with hundreds of seabirds eating their left-overs. Our entry into Englee Harbor was uneventful except for discovering that the wharf was gone and a new harbor front was under construction. As our searchlight cast about for a safe landing a man from shore pointed us to a low pier with water deep enough for us to tie up. Done for the day, we eooked the easiest meal possible—macaroni and cheese with a bit of tired Cartwight broccoli stired in. Then to bed. It was nearly midnight.



north of the ledges. He left and headed home with Figure 5.78 The Pits -- back on the water, and back on a good yarn to tell, while we started watching the course after an hour aground in Fischot Island channel.



Figure 5.79 Captain Dennis Colbourne.

25 August, Friday. Englee to Lushes Bight

4:30am is a pretty quiet time in Englee; even the sound of coffee perking seemed like an intrusion! But that's how the morning began. For Perry, even that was not early enough as he grumbled later when the wind began to blow as we crossed infamous White Bay. That place is named—as far as we were concerned—for the whitecaps from the southwest wind that roars out of that deep gash in the northern coast of Newfoundland. Fortunately, we missed the worst of it as we slipped across 90 degrees to the wind in the wee morning hours. By the time we reached the Horse Islands the swell was mostly on our stern. I used the time to finish Earl Pilgrim's Ernest Doane book, which ends rather abruptly after Doane successfully crosses the semi-frozen Strait of Belle Isle earrying the mail during the winter of 1910. Jake showed up about then, somehow managing to remain in his bunk despite our 'cranky' craft. Ninety minutes later we passed the soaring rocks of the two 'beaks' of Cape St. John and turned south for the last leg of our trip. I turned to Jake



Figure 5.80 Perry back home with the Colbourne clan and Jake.

and noted, "For me, passing this cape is one of the highlights of the summer—there are few anxieties about navigation safety and boat performance one you get here." Just two years ago we almost lost the speedboat in a series of freak waves, arriving at Lushes Bight and only then noticing that the tow loop on its bow was hanging by just a thread of steel. This year Perry had manufactured a seemingly foolproof towing loop welded to steel plates on both the outside and inside of the bow stem. The result? no trouble with the speedboat this summer!

We arrived in Lushes Bight in mid-afternoon and found a place at the dock behind one of the most ungainly boats I've ever seen—a product of the laws enacted

back in the 60s to limit the size of long-liners in a misguided (and unsuccessful) attempt to limit the catch of fish. Boat lengths were limited to a certain length (60 feet?). So what did boat owners and builders do? They increased the tonnage by making them wider, increasing capacity and at the same time making them more stable and less 'cranky' with new stabilizer technology: large door-size planes towed from booms on both sides of the vessels that dampened the boat's desire to roll as waves passed under. Pitsiulak was not so equipped, so we roll our way along in old-fashioned style. The neighboring boat had just returned from a harrowing experience. While fishing a couple of hundred miles off-shore, they were caught in the storm that held us up in Quirpon. The boat looks taller than it is long, and how she stayed upright in a heavy sea is a mystery to me. She also lacked modern navigation instrumentation and found themselves far off-course around Cape Freels and had to be rescued by the Coast Guard. Jim Wise had also been out in that weather, trying to get to southern Labrador for bakeapple-picking, but had to alter his plans and stuck to the northern Newfoundland shore. No shortage of berries around Quirpon, as we also heard when we passed through.

We spent the afternoon unloading the boat and getting gear up to Perry's. Amazing to see how quickly the Pits can be 'hollowed out' when the personal gear, food, and galley stuff is removed. There are always some surprises—new stashes of beer, dregs of liquor bottles, old cans of Will Richard's date-nut bread (WWII vintage?), artifact and bone collections, etc. This time was no different. Perry's truck loaded with gear looked like a family of refugees fleeing Syria! It all got dumped outside our little storage shed next to Perry's moose-butchering shop. The food and galley gear went into Perry's basement, along with the bones from Hart Chalet that we washed and set out to dry. Almost all are caribou.

Louise fixed us a nice dinner. We had showers and threw our dirty clothes into the washing machine. The big news was the impending Hurricane Harvey that was about to strike Corpus Christi and Houston, Texas later in the evening with 140mph winds and a storm surge of 10-12 feet. Here in Lushes Bight the weather was about to change to a northeaster—rain and wind but of a moderate sort. Jake and I returned to the Pits for the night and slept with the door open for the first time in the summer—no mosquitos! We rocked around a bit as the storm set in, but had a good sleep with some rain patter and wind puffs. Nice to be back in homeport. We have one day to clear up all work before leaving on Sunday to catch the Port aux Basque ferry and start the trip home.

26 August, Saturday. Lushes Bight

A nasty day today: cold, rain, and wind. Toast and coffee for breakfast while we watched the news reports

of Harvey, which came ashore with less sea surge than expected because it struck at low tide. However, the rains are torrential and flood waters are rapidly inundating the coastal region and Houston. Prediction are for the storm to hover rather than move on, dumping more and more rain. It's clearly going to be a ma-

jor catastrophe, but so far the good news is that there are few fatalities and the emergency response work has been well-coordinated and effective. Many people are having to evacuate their homes, wading through chest-deep water to find shelter or meet help. Breakfast was interrupted by an urgent call from the dock asking us to move the Pits to make room for a fisherman needing to unload his catch. We responded immediately, but when we got to the pier we found the buyer had cast off our bow mooring lines and the Pits was angling off the pier with just stern lines attached. Perry had a few choice words with the buyer, who seemed to have no concern for normal protocol or courtesy. He is from Cartwright and is well-known as a nasty sort; many fishermen will not deal with him.

Jake and I worked on the collections all day, cleaning, preparing a field catalogue from the field notes, and photographing. There were no new discoveries. Folks kept dropping by to see what we had found and were impressed especially with the



Figure 5.81 Cleaning and cataloguing artifacts, including Allie's find, a fragment of an Inuit soapstone pot.

Louis XIII coin. I tried to get Cassie, Perry's cute little grand-daughter, to help clean bones, but the closest she came was making a collection or her own—from stones in the driveway. Everyone was a-buzz in the morning about Grandma Nan's pills: had she taken them? Had she taken the right ones? What's with the doctor not giving her the right pills? However, when we had dinner with her she was doing fine—just a bit forgetful. Louise has been sleeping over at her house in case she needs help or gets disoriented. There were not many changes during the time we were away. Stephen's beautiful white husky is younger than our female Rosie, but I see many of the characteristics I know from my dog. The evening news showed more of the disastrous flooding in Houston but still relatively few casualties. Jake and I slept at Perry's and Louise's house since the boat was not in very comfortable condition.

27 August, Sunday. Lushes Bight to Port aux Basque



Figure 5.82 Cleaning and cataloguing artifacts, like these Groswater tools from Grand Plain.

Last day in Newfoundland. The rain and wind stopped overnight and was sun was out by mid-morning. There was not much to do today since we have finished packing the collections. I called Anja Herzog in Quebec City and alerted her to expect a package in the mail to clean and catalog. I'm still not sure how to deal with the organics that will been some conservation treatment: principally, the whalebone knife handle with iron rivets, and bear canine toggle, and the copper coin. There are a few other items that may need treatment, like the iron caribou spear. Last year the Quebee Conservation Lab charged me a horrendous fee for conserving four or five pieces, and I can't let this happen again. I packed up the archaeology gear and talked with Perry about work the boat will need next year. It's clear that the engine needs some real attention after years of nothing but routine

maintenance; we've got a number of oil leaks and seals that much be replaced, cleaning the fuel lines and injectors, and attention to pumps, turbo-charger and exhaust systems, as well as work on the stern tube. We also need a new navigation computer. And we need to see what happened to the bottom when we bumped around on the rocks in Fischot

harbor. Perry will scope some of this work out with Pete Wilson at the Marine Center and see how much cost in involved. Much of this work is beyond what Perry could accomplish. If we were to participate in Susan's Kaplan's Avayalik project in the Cape Chidley region, we would need a very dependable boat. At the same time as Susan is tying to organize for Avayalik, Patrick Jolicoeur is thinking of a project on the Thule migration into Labrador, with excavations at Staffe Island, also in the Avayalik area. Parks Canada would have to be involved, and currently they are not permitting anyone to be camping on shore because of the polar bear threat.

We left Perry's after Louise fixed a big lunch of stuffed squids, at my request, since I had not had them since she made them for me years ago. (Christie Leece had had fun catching squids among the rocks along the shore with a flashlight at night.) We said goodbyes and left on the 2:30 ferry captained by Perry's brother Dennis, who demonstrated the complexities of the McIsaac's propulsion system with its bow and stern thrusters. We had beautiful weather for the drive and reached Port aux Basques in time for a dinner at the "roast-your-own toast" Italian restaurant before lining up for the MV Blue Puttees ferry at 9:30. We secured our usual seats in the lounge and fell asleep on the floor listening to the familiar announcement over the PA system that "sleeping on the deck is strictly forbidden"—a rule routinely disobeyed by passengers and taeitly condoned by the management.

28 August, Monday. North Sydney to Fairlee, Vermont

The crossing was smooth and we docked at 7:00am on a warm and windless day. Getting off the ferry was delayed for the Deck 1 people because a truck got stuck and blocked the ramp and took an hour to clear. We hit the road about 8:30, stopped for breakfast at tourist farm before the Canso causeway, and had coffee at Sackville, N.S., at a joint frequented by students from Mount Alison University. In St. Stephen we made our usual purchase at the Ganong chocolate factory and crossed the border with our containers of frozen bakeapples without incident. From the U.S. customs agent I learned that the narwhal tusks that smugglers had hidden in a vehicle a couple years ago were discovered at the other border station outside St. Stephen. We reached Bangor about 4pm and arrived at Fairlee at 11pm just as Lynne was heading up to bed. Stephen Loring was due to arrive the next day to drop his dog Jack off before heading to Oregon to supervise the loading of the angyapik skin boat from St. Lawrence Island, being donated to the Smithsonian. After returning east he was driving to Labrador for fieldwork with Tony Jenkinson. The following morning I dropped Jake off at Dartmouth, where he reunited with Iris Wang, who had finished leading one of the freshman outing trips—no doubt regaling them with tales of her summer experiences in the north. I spent the rest of the week finishing off this dairy, dealing with my Smithsonian email backlog, and preparing to return to DC on Labor Day.

This summer's project produced excellent results. We had a fine team and got lots of archaeological work done. Jake did a great job supervising the dig at the Hart site, finishing off the work at House 3. Important finds included the 17th century French Louis XIII coin (1632-34), a whalebone knife handle, a bear tooth toggle, an iron deer spear, and fragments of a large stoneware vessel. The architecture of House 3 remains puzzling because it does not conform to the typical Labrador Inuit pattern (except for the external hearths, short entry, and absence of stone floor pavement. The coin answers the question why we did not find clay pipes and the usual Basque earthenware. I am intrigued with the idea of excavating House 2 next year if Florence Hart gives the OK. In St. Paul, our work with Garland Nadeau produced information about its Inuit settlement history, with partial excavation of what turned out to be an Inuit rectangular dwelling and an unfinished winter sod house with a paved entrance passage at the Grand Isle-2 site. Grand Plain-1 produced a fine small collection of Groswater artifacts. Both sites need more work next year, but they begin to flesh out the mysterious history of Paleoeskimos and Inuit, particularly of the Inuit, whose lack of established winter settlements compared to other regions of the Lower North Shore may result from Europeans having established prior 'ownership' of this important resource zone. Future work on the LNS advanced through discussions with François Guindon and Garland Nadeau and the Whiteley Museum. In Rigolet, our



Figure 5.83 This year's Rigolet crew (L to R above): Perry, Jamie, Haley, Iris, Allie, and Jake.

Figure 5.84 And Bill! (below)



work with Jamie Brake and the Nunatsiavut Archaeological Program identified features present at the Hunt and Henley trading post in Snooks Cove. We surveyed Caravalla Cove and the southeastern shores and eastern islands of Lake Melville, where we found evidence of use by Inuit and probably Innu. And we identified winter Inuit winter and spring dwellings on St. John's Island, making this the farthest west of any Inuit winter occupation known to date in Hamilton Inlet. Following the departure of the girls, Jake, Perry, and I had a safe trip south that was interrupted by a couple weather days at Punchbowl. There we found ourselves in the midst of a bakeapple bonanza; we also tested three of the small circular stone pavements previously known from examples on the Indian Islands in Groswater Bay, finding nothing to date or indicate cultural attribution. Finds and notes have been prepared; I'll send them off to Jake, Anja, and Jamie when I get to DC.

Perry put the boat up at the Marine Center on Monday. I'm curious to learn what the bottom looked like!

6 - Archaeological Summaries: Hart Chalet, Grand Plain, Grand Isle, and Belles Amours Sites

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Introduction

Over the past 16 years, the Smithsonian's Arctic Studies Center has sought to clarify the archaeology of the North Shore of the Gulf of Saint Lawrence. During the 2017, the ASC finished excavations at Hart Chalet (EiBh-47) House 3, began work on a qarmat-style Inuit dwelling at Grand Isle-2 (EiBk-54), partially excavated a Groswater camp at Grand Plain (EiBj-41), and surveyed new sites around Belles Amours.

The purpose of the Gateways project, begun in 2001, has been to investigate the Indigenous and European archaeology of the Quebec Lower North Shore with special attention to the interactions between these cultures and their economies (Fitzhugh 2014, 2015, 2016, 2017a). In recent years, attention has focused on excavations at the Hart Chalet Inuit winter site. Houses 1, a rectangular sod-walled dwelling with a shore entryway was samples with two cross-trenches that revealed a wood- rather than stone-paved floor and an absence of stone-edged sleeping platforms, cold trap, and stone lintel doorway. The front end of this house was disturbed during construction of the Hart chalet cottage. Both traditional Inuit and European materials were present, and a large collection of faunal remains, mostly caribou, was recovered. House 2 is a similar-size rectangular Inuit winter dwelling whose entry and doorway were tested and produced soapstone vessel fragments and a walrus ivory needle-case. Most of this structure remains intact and is covered with spruce trees. House 3 was selected for complete excavation because it appeared intact and appeared to have a different form than Houses 1 and 2. We assume all three houses were occupied at the same time based on the symmetrical settlement pattern, spacing, and orientation, and artifact finds generally support this view. Previous work took place at House 3 in 2015-2016 (Fitzhugh 2017b).

Hart Chalet (EiBh-47), House 3 (H3)

Like other Inuit winter structures on the Quebec Lower North Shore, House 3 had a short 3-4 meter long entryway that was more like a porch than a tunnel, was floored with planks rather than stone slabs, and had an external cooking hearth on the left as one exited the structure rather than inside the dwelling. A mound of sand, rock, and turf mixed with food bone, tile fragments, and a few artifacts, including an early 17th century French coin, bordered the east side of the doorway. The inner floor was paved with wood planks, which burned at some point, rather than stone, as demonstrated by numerous small nails, plank remnants, and charred wood. Around the central floor of the house, the interface between the cultural level and sterile soil sloped up to the wall without the stone-fronted sleeping platform found in Inuit houses in Labrador (and at Little Canso Island

in Jacques Cartier Bay); so House 3 must have had a wood sleeping platform. This architecture is reminiscent of an 18th century structure excavated by Auger (1991) in the seal islands, which also used plank flooring, and exhibited a pronounced "porch." This style of dwelling seems to represent an adaptation of the Inuit "communal house" to the subarctic environment, and perhaps Hart Chalet represented an early innovation.

In addition, the house did not have the usual rectangular shape but was slightly oval; it lacked well-defined wall boundaries, and stone was present only along the sides of the entry and around the door area. Bone and artifact midden was dumped around the outside wall, mostly around the front of the structure. The lack of clear wall definition and the three superimposed hearths found in the cooking alcove in 2016 suggest the structure had multiple re-building episodes. The re-excavation episodes disturbed the stratigraphic layer, making it difficult to interpret the occupation sequence. Features that distinguish House 3 from others excavated on the LNS are its oval shape, lack of a stone paved floor, and absence of a lintel doorway.



Figure 6.1 Hart Chalet H3 units excavated in 2017, View north.



Figure 6.2 Unit 16N22W showing wall profile at northwest corner of Hart Chalet House 3. View northeast.

Excavations in 2017 explored part of the hearth mound and southwest, northwest, and northeast walls (Figure 6.1). Close attention was paid to the northeast wall, where earlier work had uncovered Paleoeskimo and prehistoric lithic artifacts (Figure 6.2). In total, 8m² were excavated this summer. The cultural deposits in the walls were as deep as 1 meter in some areas. A thin coniferous hummus layer overlay a podzol deposit, with an average depth of about 10cm. Below this was a deep, mixed deposit of light and dark layers impregnated with charcoal. The soil in the site also appears susceptible to cryoturbation, further complicating stratigraphic analyses. Especially in the



Figure 6.3 Assemblage from Hart Chalet H3, 16N22W.



Figure 6.4 Hart Chalet H3 Inuit bone knife handle.

served), a crude lead-wrapped jigger hook, and an iron deer spear (Figures 6.3-5. Some European ceramic material was discovered, including fragments of a large orange stoneware vessel with interior ridges, smaller pieces of grey Normandy stoneware, and painted (blue, white, and orange) faience earthenware, probably from a teacup or some other delicate dish. A copper coin was excavated from the mound in the southeast corner of the house, near the entrance passage and hearth area. The coin was a French 1643 'double tournois,' minted in the last year of Louis XIII's northern end of the house, the stratigraphy in the sand layer was mixed, and no clear sequence of occupation could be discerned. All artifacts were discovered in the mixed sand laver. Iron nails, ceramics, and other Inuit artifacts were present throughout the sandy layer. Caribou bones appeared most frequently in the upper layers, near the sand/podzol interface, which is consistent with previous excavations. A peat layer, representing the original forest floor, was encountered beneath the mixed sand around the margins of the house pit. Sterile sand was encountered directly beneath the

peat, and while some artifacts were found near the ancient forest floor, none were found beneath it.

Finds were relatively few. As usual, the artifact assemblage was dominated by nails, tile fragments, and glass. Nails appear in all levels of the mixed cultural layer. Finds of indigenous production include a whalebone knife handle, a bear tooth toggle (both badly pre-



Figure 6.5 Hart Chalet H3 bear tooth drag handle.



Figure 6.6a (above) and 6.6b (below) French king, Louis XIII double tournois coin dat-



reign (Figure 6.6). This type of coin was used in France starting in the 1200s, under Phillipe the Fair, but production ceased under Louis XIV in 1647, and the coin fell out of use after that. Our coin, although slightly tarnished and spalled from age, showed little sign of wear from extended use. This helps explain the absence of clay pipes and Basque earthenware – the site was too early for common use of clay pipes, and too late for most types of early Basque earthenware.

Excavations this year also produced more prehistoric lithic artifacts. The artifacts were mixed into the house fill, suggesting that they had been removed from their original depositional context when the house was originally excavated. A Ramah box-based, side-notched end blade, attributed to Groswater was discovered, as were two ovoid knives, likely of Late Prehistoric Indian origin. Tools of indeterminate origin include a crude side-notched flake knife of dark glassy chert, a biface blank, and light, chalky end blade preform. Finds from earlier seasons (see Fitzhugh 2017) suggest the presence of extensive prehistoric occupation at Hart Chalet. Two microblades, and two small bifaces attributed to early Dorset and Groswater also attest to a Paleoeskimo presence. The prehistoric Indian evidence is more prominent, and includes side-notched and corner notched arrow points, as well as biface knives. Surface finds around the site suggest continued use by cultures dating as

early as late Maritime Archaic, but no specific dwelling locations have been identified.

Grand Isle-2 (EiBk-54)

For many years we considered the St. Paul River region as the most likely territory for Inuit settlement on the LNS, especially after discovering and excavating Inuit winter dwellings at Petit Mecatina, Jacques Cartier Bay, Belles Amour, and Figure 6.7 Grand Isle Brador. Why would by excavated interior.



and Figure 6.7 Grand Isle-2 (L1) showing low, sod-walled qarmat walls and partialould ly excavated interior.

Inuit have chosen not to occupy St. Paul which is one of the richest resource zones on the LNS? When our 2016 survey failed to reveal Inuit winter settlements or any sign of graves or summer tent-rings, it seemed that the region might have been avoided because it was already occupied by Europeans when Inuit appeared here in the early 1600s. Our 2017 excavations forced us to reassess this view when a rectangular house foundation found in 2016 (Grand Isle-2, Fea. 1), upon excavation, turned out to be Inuit rather than Innu. The structure was eroding at the edge of a shore-side terrace on the north side of Grand Isle and had lost its north wall and part of the interior to the sea. Its low foundation made it barely distinguishable from the surrounding tundra. The foundation encloses two lateral sleeping benches and a slightly lower central floor area into which beach stones

26.08.2017 Lord Down Cont.

Figure 6.8 Grand Isle-2 soapstone pot fragment repaired with iron nails.

had been dumped when the site was abandoned (Figure 6.7). When it was discovered in 2016. the house was interpreted as an early Innu dwelling based on the presence of dark chert flakes, bits of rusted iron or tin sheeting, and a c14 date on charcoal of AD 1415-1455. These data suggested the site might have been occupied by an early European-contact Indian (Innu) site. However, excavation of three 2x2 meter squares in the center of the structure in 2017 produced clear evidence that it and most of its contents were Inuit: Basque roof tiles, Inuit soapstone pot fragments (Figure 6.8), iron sheet metal, and large iron spikes similar to those found in other LNS Inuit sites. These materials were found on the partially preserved remains of a wood floor. Below the floor a thin peat-humus level representing the original vegetated ground surface contained flakes of dark chert, Ramah chert, and charcoal (c14-dated, above). Apparently, an Inuit group had built a small rectangular dwelling at a location previously occupied by prehistoric Innu. The rectangular shape of the structure, its low sod walls, and its excavated interior suggested that it was an Inuit qarmat-type structure used during the fall when summer tents did not provide sufficient protection, but before winter pithouses were occupied.

In 2017 we also discovered a second Inuit structure (Grand Isle-2, Fea. 2) on a raised beach about 75 meters up-slope and south of GI-2, F1. Tests in this roughly circular feature about 10 meters in diameter revealed a below-ground paved entry passage and a hearth pile containing fire-cracked rock and caribou bones. This structure at first seemed to be a typical Inuit semi-subterranean winter house excavated into the raised beach, but when we tested the interior, we found no sign of a floor or cultural level with artifacts, bones, or charcoal. What we thought was an excavated house pit turned out to be a natural declivity in which Inuit had begun building a winter house. The interior had not been excavated, and no walls were present. The site appears to have been abandoncd after creating the entry way and hearth. It seems likely that both the rectangular L1 feature and the L2 unfinished winter dwelling were part of an intended multi-seasonal occupation by a single 17th century Inuit group that only actually occupied the qarmat site.. Grand Isle-2 is our first evidence of Inuit occupation in St. Paul, but it appears to have been a short-lived. This same group may also have contributed to the nearby boulder structures at Kettle Head (Grand Isle-1) where Charles Martijn (1974) reported human remains and an Inuit snowknife at the top of the hill a few hundred meters south of Grand Isle-2.

Both L1 and L2 sites need more work next year, but they begin to provide information on the elusive Inuit history in St. Paul River that includes stories of a great battle between the Inuit and Europeans. The lack of multi-house Inuit winter settlements such as found elsewhere on the LNS may result from Europeans having established prior 'ownership' of this important resource region.

Grand Plain-1, L1 (EiBj-41)



Figure 6.9 Grand Plain-1 Groswater site. View north.

Grand Plain-1/L1 (called the "Crossroads Groswater" site in Fitzhugh 2017:74) is located about a kilometer east of the Old Salmon Bay settlement at the southwestern edge of a huge series of raised beaches north of Wild Cove and above Point Scramble. The site was discovered in 2016 when we noticed flakes of Groswater chert in an ATV path. Several other sites were identified at GP-1/L2 in a clearing west of GP-1/L1, including another Groswater site and probable Indian sites exhibiting a variety of chert types but no diagnostic artifacts. Test pits at L1 revealed in situ deposits beneath a thin veneer of caribou moss, lichen, and birch shrubs. In 2017 we returned



to obtain a sample of tools and charcoal and excavated a 1x8 meter trench in sandy beach sediment on top of a low rocky ridge (Figure 6.9). The site seems to have been used as a temporary camp; no internal features were noted, and no organics remained, other than charcoal stains and chunks. Two meters west of the excavation trench we found a small 30-centimeter high mound of fire-cracked rock containing chert flakes, but time did not permit its excavation.

The lithic collection identified the site as Groswater, probably dating ca. 2400-2200 BP (Figure 6.10). Due to the small size of the trench, no spatial patterning of artifacts and debitage was detected; for the

most part flakes and tools were scattered evenly across the excavation area. As usual, microblades and microblade fragments dominated the assemblage. Several endblades were uncovered, including two box-based, side-notched points. Most other bifaces were fragmentary, but two asymmetric knives were found. Two burn-like tools (one chipped and one ground) occurred, as well as a single burin spall. The most abundant tool apart from microblades were endscrapers (6), including four finely made flared types with and without side notches, suggesting skin-working was an important site activity. Some Ramah chert was present, but most artifacts were made from dark grey or tan chert.

A survey occasioned by bad weather allowed us to survey the sandy terraces and large blowouts on the west side of Belles Amours Harbor, resulting in the location of three sites:

Belles Amours Harbor North

A large field of boulders at the point where the Belles Amours Harbor Peninsula joins the mainland (northeast of Isthmus Bay) contains a score or more of boulder pit structures, some of which are caches while others may be dwellings. We photographed some prominent features and took GPS readings but did not have time to make a map or hunt for diagnostics. The boulder field is 10-20 meters higher than the highest sandy beach terrace between Belles Amours Harbor and Isthmus Bay.

Isthmus Bay (Middle Bay)

On a grassy point on the south side of a small peninsula at the northeast end of the L'Anse de Isthmus on the Belles Amours Harbor Peninsula we found tent ring structures that contained 18/19th C. white and blue print ceramics and pieces of worked whale and seal bones. Although whale bones might suggest this is an Inuit site, Innu and Europeans also used whale bone for their dog

sledge runners, so its identity remains uncertain.

Belles Amours Isthmus Blowouts

A foot survey in the blowouts in the raised beaches west of Belles Amour inner harbor produced a small collection of Groswater implements that were eroding from a buried soil horizon exposed for a distance of 20-30 meters in the wall of the dune, and on the gravel bed below (Figure 6.11). We collected charcoal from the soil horizon and designated the area as L1. In addition to scrapers, sidenotched points, and microblades, was a tiny ground burin-like tool measuring less than a centimeter on a side (Figure 6.12). Several hundred

Figure 6.11 Belles Amours Blowout, L1, showing Groswater finds eroding from buried soil.

meters away in the southern extension of this blow-out we



Figure 6.13 Belles Amour L2 Groswater microcore (with cortex) and blades.

found a smaller concentration of Groswater implements and fragments of mottled tan-brown chert nodules (Figure 6.13). This chert resembles the stone used in LNS Groswater technology and explain could why these sites are found in the blowout. Could this be a new source for Groswater lithics?



Figure 6.12 Groswater finds from Belles Amours L1. 1x1cm chipped and bifacially ground burin-like tool at lower right.

Conclusion

Final excavations at Hart Chalet House 3 clarified the nature of its house walls. The hearth mound east of the door turned out to be a midden pile containing mostly caribou bones as well as the 1633 French coin, a whale bone knife handle, a bear tooth drag handle, stoneware, and painted faience

earthenware. The early 17th century date of these materials suggests this midden belongs with an early occupation of the house, before it was re-modelled with the midden being left intact as a bulwark for the east side of the entry door in the later renovations. The excavations in the east wall revealed the edges of the original house pit excavation and the charcoal-rich inner floor, but provided no indication of an elevated sleeping platform. The same type of profile was found in the northern wall. The artifacts were consistent with those found in previous years, including several ceramic fitting fragments. A few Groswater, Middle Dorset, and Recent Indian finds came from both in situ external deposits outside the wall and beneath Inuit middens; however most were from mixed deposits in the house walls and middens. The northwest side of the house may have been excavated into a sand dune, explaining the difficulty in defining wall structure here, and this may explain the lack of stratigraphic context for most of the pre-Inuit artifacts. Finally, the oval shape of House 3 stands out as qualitatively different from Houses 1 and 2, principally by its lack of clearly defined rectangular sod walls. However, given other similarities (wood-structured doors, plank floors, external hearths, and similar artifacts) this difference may be a result of its construction into a sand done formation rather than the flat intact, spruce-covered beach deposits of Houses 1 and 2.

Grand Isle 2 (L1) produced important evidence of an Inuit qarmat-type rectangular dwelling—the first found so far on the LNS—similar in shape to early Labrador Inuit stone qarmats in central and northern Labrador. The Inuit who lived here had access to Basque tiles, iron spikes and occupied an eroding terrace front previously utilized by pre-historical Innu with access to Ramah chert. The aborted attempt to build a semi-substerranean winter dwelling (L2) upslope from L1 suggests a seemingly tentative attempt to establish a winter occupation at this site. However, unlike other Inuit winter sites known on the LNS, this was an operation conducted by a single family group rather than the three-family pattern seen on this coast and in many places in Labrador. Perhaps the Grand Isle Inuit represent a pioneering event that failed due to European or some other adversity. Further research at Grand Isle-2 and Martijn's boulder pit structures at Grand Isle-1 may provide answers to the unusual nature of Inuit history in the St. Paul archipelago.

In other results, the 2017 work continued to document the widespread presence of Groswater sites along the LNS, dating to ca. 2500-2200 BP and showing similar tool assemblages as other sites of this period in Labrador and Newfoundland. The nodule of worked grey chert found at Belles Amours Blowout L2 suggests that marine deposits along the LNS was source of chert for Groswater lithic industry which is normally thought to have come from southwest Newfoundland sources.

Acknowledgments

St. Lawrence Gateways research is stimulating interest among local organizations interested in developing the LNS cultural heritage resources. This year's field crew consisted of Dr. William Fitzhugh (Smithsonian Institution), Alexandra Castellanos (University of Notre Dame), Halley Adams (University of Notre Dame), Iris Wang (Dartmouth College), Jacob Marchman (Dartmouth College), and skipper Perry Colbourne of Lushes Bight, Newfoundland. Garland Nadeau, Florence Hart, the Whiteley Museum, and members of the St. Paul Municipality made important contributions. We thank the Quebec Ministries of Culture and Communication and Natural Resources for permits and Anja Herzog for processing collections.

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7 - Excavation Field Notes: Square Maps, Profiles, and Artifact Finds and Illustrations

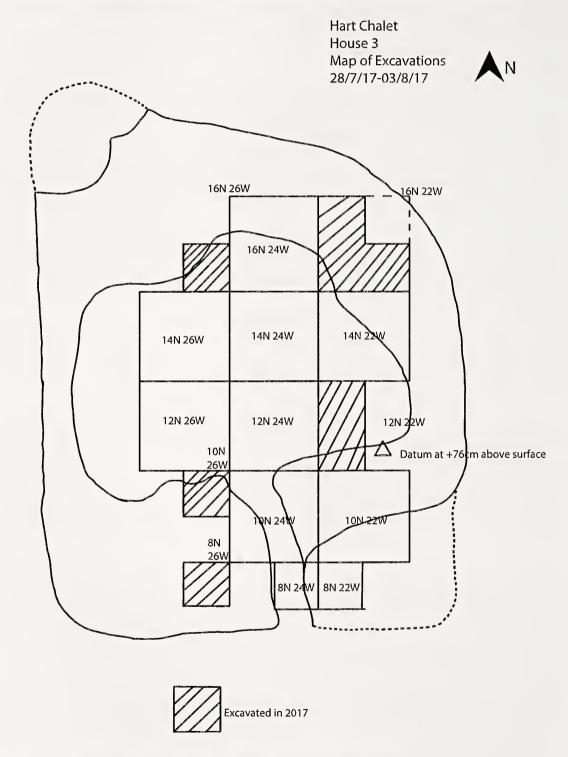
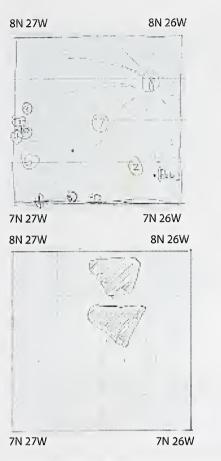


Figure 7.1 Hart Chalet, House 3, Map of Excavations.



1. Large iron nail, -96cm, top layer of humus

2. Glass shard, -141cm, light sand (below charcoal)

3. Glass shard, -121cm, gray layer

4. Ceramic, -121cm, gray layer

- 5. Nail (large), -122cm, gray layer
- 6. Nail, -123cm, gray layer
- 7. Nail, -120cm, gray layer
- 8. Charcoal layer, -138cm
- 9. Glass shard, -124cm, gray sand missing
- 10. Nail, -127cm, gray sand

I first dug through the humus when digging in this quadrant. This square is in the northeast quadrant of its 2m x 2m square. I found a large iron nail (1) in the humus layer, just before I reached dark sand, on the

Iris Wang

HC H3

8N 26W NE Quadrant

edge of the southern wall. As I dug further down, in the dark/gray sand layer, I found a glass shard (3) and a nail (7) on the south edge of the quadrant. In the gray layer I also found a ceramic shard (4), a nail (5), a glass shard (9), and a nail (10) clustered near the west wall; another nail (6) was close by. I also found a flake in the southeast corner, in the gray layer. I found a charcoal layer, 3-6cm wide, below the gray/mixed dark sand layer. In the light sand below the charcoal layer I found another glass shard. I found nothing else in this layer, and below it was a reddish brown sterile sand. I found two large rocks in my square. These rocks intersected the charcoal layer, and part of the gray layer above the charcoal along with part of the light layer below the charcoal.

Figure 7.2 Hart Chalet, House 3, Artifact List and Sketches.

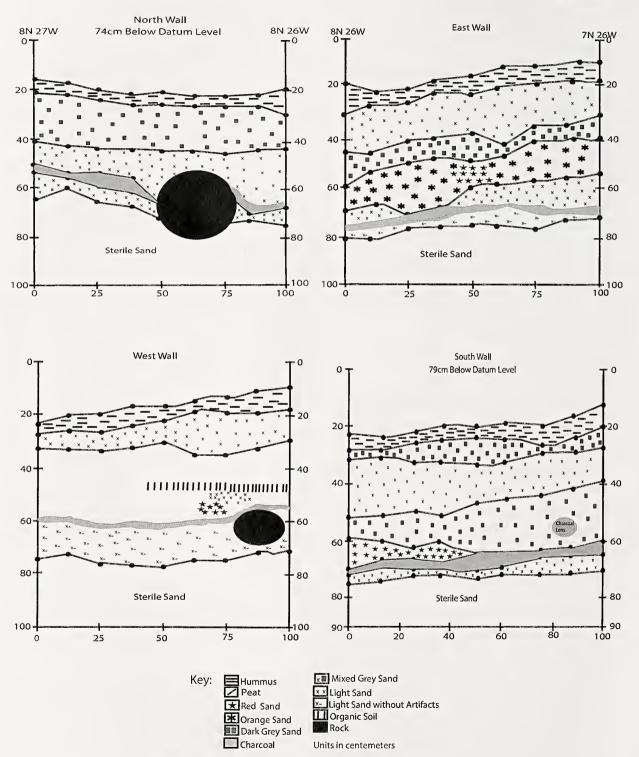


Figure 7.3 Hart Chalet, House 3, 8N 26W, Profiles.



Figure 7.4 Hart Chalet H3 overview showing 2017 excavations and 2016 back-filled central part of the house. 8N 26W is at upper right.



Figure 7.5 Artifacts from 8N 26W.



Figure 7.6 Excavation overview showing 10N 26W, View SW.



Figure 7.8 Artifacts from 10N 26W.



Figure 7.7 Unit 10N 26W overview. View to SW.



Figure 7.9 10N 26W southeast quadrant excavation. View to SW.

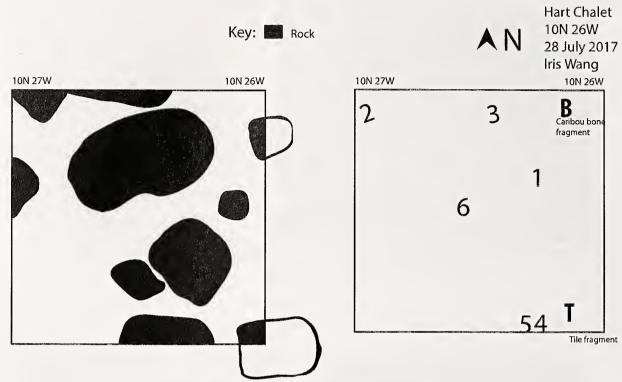


Figure 7.10 Hart Chalet, 10N 26W Field Notes.

- 1. Iron nail, -127cm, mixed gray sand layer.
- 2. Iron nail, -135cm, mixed gray sand layer.
- 3. Iron nail, -136cm, mixed gray sand layer.
- 4. Iron nail, -127cm, gray sand layer.
- 5. Iron nail, -103cm, mixed gray sand layer.
- 6. Pyrites nodule, -128cm, gray sand layer.

This quadrant (the northeast corner of its 2m x 2m square) was filled with rocks near the surface. Once I dug down into the peat, I found several large rocks, throughout the quadrant, that continued into the mixed gray sand layer beneath the peat. Near the top of the mixed gray sand layer, I unearthed a thick layer of fragmented tile (3-4cm thick) in the southeast corner. I also found a lor of caribou bone, including two caribou skulls, in the northeast corner of the quadrant near the top of the quadrant near the top of the gray sand layer. Further down in the gray sand, I found two iron nails on the south wall edge of the square. In the interior I found 3 more nails scattered in the gray mixed sand, concentrated in the northeastern half of the square. I also found a pyrites nodule in the middle of the square. I found a clear charcoal layer below the gray sand mix. Below the charcoal layer was sterile sand, and in some places a light gray sand which had sterile sand right below it. In the dark gray sand above the charcoal layer I had found what appeared to be a few charcoal or organic material lenses. But, it was the clear layer of charcoal that caught my attention because I found big chunks of charcoal in it.

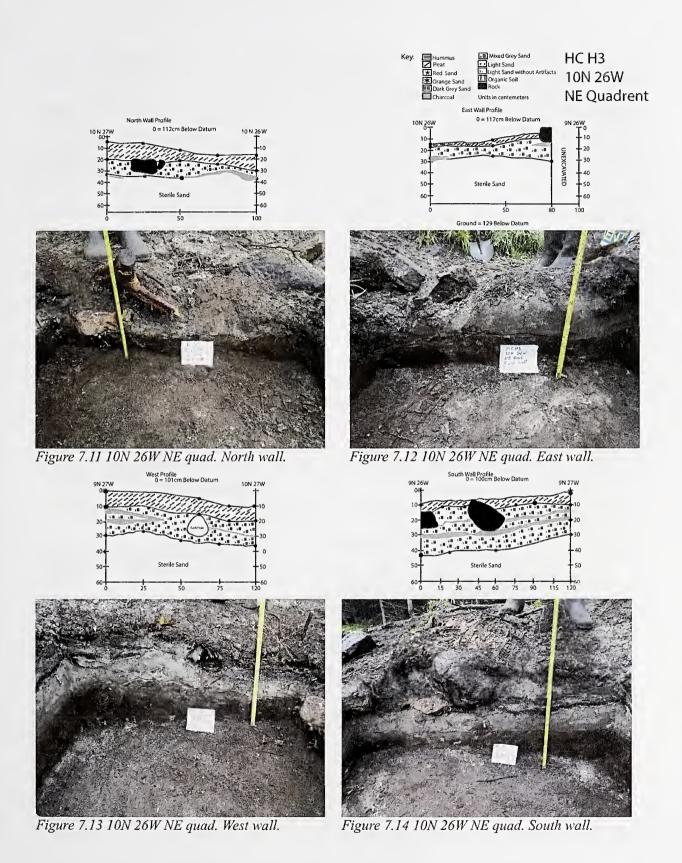


Figure 7.15 Hart Chalet, 10N 26E, NE Quadrant, Profiles.

The stratigraphy of this particular "trench" was rather un-uniform. The humus contained no artifacts. The upper dark mixed sand layer and the upper light mixed sand provided the majority of the artifacts and bones (mostly caribou). After the charcoal lens there was a white/ light gray sand layer with no bones or artifacts. Then, finally, the iron rich sterile sand

Hart Chalet H3 12N 22W 28 July 2017 Alexandra Castellanos

with no bones or artifacts. The upper dark layer, close to the east wall, produced: a large pile of bones, a bone knife handle with nails, a tooth with two man made holes, and a coin with visible inscriptions. In addition to these unique artifacts the dark mixed layer produced several small rocks and iron nails. The lower portion of the dark mixed sand layer produced: two rather sizable stoneware sherds, a Ramah chert box based harpoon head (missing tip), a quartz biface, and a piece of green glass. In addition to these artifacts several small pieces of orange low fire tile were uncovered. After the laver of dark mixed sand many animal burrows and tunnels were discovered. These eventually collapsed as the excavation continued. Due to this collapse however, I was able to locate one piece of green glass, but at an unknown layer or level. The upper portion of the light mixed sand layer produced mostly animal bones, a partial skull, mandible, vertebra, teeth, and iron

12N 24W Not Excavated -123 Not Excavated Datum Triangle level is located on top of this square. 12 14 13

bones and iron nails. In addition to these artifacts five shards of blue, white, and orange faience pottery were uncovered. In this lower portion of light mixed sand chard wood planks were also discovered, but were too delicate to be preserved or collected. After the light mixed sand layer a thin layer of charcoal or wood plank was uncovered but produced no artifacts or bones. A very light sand layer followed this layer of charcoal and produced no artifacts but was mixed with faint traces of charcoal. Finally after this light no artifact sand, iron rich dark orange sterile sand was uncovered producing no bones or artifacts. Flakes were evenly distributed between both dark mixed and light mixed sand layers. The large rocks in

nails in a variety of sizes and oxidation levels. The lower

portion of the light mixed sand layer produced

The coin was later identified as a Louis XIII double tournois coin and minted from 1632-1634.

the square did not show any patterns, indicating random

placement or no cultural significance.



Figure 7.16 12N 22W western quadrants excavated, View SE.

Figure 7.17 Hart Chalet, 12N 22W, Field Notes.

- 1. Iron nail, -92cm, light mixed sand layer
- 2. Copper (or silver) coin, -160cm, dark sand layer, writing is still visible

a. Louis XIII, 1632-1634, Double Tournois

- 3. Iron nail, -122cm, light sand layer
- 4. Iron nail, -123cm, light sand layer
- 5. Iron nail, -120cm, light sand layer
- 6. Two stoneware pot shards (orange clay) (medium fire), -109cm, dark mixed sand layer
- 7. Composite bone knife handle with nails/rivet holes, -92cm, dark mixed sand layer
- 8. Tooth with two holes in center, -87cm, mixed "peat" dark sand layer
- 9. Iron nail, -92cm, interface soil and sand
- 10. Ramah chert box based harpoon head (missing tip), -95cm, mixed peat and gray sand (dark mixed sand laver)
- 11. Green glass, -100cm, gray sand layer (dark mixed sand layer)
- 12. Quartz biface, -102cm, gray sand layer (dark mixed sand layer)
- 13. Iron nail, -103cm, gray sand layer (dark mixed sand layer)
- 14. Green glass, found in animal tunnel
- 15. Two shards of colored pottery (faience) (possibly teacup), -111cm
- 16. Three shards of colored pottery, -111cm
- 17. Biface blank, found in the collapsed animal tunnel Figure 7.18 Hart Chalet, 12N 22W, Artifact List.







HCH3 12N 22W 28 July 2017



Figure 7.19 Louis XIII Double Tournois coin, 1632-34.



Figure 7.21 Bear tooth toggle.

Figure 7.22 Whale bone knife handle with iron blade.

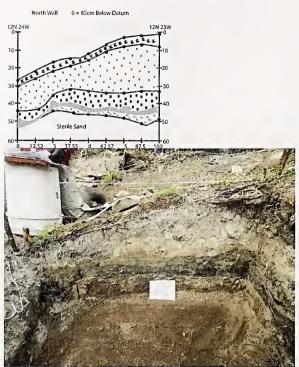


Figure 7.23 12N 22W NW quad. North wall.



Figure 7.25 12N 22W NW quad. South wall.

HC H3 12N 22W West Trench Profile

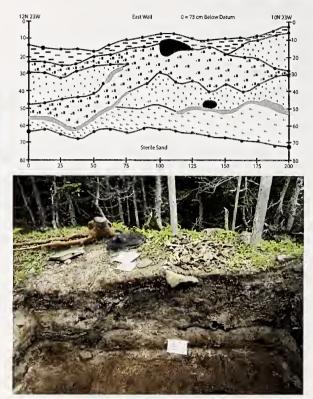
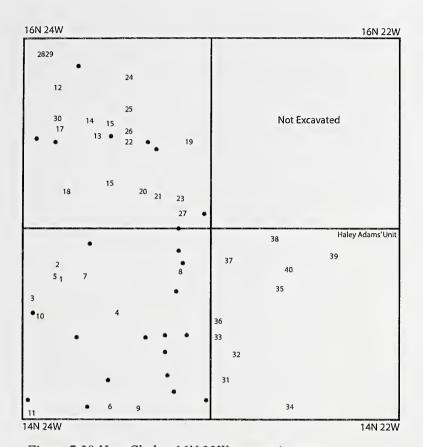


Figure 7.24 12N 22W, NW/SW quad. East wall.



Figure 7.26 12N 22W NW quad. West wall.

Figure 7.27 Hart Chalet, 12N 22W, Profiles.



HC H3 16N 22W 28 July 2017

Figure 7.28 Hart Chalet, 16N 22W, excavation map.



Figure 7.29 16N 22W NW/SW quads after excavation. View to N.



Figure 7.30 16N 22W overview of completed excavation. View NW.

16 H B

HC H3 16N 22W NW, SW Quadrants

- 1. Iron nail, -76cm, gray mottled sand layer
- 2. Lead wrapping for jigger hook, -70cm, gray mottled sand layer
- 3. Iron nail, -80cm, gray mottled sand layer
- 4. Iron nail, -83cm, gray mottled sand layer
- 5. Iron nail, -82cm, gray mottled sand layer
- 6. Iron nail, -79cm, gray mottled sand layer
- 7. Broken glass, -85cm, dark gray mottled sand layer
- 8. Dark chert biface, -85cm, dark gray mottled sand layer
- 9. Broken glass, -90cm, dark mixed sand layer
- 10. Quartzite blade fragment, -98cm, light mixed sand beneath dark layer
- 11. Ceramic pot shard stoneware, -116cm, peat level/floor level
- 12. Iron fragment, -66cm, humus layer
- 13. Iron nail, -67cm, humus/ sand interface
- 14. Iron spike, -69cm, at top of light mixed sand layer
- 15. Iron nail, -70cm, at top of light mixed sand layer
- 16. Iron spike, -73cm, light mixed sand layer

Figure 7.31 Hart Chalet, 16N 22W, Artifact List and Sketches.





17. Utilized flake, -71cm, light mixed sand layer

18. Iron nail, -72cm, light mixed sand layer

19. Glass shard, -76cm, light mixed sand layer

20. Light chert biface, -76cm, light mixed sand layer

21. Pyrites nodule, -76cm, light mixed sand layer

22. Iron nail, -82cm, dark mixed sand layer

23. Iron nail, -84cm, dark mixed sand layer

24. Iron nail, -82cm, dark mixed sand layer

25. Endblade preform, -82cm, mixed sand layer

26. Ceramic shard, -82cm, mixed sand layer

27. Iron nail head, -87cm, lower dark mixed sand layer

28. Iron nail, -88cm, lower dark mixed sand layer

29. Iron nail, -88cm, lower dark mixed sand layer

30. Ramah box base endblade/ could be small endscrapper?, -92cm

Figure 7.32 Hart Chalet, 16N 22W, Artifact List and Sketches.



Figure 7.33 Artifacts from 16N22W, including lead jigger and prehistoric lithics.



Figure 7.34 Nails, spear point, and Groswater microblade from 16N 22W.



92

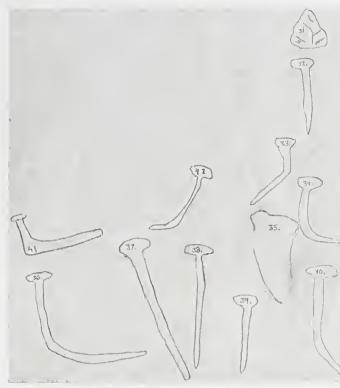
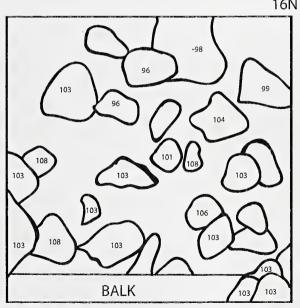


Figure 7.36 Hart Chalet, 16N 22W, Artifact List and Sketches.

- 31. Dark chert flake, -67cm, sod layer
- 32. Iron nail, -73cm, light gray sand layer
- 33. Iron nail, -79cm, dark gray sand layer
- 34. Iron nail, -82cm, dark gray sand layer
- 35. Dark gray chert flake, -80cm, dark gray sand layer
- 36. Iron nail, -82cm, light tan sand layer
- 37. Iron nail, -81cm, dark gray sand layer
- 38. Iron nail, -84cm, dark gray sand layer
- 39. Iron nail, -85cm, dark gray sand layer
- 40. Iron nail, -97cm, light tan sand layer
- 41. Iron nail
- 42. Iron nail, -84cm, dark mixed sand and peat layer



16N 23 W

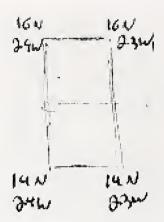
HC H3 16N 23W NW Quadrant Jake Marchman 28 July 2017

Figure 7.37 Hart Chalet, 16N 23W, Field Notes.

15N 24W

Upper Layer: All cobbles lie above charcoal and peat.

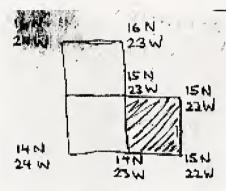
Lower Layer: Rocks appear to be cobbles- not culturally placed.



HC H3 16N 22W July 2017 Jake Marchman

"West" Excavation Trench

The stratigraphy in this excavation trench was complex. In general, there were six soil types: humus; a mixed light sand with relatively little charcoal; a lower forest peat and charcoal layer; a leached sand layer with some charcoal; and a red/ gray sterile sand layer. The actual stratigraphy of the gray sand layers is unclear. We only defined general soil types in the profiles because there was too much mixing to be meaningful. All artifacts were found in the dark and light mixed sand between the humus and the lower peat. Iron nails seemed to be distributed uniformly through the mixed sand layer. Numerous caribou bones were found in the upper mixed sand. The caribou remains primarily consisted of long bone fragments, although other types, including scapulae, vertebrae, and ribs were also found. Several stone tools were found in a layer of dark mixed sand, between -26cm and -85cm. These included two bifaces and an (endblade?) preform, all were crudely chipped from a course chert. They, artifacts 8, 20, and 25, appear to be recent Indian in origin. A quartzite knife fragment, artifact 10, was also found in a layer of light mixed sand at -98cm.



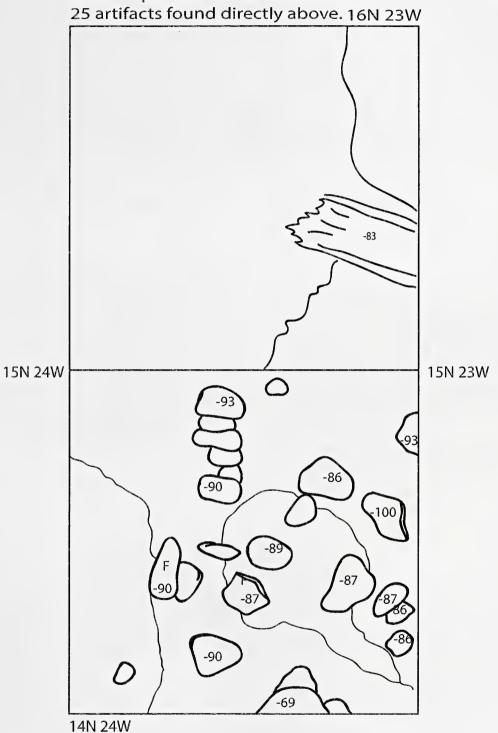
HC H3 16N 22W 1 August 2017 Haley Adams

Southeast Excavation Trench

In the southeast trench, a dark chert tool fragment was found in the upper humus layer. Many iron nails were found in the dark and light mixed sand layers between -73cm and -97cm. They were concentrated in the western half and west wall off the quadrant. A few bone fragments were found in the northwest half of the quadrant. A large dark grey chert blade, artifact 35, was found at -80cm in the dark sand layer. This quadrant contained no chert flakes in comparison to the adjacent southwest quadrant, it contained more iron nails but a lesser degree of variety in artifact types.

Figure 7.38 Hart Chalet, 16N 22W, Field Notes.

HC H3 16N 22W, SW Quadrant July 2017

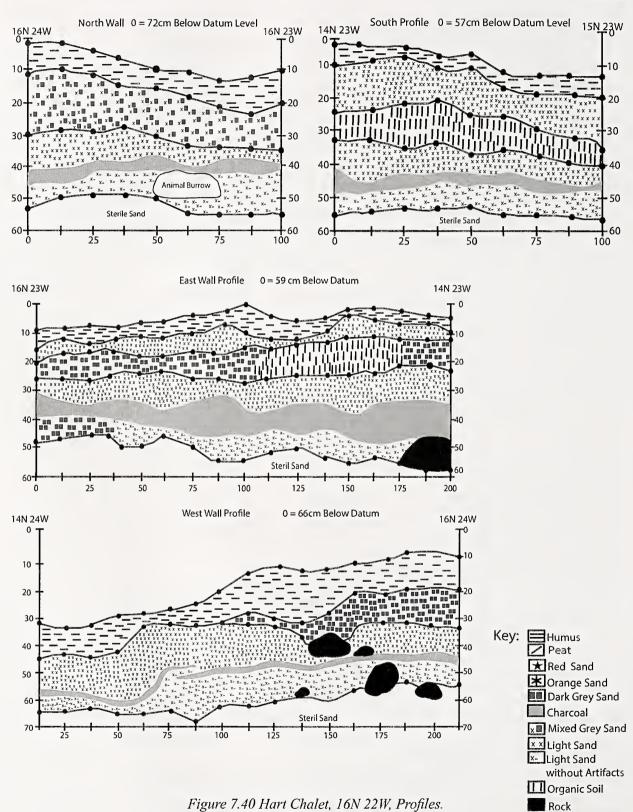


Charred plank remnents

Rocks positioned on top of peat/ charcoal layer.

Figure 7.39 Hart Chalet, 16N 24W west quads.

Units in centemeters



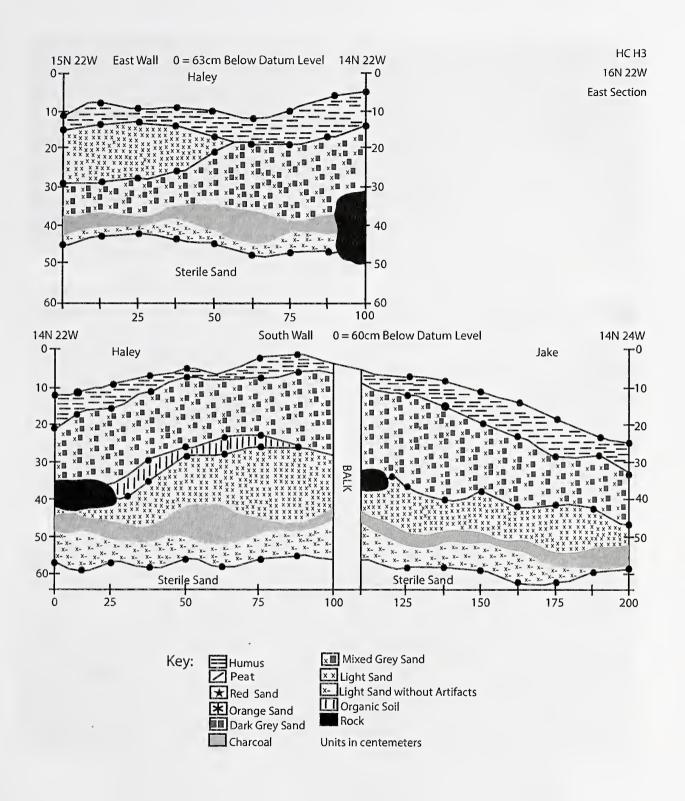


Figure 7.41 Hart Chalet, 16N 22W, Profiles.



Figure 7.42 16N 22W NW quad. East wall.





Figure 7.44 16N 22W NW quad. West wall.



Figure 7.45 16N 22W SW quad. West wall.



Figure 7.46 16N 22W SW quad. South wall.



Figure 7.47 16N 22W SE quad. South wall.





Figure 7.49 16N 22W SE quad. North wall.

HC H3 16N 26W 28 July 2017

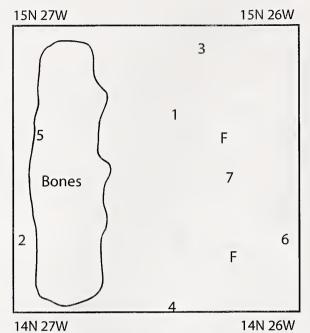


Figure 7.50 Hart Chalet, 16N 26W, Field Notes.



Figure 7.51 16N 26W artifacts, including an iron caribou spear and a Groswatere microblade.

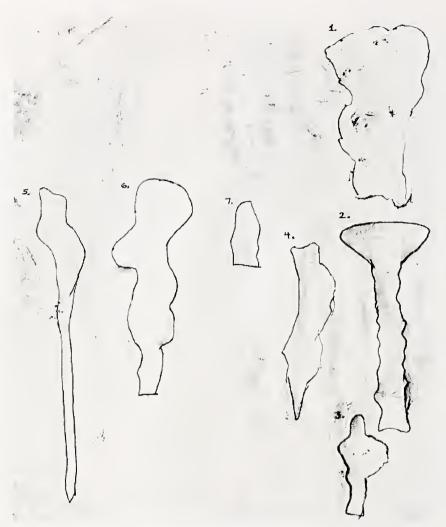
HC H3 16N 26W SE Quadrant 1 August 2017

The stratigraphy of this quadrant was variable between all four walls and quite complex. It consisted of eight different soil types: humus; upper light mixed sand; upper dark mixed sand; lower light mixed sand; lower dark mixed sand; dark charcoal sand: light sand with no artifacts; and sterile sand. The top humus layer contained a large tree stump in the southeast corner and one chert flake was found in this layer. The humus layer was 0-10 cm thick on all four sides. Moving into the upper light mixed sand layer various orange tile fragments, iron nails, and a fragment of an iron pot were found. These artifacts were concentrated in the northern half of the quadrant. In the lower dark mixed sand layer there were many small charcoal lenses interspersed throughout the layers, particularly in the south and west walls. At the bottom of this layer was a mostly continuous line of charcoal that stretched across the wall. About halfway through this layer many animal bone fragments were found (likely caribou) that had been processed for marrow. This might indicate that the quadrant was part of a midden. The bones were concentrated in the western half of the quadrant and in the west wall. Below the bones several large bedrocks were uncovered. Several iron nails and a fragment of an iron pot were found between -90cm and -113cm. This also included a Ramah chert flake and a dark gray chert knife, artifact 7. A large amount of error must be accounted for in the profile measurements due to the complicated stratigraphy of this quadrant.

Figure 7.53 Hart Chalet, 16N 26W, Field Notes.



Figure 7.52 Iron nails and caribou lance from 16N 26W.



HC H3 16N 22W SE Quadrant 28 July 2017

- 1. Iron pot, -90cm, dark gray mixed sand layer
- 2. Iron nail, -98cm, dark gray mixed sand layer
- 3. Iron nail, -102cm, light tan mixed sand layer
- 4. Iron nail, -104cm, dark gray mixed sand layer
- 5. Iron caribou spear, -113cm, dark gray mixed sand layer
- 6. Iron nail, -108cm, light tan mixed sand layer
- 7. Dark grey chert knife, -109cm, dark gray sand layer

Figure 7.54 Hart Chalet, 16N 26W, Artifact List and Sketches.

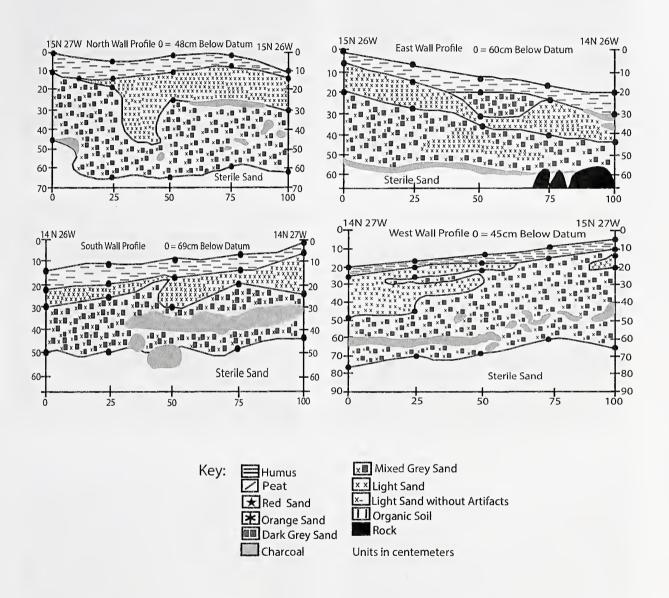


Figure 7.55 Hart Chalet, 16N 26W, Profiles.



Figure 7.56 16N 26W NW quad. North wall.



Figure 7.57 16N 26W NW quad. East wall.



Figure 7.58 16N 26W NW quad. South wall.



Figure 7.59 16N 26W NW quad. West wall.

Site Name: Grand Isle -2 Borden No.: EiBk-54 N 51° 24.530'W 57° 41.016'

Map Ref.: 12 P/5

Culture: Inuit

Tentative Dating: 16-17th C

Site Type/ Seasonality: L-1 Rectangular sod-foundation dwelling and L-2 sod walled winter house.

Site Location: 200 meters east of Leonard Thomas' summer cottage on the north side of Grand Isle. L-1 is eroding at the gravel bank edge and has lost its midden and front wall. L-2 is 75 meters up the raised beach marked by a pit and birch bushes.

Description of Site: These two Inuit sites are probably related and part of a single Inuit group's settlement in the early historical period. Large iron spikes and smaller nails, and a single large Basque tile were found on the living floor along with fragments of an Inuit soapstone cooking pot, repaired with iron nails following traditional Inuit stitching repairs. Wood timber remains present in L-1. A departure cache was on the central floor. Two raised lateral sleeping platforms were located at the end of the structure. Raised sod wall foundation, 4x8m in dimension. Prehistoric Indian evidence seen in flakes of Ramah chert and other cherts.

Raw Materials: Iron nails, Basque tile, Ramah and other local chert.

Nature of Soils/ Sediments/Vegetation Cover: L-1 fully covered by black berries, tundra plants. L-2 had a small birch brush inside pit.

Collection Procedure(s): L-1: 2x2m squares excavated in 2017. L-2: 5, 50cm, test pits.

Samples Taken: Yes.

Potential for Further Work (# of Squares, Depth of Deposit?): Yes!

Remarks (Including Prehistoric Geography/ Topography/ Site Exposure and Orientation): Leonard Thomas reported that seal and caribou bones had been present along the beach near his house, according to Garland. This must have been from an eroding midden in front of the L-1 structure, which is now gone completely. Unlike some other Inuit settlements on the LNS this site has few types of European material culture. No ceramics or clay pipes, lead, or beads. L2 may never have been completed as a dwelling, but its hearth with caribou bones suggests some length of occupation.

Photos (Black and White): No

Color Slides: Yes

Surveyed By: Pitscklak/ Smithsonian

Date: 27 July 2017



Figure 7.60 Grand Isle 2 House 1, with front eroded by the sea. View to NW.



Figure 7.61 Grand Isle-1 House 1. View to SE.

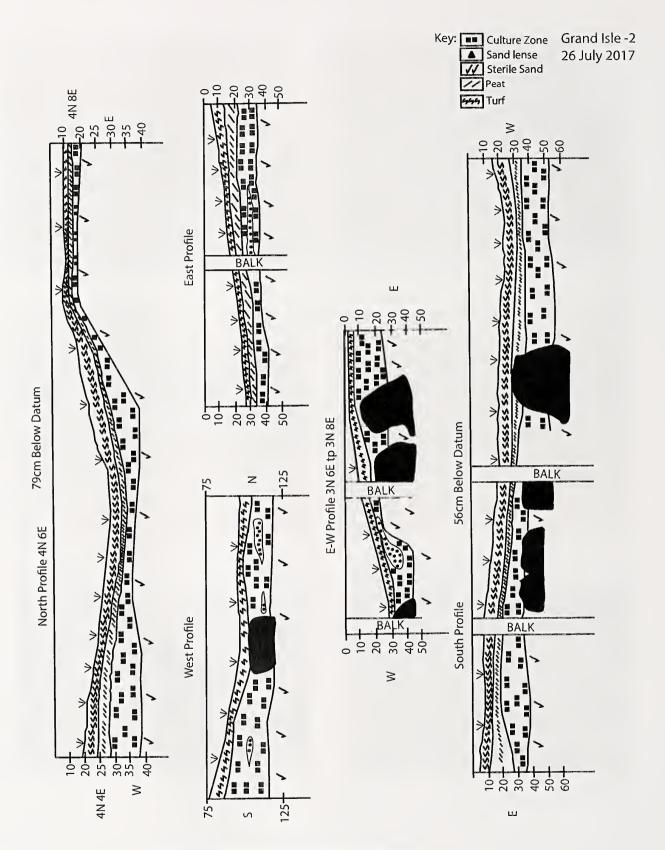


Figure 7.62 Grand Isle -2, EiBk -54, Profiles.



Figure 7. 63 Grand Isle-2 House-1 excavation.



Figure 7.65 Grand Isle-2 House 1. Soapstone cooking vessel wall with iron nail repair.



Figure 7.67 Basque roof tile on floor of Grand Isle-2, House-1.



Figure 7.64 Grand Isle-2 4N8E SE quad. View west.



Figure 7.66 Eroding bank has destroyed the front half of House 1.



Figure 7.68 Competed excavation at GI-1, H1. View to E, showing rock pile on central floor or former roof of the structure. Raised benches lie to east and west of the rocks.



Figure 7. 69 Wood and whale bone roof and flooring materials were preserved at the eastern portion of the house.



Figure 7.70 Grand Isle-2, House 2, showing the depression and partially built entrance passage.

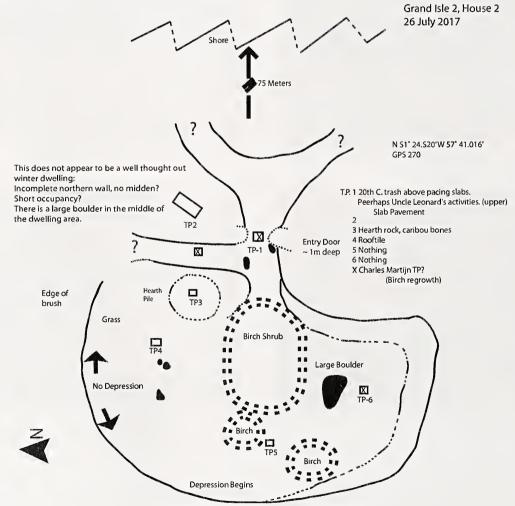
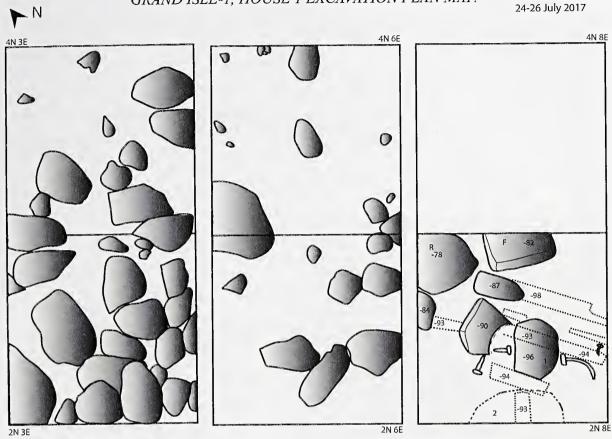


Figure 7.71 Grand Isle -3, Site Map.



Large blocky rocks, no flat slabs.
Rotted wood and timbers associated with nails.
RC flakes in bottom of peat/ upper sand.
1. Barrel-top-shaped carbonized wood beneath timbers.
2. Tan clay-like deposit 10cm thick in peat.

Figure 7.72 Plan map of GI-2, H1, excavation.



Figure 7.73 Grand Isle-2 excavation. View north.

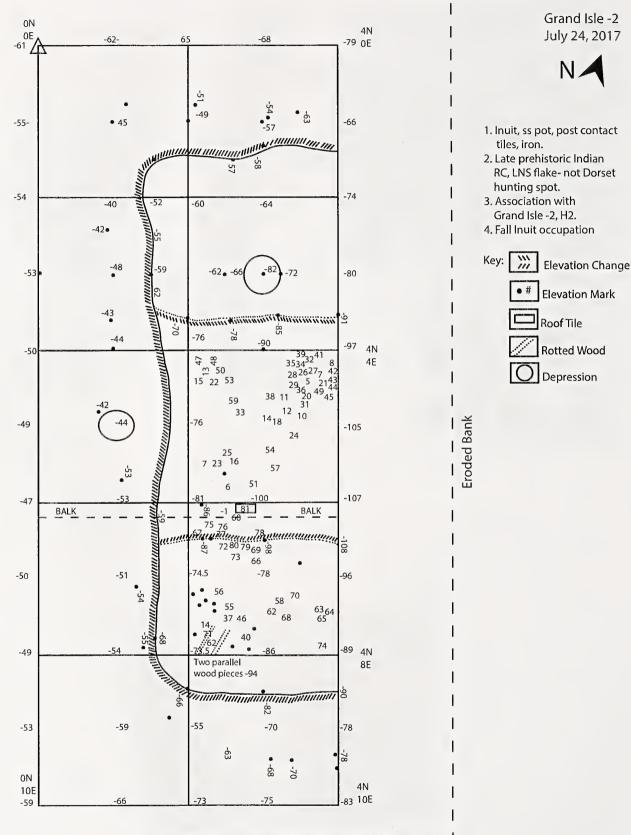


Figure 7.74 Grand Isle -2 EiBk -54, Field Notes, Mapl

Not Collected-Upper Peat

Grand Isle -2 24 July 2017

- 1. Rubber medicine dropper tube
- 2. Broken plastic button
- 3. Leather fragment
- 4. Rotted fabric fragment

Below: All finds in black floor level

- 5. Brown chert flake, -110 / Absorbed in Junior Bottle in upper sod
- 6. White porcelain fragment in consolidated peat w/ sand grains, -105
- 7. Ramah chert flake, -113
- 8, Ramah chert flake, -113
- 9. White plastic shard, -105
- 10. Ramah chert flake, -115
- 11. Ramah chert flake, -110
- 12. Ramah chert flake, -111
- 13. White/grayish chert flake, -99
- 14. Ramah chert flake on top of black soil
- 15. White/gray chert flake, -100
- 16. Fragment of glass, black soil, -103.5 (two pieces 16a, 16b)
- 17. RC flake in black soil with chunk of charcoal, -88
- 18. Dark chert flake in back earth, -117
- 19. Ramah chert flake in black soil, -117
- 20. Piece of iron oxide, on top of rock in black earth, -115
- 21. Ramah chert flake in black earth, -114
- 22. Iron nail, two pieces in black earth, -104
- 23. Ramah chert flake, -107
- 24. Ramah chert flake, black soil, -108
- 25. Dart chert flake, black soil, -108
- 26. Square iron nail, above gray sand, -115
- 27. Square iron nail, above gray sand, -115 -- Fragmentary
- 28. Square iron nail, above gray sand, -115
- 29. Flat iron piece, above grey sand, -115
- 30. Iron spike next to timber in black earth, -94

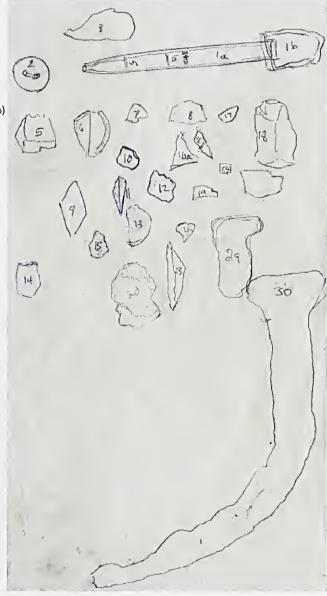


Figure 7.75 Grand Isle -2, EiBk -54, Artifact List and Sketches.

- 31. Ramah chert flake, black earth, -116
- 32. Nail fragment, black earth, 117
- 33. Ramah chert flake, black earth, 114
- 34. Dark chert flake, black earth, 117
- 35. Square iron nail, bottom on black earth, fragmentary, 118
- 36. Translucent grey chert flake, 117
- 37. RC flake in black earth, -92
- 38. Grey/tan flake at bottom of black earth, -117
- 39. Nail fragment, black earth, -117
- 40. Dark chert biface thinning flake, -97
- 41. Ramah chert flake
- 42. Gray green chert flake, -115
- 43. Ramah chert flake, -116
- 44. Iron nail
- 45. Ramah chert flake
- 46. Ramah chert flake, black soil, -98
- 47. Ramah chert flake, black soil, 109
- 48. White/ grey chert flake, black soil, 109
- 49. Nail head and shaft, black soil, -117
- 50. Iron nail, black soil, -114
- 51. Eight roof tile fragments in black earth, -117.5
- 52. Nail head, black soil, -115
- 53. Ramah chert flake, -119
- 54. Green chert flake, -114
- 55. Iron nail, base of black earth, -100
- 56. Iron nail, base of black earth, -99

From now on we stopped cataloging

flakes but plotted them.

Almost all flakes are found at the base of the black earth just above sand.

- 57. Roof tile fragment, -121.5
- 58. Iron spike in middle of black earth, -98
- 59. Roof tile, -122
- 60. Inuit soapstone pot side fragment,

repair holes for lashings and last repairs made with nails, -107

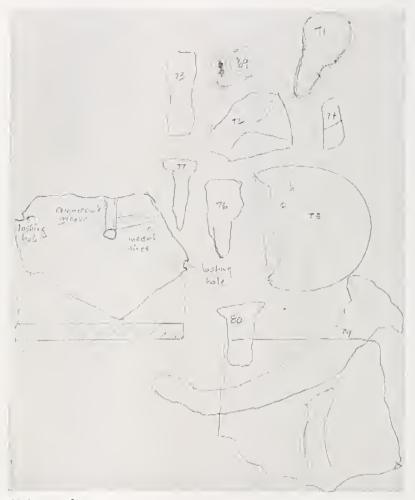
- 61. Iron nail in wood piece
- 62. Iron fragment -101
- 63. Iron fragment -104
- 64. Iron fragment -104
- 65. Iron fragment -104
- 66. Iron nail head -98
- 67. Iron nail -92, 9cm NfS, 41cm EfW
- 68. Iron nail head, -101, 70 SfN, 50 WfE



Figure 7.76 Grand Isle -2, EiBk -54, Artifact List and Sketches.



Figure 7.77 Grand Isle -2, H1, EiBk -54, Artifact List and Sketches.



- 69. Lump of iron, -99
- 70. Iron flake, -101
- 71. Iron nail, -102
- 72. Brick (?) fragment
- 73. Nail
- 74. Nail, two pieces
- 75. Round hammer stone, base of black earth
- 76. Nail, base of black earth
- 77. Nail, base of black earth
- 78. Soapstone pot fragment -125
- 79. Iron spike base of black earth, -106
- 80. Iron nail, -109

Figure 7.78 Grand Isle -2, EiBk -54, Artifact List and Sketches.



Figure 7.79 Grand Isle-2, H1: artifacts from 4N 6E.





Figure 7.81 Two sides of Inuit soapstone cooling vessel fragment from 4N8E.



Figure 7.82 Grand Isle-2, H1. Two sides of Inuit soapstone cooling vessel from 4N 8E SW quad, with iron nail repair.



Figure 7.83 Hammer or smoothing stone from 4N 8E.



Figure 7.84 Caribou bone fragments from hearth in Grand Isle-2, House 2 hearth.

Grand Plain -1 Grosswater 22 July 2017 N 51° 25.489′ W 57° 36.485′

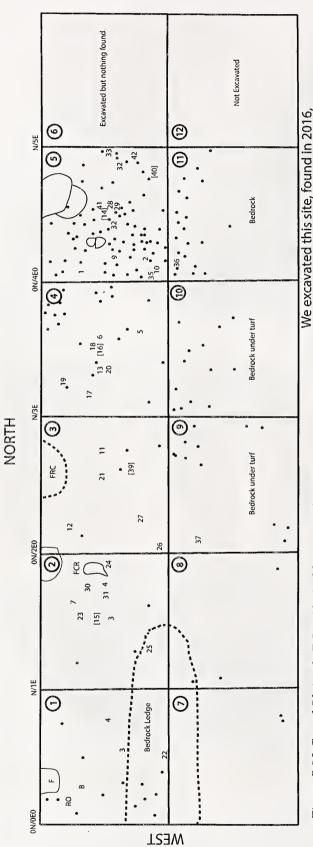


Figure 7.85 Grand Plain -1, EiBj -41, Field Notes and Map.

along a low rock ridge. No structure was found, but a in two days using a 2x5m trench aligned east to west

hearth pile containing fire cracked rocks (FCR) one

meter to the north of excavation between it and the including a spalled and fully ground burin-like tool! A good sample of Groswater tools were recovered path to north, would be interesting to excavate. as suggested by the number of end serapers it is possible this is a winter/cold season site, found (skin/ clother preparations?).

Figure 7.87 Grand Plain-1 Groswater site excavation, view east.

Figure 7.86 Grand Plain-1 Groswater

site excavation, view west.



Grand Plain -1 (Crossroads)

Borden No.: EiBj-41

N 51° 25.29.5'W 57° 36.295'

Map ref.: 12p/5

Culture: Groswater (Dorset)

Tentative Dating: 2400BP

Site Type/Seasonality: Small camp/ hearth

Site Location: Located on one of the many four wheeler tracks east of the Old Salmon Bay settlement area; on a low granite ledge outcrop.

Description of site: Found in 2016 and excavated 2.5 -2x2m units along the granite ledge. Did not excavate the hearth pile which has FCR, north of excavated area. A nice assemblage of Groswater tools included a couple of "box-based" endblades, microblades, burin-like tools, biface knives, and several end scrapers. No evidence of a structure or slabs inside a dwelling.

Areal Extent of Site: 10x15m

Raw Materials: Groswater chert

Nature of Soils/ Sediments/ Vegetation Cover: Lichen, blackberries

Collection Procedure(s): Excavation

Samples Taken: Yes, including charcoal. No bone or wood.

Potential for Further Work (# of Squares, Depth of Deposit?): Hearth would/ should be excavated.

Remarks (Including Prehistoric Geography, Topography, Site Exposures and Orientation): Perhaps a fall camp due to the numerous end scrapers.

Photos (Black and White): No

Color Slides: Yes

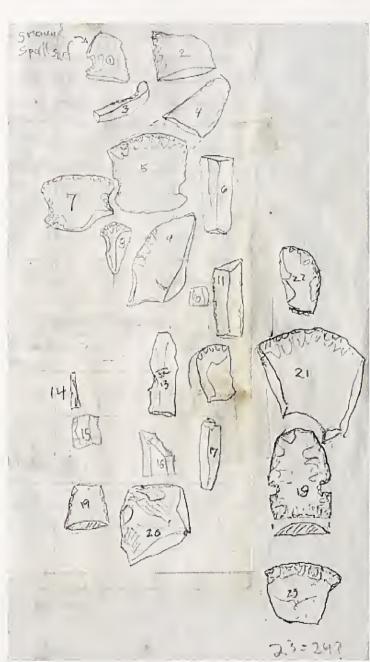
Surveyed By: 2017 Pitsiulak Smithsonian

Date: 22-23 July 2017



Figure 7.88 Grand Plain-1 (EiBj-41) Groswater Figure 7.89 Groswater artifacts from Grand Plain-1. artifacts.

Grand Plain -1 Groswater 22 July 2017 EiBj - 41



- 1. Burin-like tool/ broken chert, broken
- 2. Biface fragment, Ramah chert
- 3. Microblade knife, tan chert
- 4. Biface blade fragment, dark chert
- 5. End scraper, brown-tan chert
- 6. Microblade, tan chert
- 7. End scraper, tan gray
- 8. End scraper edge fragment, tan chert
- 9. Utilized flake, brown chert
- 10.Microblade mid-section, tan chert
- 11. Microblade, retouched edges on ventral surface, tan chert
- 12. End scraper fragment, tan chert
- 13. Microblade, green chert
- 14. Burin spall, found in collection with polished edge and face, utilized distal end
- 15. Microblade midsection, found in collection, dark chert
- 16. Microblade base section, found in collection, dark chert
- 17. Microblade, green chert
- 18. Box-based end blade, Ramah chert
- 19. Biface midsection, dark chert
- 20. Core fragment, utilized, dark chert
- 21. Core scrapper, dark chert
- 22. Biface, brown chert
- 23. Chalcedony end scraper

Figure 7. 90 Grand Plain -1, EiBj -41, Artifact List and Sketches.

Grand Plain -1 Groswater 22 July 2017 EiBj - 41



- 24. End scraper, dark chert
- 25. Microblade, distal end, Ramah chert
- 26. Biface, midsection, gray-green chert
- 27. Box-based harpoon point, dark chert
- 28. Microblade, gray-green chert
- 29. Microblade, gray green chert
- 30. Burin-like tool, ground on both sides and spalled, gray chert
- 31. Microblade midsection, Ramah chert
- 32. Microblade chert
- 33. Microblade, tan chert
- 34. Side-notched biface base, gray chert
- 35. Biface, distal end, gray chert
- 36. Axe blade fragment, green chert
- 37. Utilized flake, tan chert
- 38. Biface fragment, brown chert
- 39. Distal biface, brown chert
- 40. Microblade, gray brown chert
- 41. Microblade core, gray chert
- 42. Microblade, white gray chert
- 43. Microblade knife, gray chert

Figure 7.91 Grand Plain -1, EiBj -41, Artifact List and Sketches.

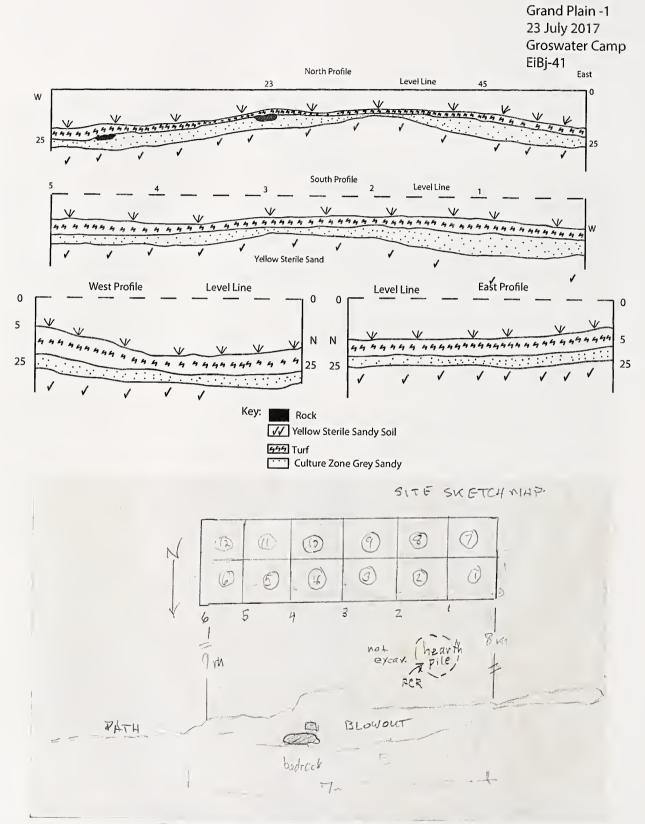


Figure 7.92 Grand Plain -1, EiBj -41, Profiles.

Site Name: Belles Amour Blowout Site H-1 Borden No.: 12P6

Height A.S.L.: Not Measured L-1 N 51° 27.720 W 57° 27.863' L-2 N 51° 27.667'W 57° 27.213'

Figure 7.93 Belles Amours Blowout,

Field Notes.

Culture: Groswater Paleoeskimo

Tentative Dating: 2400BP

Site Type: Hunting Camp

Site Location: This site was found by Alexandra Castellanos, a University of Notre Dame student intern with ASC. Located in the western corner of the largest blowout along the western shore of Belles Amour Harbor.

Description of Site: A small hand full of flakes and a few artifacts had eroded out from a buried ground surface and were scattered over an area of about 30 meters on the bottom of the blowout. One eroding location was identified and produced a charcoal sample. A few microblades were found and the smallest burin-like tool I've ever seen.

Description of Site: L-2: This site is a few hundred meters south of L-1 in a shallow blowout. No hearth nodes. Materials were very scattered.

Areal Extent of Site: Widely scattered in the blowout.

Raw Materials: Tan, gray, and "Groswater" chert.

Nature of Soils/ Sediments/ Vegetation Cover: Blowout. No vegetation. The buried humus level that the flakes appear to be coming from was about 2-3cm thick. We did not actually find flakes in this level when we scraped along it but this seemed to be the source and was forchaved.

Page 11 (continuation of form from page 10)

Collection Procedure(s): Surface collected

Samples Taken: Flakes, artifacts, charcoal

Potential for Further Work (# of Squares, Depth of Deposit?): No!

Remarks (Including Prehistoric Geography, Topography, Site Exposure and Orientation): This and the nearby L-2 site seem like shore side camps. No hearth rocks or slabs were present.

Photos (Black and White): No

Colored Slides: Yes

Surveyed By: Fitzhugh, Adams, Castellanos, Wang, and Marchman.

Date: 27 July 2017



big blowout at Belles Amour Harbor.

8 Figure 7.95 Groswater artifacts from Belles Amour Harbor terrace blowout L2. Chert cobble may indicate a local chert source.

Site Name: Isthmus Cove (Middle Bay)

Height A.S.L.: 1.5m

N 51° 27.690'W 57° 28.446'

Map ref.: 12 P/6

Culture: Inuit?

Tentative Dating: 19th C?

Site Type/ Seasonality: Tent Ring summer/ spring?

Site Location: Located in a grassy point on the south side of a land projection in the northeast corner of L'Anse de Isthmus.

Description of Site: At the head of a shallow by. Three partial tent rings showing through a thin black earth soil enriched with organic remains. Test pits excavated in each of the possible tent rings and in the midden area. Finds included seal and whale bone, white ceramics and blue ceramic. A likely sealing camp. Whale bone suggests Inuit, but not conclusively.

Areal Extent of Site: 20x30m

Raw Materials: Ceramics, seal and whale bone.

Nature of Soils/Sediments/ Vegetation Cover: Thin black soil and enriched midden vegetation,

Collection Procedure(s): Small samples from TP1

Samples Taken: see above

Potential for Further Work (#of squares, Depth of Deposit?): Could be interesting for Inuit or European history.

Remarks (Including Prehistoric Geography, Topography, Site Exposure and Orientation): No Basque tiles- but only a couple of TPs excavated.

Photos (Black and White): No

Color Slides: Yes

Surveyed By: Pitsiulak

Date: 27 July 2017



Figure 7.96 Isthmus Cove (Middle Bay), Field Notes.



Figure 7.97 Isthmus Bay, Middle Bay, tent rings in grassy field at shore.

Site Name: Saddle Island North

Culture: Inuit

Tentative dating: Historic+ 18th-19th Century

Site Location: North side of Saddle Island between western isthmus and the North Cape. Several black bear trails were seen in the bushy between L1 and L2.

Description of Site: Several TR loci were identified along this shore of which the most interesting was L1, a well-preserved and complete circular TR with a single hearth feature. Well covered with turf. L2 is a set of boulder caches and L3 a tent ring and cache in the middle of the beach west of the north point. A modern tent frame is in the middle of the long sandy beach and at the west end on the rocky share a complex of TRs and other features (L4). L5 has a TR and two standing slabs. NO Test pits were excavated and all sites appeared to be Inuit.

Collection Procedure(s): Noting collected.

Samples Taken: --

Potential for Further Work (# of squared, depth of deposit?): We did not survey the east-facing cove on the island. This can only be done when there is no sea on. Very few soil exposures in this area.

Color Slides: Yes.

Surveyed By: Fitzhugh and Pitsiulak team

Date: 9 August 2017

Figure 7.98 Saddle Island North 2017 2017 survey area with locations of LI-L5 sites.

1015

Ant

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Figure 7.99 Saddle Island North L1 Inuit circular tent ring. View to east.



Figure 7.100 Saddle Island North L2, 3 showing boulder pit structures. View to east.

Site Name: Mason Island East Terrace

Borden No.: GbBk-02 (L2)

Military Grid Ref.: N54 ° 13-341'W57 ° 49.208'

Culture: Inuit

Tentative Dating: 18th -19th Century

Site Type/Seasonality: Tent Ring and cache.

Site Location: This site was found in 2017 and is an extension of the TRs found east of the Wolfrey cabin on the south side entrance of the inlet to a tidal lagoon that would have served as a fine small harbor for small boats – totally protected from sea and wind.

Description of Site: Oval tent ring with heath features and to the north a small cache or other construction. Did not have time to document or explore thoroughly.

Areal Extent of Site: 20 Meters

Raw Materials: --

Nature of Soils/Sediments/Vegetation Cover: Tundra

Collection Procedures: --

Samples Taken: --

Potential for Further Work (# of Squares, Depth of Deposit?): Possibly a well-preserved early Inuit site.

Color Slides: Yes

Surveyed By: Fitzhugh Date: August 9, 2017

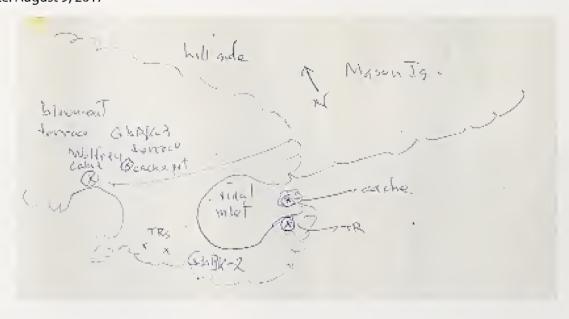


Figure 7.101 Mason Island East Terrace, GbBk -02 (L2), Field Notes.

Culture: Inuit

Tentative Dating: Inuit historic, 18th-19th Century

Site Type/Seasonality: Tent ring and grave cairn.

Site Location: On the northwest tip of Mason Island on the rocky point north of a small pond near the shore.

Description of Site: Levi Wolfrey told us about this site, including mention of an opened grave cairn. There seem to be several partially buried TBs (L2) near the grave. On the south side of the rocky promontory near the pond is a small niche in the ledge that has been made into a hut or shelter (L3). L2 TR area has a U-shaped hearth.

Areal Extent of Site: 50 Meters

Nature of Soils/Sediments/Vegetation Cover: Tundra

Collection Procedure(s): Nothing Collected

Samples Taken: --

Potential for Further Work (# of Squares, Depth of Deposit?): Minimal

Remarks (including prehistoric geography, topography, site exposure and orientation): Nothing could be seen in the opened

grave.

Color Slides: Yes

Surveyed By: Pitsiulak team

Date: 9 August 2017

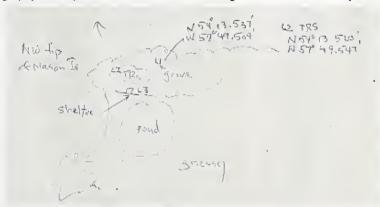


Figure 7.102 Mason Island West, Field Notes.



Figure 7.103 Mason Island North Inuit site with opened grave. View north.



Figure 7. 104 Mason Island North, Inuit tent ring and U-shaped hearth.

Military Grid Ref.: N54 ° 15.782' E57 ° 51.082

Culture: Indian (Unknown)

Radiocarbon date: 1246-1302 AD cal. (Beta 481306)

Site Type/ Seasonality: Cache pit for storing food?

Site Location: In the gravel blowout on the south side of Mason Island about 100 meters northeast of Levi Wolfrey and Ruth Pottle's cabin and a few meters east of our 2015 excavation of a circular stone hearth base. – [We found Inuit TRs on the east side of the lagoon/inlet east of Wolfrey's cabin. An extension of GbBk-02.]

Description of Site: This feature presented as a 20cm depression in a slightly mounded soil eminency about 10cm higher than the surrounding lichen-covered gravel surface of a large blown-out terrace. The mounded soil had been stabilized by vegetation and a surrounding ring of flat slabs arranged with their long axes toward the central pit – making the feature appear carefully arranged, perhaps like a human burial. Black berry bushes were growing in the pit. We excavated to see what the feature might be, thinking it was related to the stemmed point we found on the surface nearby.

Areal Extent of Site: The mound was 4 meters in diameter.

Raw Materials: Two flakes were found in the pit - one white quartzite and one small Ramah chert. Both probably inadvertent.

Nature of Soils/ Sediments/ Vegetation Cover: Inclusions from surrounding terrace blown out lag deposit with patches of berry plants, mostly blackberry (empetrum).

Collection Procedure(s): Excavated the central pit area but not all the outlying areas with rocks as they were on sterile soil.

Samples Taken: A charcoal sample was found at the bottom of the pit (sample B, -67cm). Sample C was from wood at the bottom of pit -67. Sample G was saved and came from the piece of wood spanning the bottom of the pit. Peat Sample A was not saved because we had better samples (wood, charcoal) for dating.

Remarks (including prehistoric geography, topography, site exposure and orientation): The excavation found alternating lenses of turf/ peat and sand extending from the modern blackberry plants on the surface. This lensing resulted from a long process of sand in-filling and vegetation growth, so the pit must have been left open for a long time to accumulate these lenses. The wood spanning the bottom had sagged down in the center as something inside rotted. There was definite structure to the feature as slabs and large flat rocks linked the pit walls and extended down to its bottom. There was no horizontal slab at the bottom of the pit- only sterile sand. - There could have been a wood/ plank or hide floor that did not survive. The radial arrangement of rocks outside the pit seemed odd for rocks removed from on top of cache but they may have just been placed in that arrangement to hold down a skin or birch bark cover. There were no artifact or bones –human or animal– in the pit. The feature seems to have been specifically constructed cache pit for storing food.

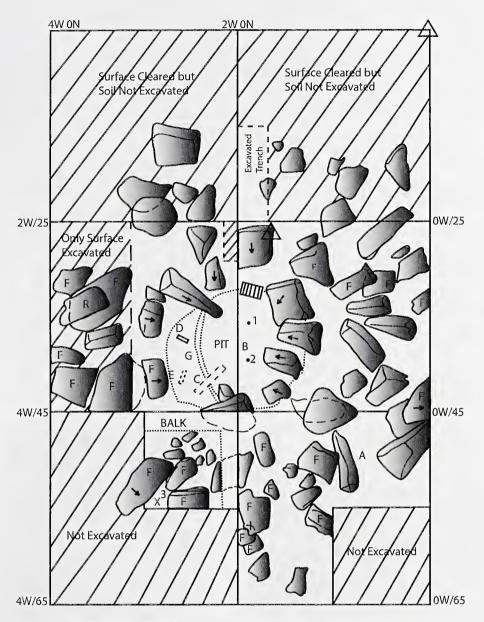
Color Slides: Yes

Surveyed By: Fitzhugh, Marchman, Castellanos, Wang

Date: 9 August 2017



Figure 7.105 Mason Island Cache after excavation.



- 1. RC Flake in brown sand
- 2. Quartzite flake in brown sand -46.5cm (Cortext flake)
- 3. Quartzite flake in gray sand -10cm
- A Organic (peat) sample beneath slab, -4cm from surface
- B Charcoal, -67cm at base of pit
- C Wood in pit, -50cm

...-63

- Thin stone slab, upright, -54cm top; -74cm bottom
- E . Vertical, 1cm thick, slab, -45cm top; -65cm bottom
- Piece of wook spanning the bottom of the pit, ends higher than middle.



Key:

- Ramah Chert flake
- X Quartzite flake

A Datum Rock

Most upper rocks in gray soil level.

Figure 7.106 Mason Island Cache Pit, GbBk -03, Field Notes.

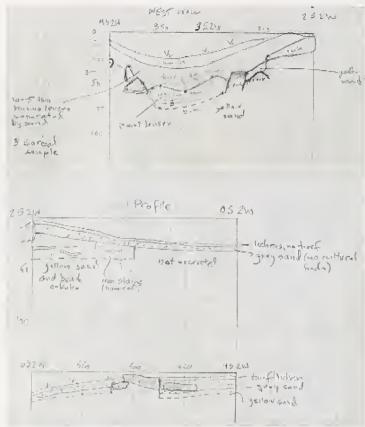


Figure 7.107 Mason Island Cache Pit, Features Profiles.



Figure 7.108 Mason Island cache pit before excavation. View south.



Figure 7.109 Wood preserved at base of Mason Island cache.



Figure 7.110 Cache pit interior showing slab lining.

Richard Jordan and his Eskimo Island team surveyed Snooks Cove in the early 1970's and located two Inuit winter dwellings, one of which (House 2) he excavated and recovered lots of Inuit material (see RHJ field notes and report in Susan Kaplan's thesis). Brian Pritchard of MUN excavated House 1 and part of House 2 until he realized Jordan had excavated it. Our surveys identified two gravel - mounded structures associated with the post and excavated test pits as below.

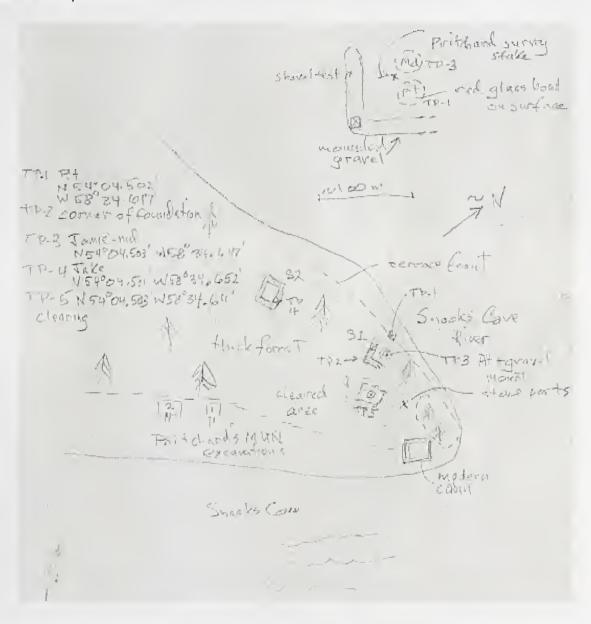


Figure 7.111 Snooks Cove -1, GaBp -7, Field Notes.



Figure 7.112 Snooks Cove-1 Hunt&Henley trading post trash pit.



Figure 7.113 Test pit finds from 19th century trash midden.



Figure 7.114 Structure 1 sod foundation wall of new H&H post building adjacent to trash pit and riverside midden.



Figure 7.115 Test pit 4 in Structure 2, in thick woods west of S1.



Figure 7.116 Clearing between S1, S2 and the modern cabin at the shore, the location of TP5. View east.



Figure 7.117 Modern fishing cabin at Snooks Cove, the site of the Hunt and Henley post.



Figure 7.118 Caravalla Cove Structure 1 sod foundation and midden, with stone inuksuk on the point to reard. View south.



Figure 7.120 Finds from S1 test pit.



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Figure 7.119 Caravalla Cove River Point Medow, Field Notes.



Figure 7.121 Caravalla Cove Test pit 2, view south.

Figure 7.122 Annular ware cup reassembled from Caravalla Cove TP2.

We found a small site on the point the SJIs tickle a hundred meters north of the narrows. Two patches of "midden" vegetation are found in a small area of grass between the shore and cliff. Test pits in the two patches produced a clay pipe stem (S1, T.P.1). Structure 2 T.P. produced a fragment of pipe bowl. S1 also had the rotted piece of wood that was probably part of a structure.

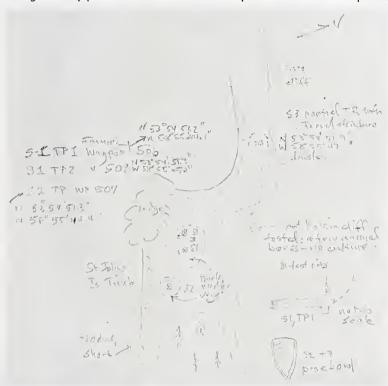


Figure 7.123 St. John Island Tickle -1, Field Notes.



Figure 7.124 St. John Island Tickle, L1 contains two patches of midden and structures.

Iron nails found by Jacob Marchman on a small, narrow cobble beach 50 meters NW of the small grassy point (north side of the tickle and west of the narrows). Only part of the outer tent ring is present. There is a V-shaped inner structure that separates the working area from the rear sleeping area. Surface collected only. (In the ledge east of site there is a sinkhole worn into the rock/rock cliff immediately behind site.)



Figure 7.125 St. John Island Tickle -1, Field Notes.



Figure 7.126 Jake recording St. John Tickle L2 tent ring with iron spikes. Note the small crevass in rock face at upper left. View to southeast.



Figure 7.127 Iron spikes from St. John Tickle L2.

Surveyed the sandy, low tombolo beach on a windy stormy day. Found the grassy/mossy surface to be littered with surface rocks that are probably parts of tent rings. At the north end of the spit there is modern occupation - a recent hearth and a foundation of wood sticks that must have had a small building. Bed spring and old engine (outboard) foot in the grass nearby. Several potential tent rings on the northwest part of the beach, and more in the central area of the beach. The clearest structure is a rectangular T.R. about 4x8m that looks like an Inuit 18th-C summer camp. The southern end may have been reconstructed in a circular pattern. Likely hearth rocks in the northern end of the structure. Weather was too bad to test. Took photos. Most rocks were deeply embedded in the turf.

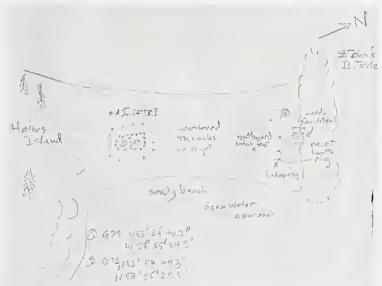


Figure 7.128 St. John Island Tickle -2, Field Notes.



Figure 7.129 St. John Tickle 2. A low grassy tombolo with many site features, including a circular Inuit tent ring seen here. View to south from north end.



Figure 7.130 North view of St. John Tickle-2 from Haines Island hillside to the south. Circular Inuit tent ring with outlying hold-down rocks in the foreground.

Culture:Labrador Inuit (?)

Site Type/ Seasonality: Boulder beach tent rings.

Site Location: Sites are on a large area of boulder beaches about 2-3 miles north of English River, opposite the east side of St. John's Island: See GPS readings on sketch map.

Description of Site: We recorded three tent ring structure on the boulder beaches - two on the lower beach hives and 8-3 on the middle of the series. S1 is an oval T.R. with two lateral internal areas and a hearth feature in the center. S2 is a round T.R. no notable features. S3 is a small square T.R. (4x4m) with wood poles and an 8x8 inch inter nearby. An old weathered bone (seal phalange?) was among the rocks inside the T.R., but the wood remains seemed much more recent. We found no cultural features on any of the high beaches- no maritime Archaic longhouses or Dorset signs.

Raw Materials: Nothing collected except a plastic duck decoy from the land wash which we presented to Perry Colbourne.

Nature of Soils/ Sediments/ Vegetation Cover: None.

Collection Procedure(s): None.

Samples Taken: None.

Potential For Further Work (# of Squares, Depth of Deposit?): Negligible.

Remarks (including prehistoric geography, topography, site exposure and orientation): A bit surprised not to find more sites on such a large exposed piece of territory. All activity seemed likely to be Inuit. No large cache pits like you see on the outer coast probably because harp seals do not come into Lake Melville - only ring seals here generally. You do not catch many ring seals at one time and don't need to cache them as you do with harps- especially when netting them.

Color Slides: Yes.

Surveyed By: J. Brake, W. Fitzhugh and 2017 Pitsiulak crew.

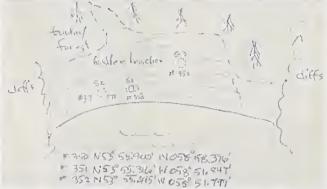


Figure 7.131 English River North Shore -1, Field Notes.



Figure 7.132 Rock structures in the northernmost boulder beach north of English river. View to south.

Culture: Labrador Inuit

Tentative Dating: 18/1900 C.

Site Type/ Seasonality: Winter sod house.

Site Location: Located on the northern tip of St. J. Is. on a small rocky promontory. The site lies on the eastern side of the promontory about halfway down from the crest of the emerged beach. A cairn has been built on the rocky ridge on the north side of the promontory.

Description of Site: A classic Labrador Inuit winter house rectangular shape with lateral sleeping platforms, a central work area and a 3-4 meter long entrance passageway. Rocky buttresses are on either side of the doorway. The house is completely sodded over but many wall rocks are showing. Test pit 1 was in the inner part of the entryway and produced seal and other bones, a tiny white seed bead, and a lead (?) ornament in the shape of a person (on a Dorset type harpoon). TP2 was in the northern sleeping platform and contained masses of birch bark below vegetation and peat. Below the bark was wood and black soil and then sterile sand.

Areal Extent of Site: 10x10 meters.

Raw Materials: N/A

Nature of Soils/ Sediments/ Vegetation Cover: Tundra vegetation over peat on top of cultural level.

Collection Procedure(s): Two test pit excavated hastily as boats were standing off shore waiting.

Samples Taken: Birch bark, bones, bead, amulet/ornament.

Potential For Further Work (# of Squares, Depth of Deposit?): Excellent.

Remarks (including prehistoric geography, topography, site exposure and orientation): This is a new find- an Inuit winter settlement and the western-most such site known, far west of Eskimo Island and near the western limit of Inuit activities in Hamilton Inlet. The north end of St. J. Is. at this location may have open water all winter due to currents. The little lead amulet/ornament is a remarkable find from a small test pit. Test Pit 1 had cultural deposits on top of a slab pavement.

Color Slides: Yes.

Surveyed By: Jamie Brake, Fitzhugh and Pitsiulak 2017 crew.



Figure 7.133 Jamie's St. John Island -1 Inuite house from above.



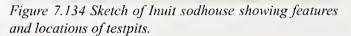




Figure 7.135 New Inuit winter house found on St. John Island's northern point.

Culture: Labrador Inuit (likely)
Tentative Dating: 2-300 yrs old

Site Type/ Seasonality: Boulder Beach Tent Rings

Site Location: West side of St. John's Island north of the Hayues Island - St. John's Island Tickle.

Description of Site: A large series of raised boulder beaches about 50-75 meters wide. A large enclosure built of driftwood (S1) was just above the modern beach in the SW part of the beach. The tent ring inside may or may not predate the barricade. S2 and S3 were round then rings on a slightly higher beach (Jamie Brake's Way point 2 and 3). S4 is a partly disassembled fox trapthere for 17/18th C. S5 is an oval TR west of the vegetation patch. S6 is a rock cairn that may be a burial (Inuit) for a small person. There is a rock pile on one of the highest beaches.

Areal Extent of Site: 50x50 meters.

Raw Materials: Nothing seen or collected.

Nature of Soils/Sediments/Vegetation Cover: Boulders!

Collection Procedure(s): Nothing. Samples Taken: None - no excavation.

Potential For Further Work (# of Squares, Depth of Deposit?): Not that promising!

Remarks (including prehistoric geography, topography, site exposure and orientation): Probably seal hunting camps. S1 drift-wood barricade may result from camping in a storm and building a windbreaker. Fox trap means pre-and 19th C before metal traps were common and it also means an Inuit winter house somewhere in the vicinity. This trap might have been maintained by the Inuit living in the St. John's Island -1 winter house since that is the only one known on the island.

Photos: Black and White: Color.

Color Slides: Yes.

Surveyed By: Pitsiulak team.



Figure 7.136 Raised boulder beach on west side of St. John Island. Recent improvised structure of driftwood and several boulder features were recorded, but nothing diagnostic. View north.

St. John Island-2 boulder beach



Culture: likely Labrador Inuit

Tentative Dating: Labrador Inuit (?) 18/19th C.

Site Type/ Seasonality: Tent Rings

Site Location: A small low island on 100 meters long in between Bear Island and Indian Island but almost connected to Indian Island. Tent rings in two groups at east and west wend of itself.

Description of Site: 4-5 tent rings in each group, but most are indistinct and many have been cannibalized for the latest ones. A couple in each group are almost intact and most seemed circular, some with hearth features. All are covered in black/blue partridgeberry plants- no exposures. We did not test any. Lots of geese, ducks and seals in this area.

Areal Extent of Site: 75-100m.

Raw Materials: N/A.

Nature of Soils/ Sediments/ Vegetation Cover: Tundra plants.

Collection Procedure(s): None.

Samples Taken: None - None.

Potential For Further Work (# of Squares, Depth of Deposit?): Not a high priority!

Remarks (including prehistoric geography, topography, site exposure and orientation): The site is perhaps one of the western most Inuit subsistence area, and for settlers from Rigolet as well. Tent rings look like 19/20th century styles.

Color Slides: Yes.

Date: 16 August 2017

Surveyed By: Jamie Brake, W. Fitzhugh and Pitsiulak crew.

Figure 7.138 Indian Island, Field Notes.

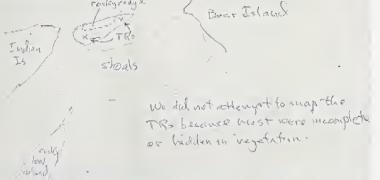




Figure 7.139 Indian Island tent rings at southwest end of this small islet. View west.

Culture:Labrador Inuit/ Settler?

Tentative Dating: Recent/ Historic

Site Type/ Seasonality: Tent Rings - goose/ duck/ seal hunting

Site Location: Andy Island is a small island south of Burnt Head and west of Indian and Bear Islands. A few (2-3) indistinct tent rings are seen in the saddle between the higher hills at the north and south ends of the island.

Description of Site: 3 acres of cultural activity - L-1 is a TR on the south side of the saddle - test pit was negative. L-2 is a cairn or stone feature at the south end of the vegetated beach deposit, L3 is a probable TR on the north side of saddle where some cut wood has been stored.

Areal Extent of Site: Small TR areas.

Raw Materials: N/A.

Nature of Soils/Sediments/Vegetation Cover: Tundra.

Collection Procedure(s): None.

Samples Taken: None - None.

Potential For Further Work (# of Squares, Depth of Deposit?): Negligible.

Remarks (including prehistoric geography, topography, site exposure and orientation): Difficult to determine the types of TR's since they are not well exposed - but likely Labrador - Inuit / settler.

Surveyed By: Jamie Brake, W. Fitzhugh and Pitsiulak team.

Date: 16 August 2017

Figure 7.140 Andy Island, Field Notes.





Figure 7.141 Andy Island site locales. View to north.

Culture: Recent - Unknown ID

Tentative Dating: Recent

Site Type/ Seasonality: Tent camps / rings

Site Location: Green Island sits in the middle of Lake Melville's eastern end and is made of soft red- purple sandstone. We walked around the entire island at various beach levels but did not survey the highest beaches at the top of the island. The entire island from shore to top os all fossil beach lines.

Description of Site: Despite the ideal setting for archaeological sites we found only four and all were recent. One was a tent ring on the extreme NW shore on the first prominent terrace. Lots of modern wood scattered around it. The second was a cache on the SW corner on a rocky ridge above a seal hunting camp with seal skin stretchers and notched tin stove pegs and a few TR rocks. The third was a hearth and slab rocks on the 1st terrace, east of the sealing camp. This looked old because of the use of slabs instead of round rocks. The hearth did not have charcoal. This site had a Dorset look because of the slabs. No shore flakes/ tools seen. The fourth is a tent ring on the extreme east end of the island (Jake mapped it) on the 18 degree terrace.

Raw Materials: Nothing found.

Nature of Soils/ Sediments/ Vegetation Cover: Spruce in patches on top of island, but most is covered in tundra, moss and spongy peat.

Collection Procedure(s): Nothing.

Samples Taken: None - None.

Potential For Further Work (# of Squares, Depth of Deposit?): None.

Remarks (including prehistoric geography, topography, site exposure and orientation): This island had enough exposures and tundra cover to see structures - but had few, and all but #3 were recent. The island is far out from shore and may only be used for goose hunting (we saw flocks) and spring seal hunting. Only transient camps at best. What a pity such beautiful beach ridges and no long history of archaeological site to be found on them!

Color Slides: Yes

Surveyed By: Jamie Brake, W. Fitzhugh and 2017 Pitsiulak team.



Figure 7.142 Green Island, Field Notes.



Figure 7.143 Green Island L3 slab hearth on south side of the island. Potentially Groswater, but tested, but nothing found.



Figure 7.144 Green Island -4, Field Notes.



Figure 7.145 Green Island L4 tent ring being recorded by Jake Marchman. View southeast.

We spent an hour or two at the Etagaulet Point site (see Fitzhugh report of 1986 visit published in 1989 Newfoundland Annual report series). In out 1986 and 1968 visits there was lots of cultural activity visible, but today's visit was frustrating because much of the earlier evidence was buried in ground vegetation and forest advance. We found three areas where tent rings were visible and tested positive. The central area of the site was too covered with brush and vegetation to see the ground.



Figure 7.146 Etagaulet Point, Field Notes.



Figure 7.147 Etagaulet Point. View to northwest.



Figure 7.148 Etagaulet Point L1 tent ring with ceramics and a a glass seed bead. View northwest.

Culture: Unknown

Tentative Dating:?

Site Type/ Seasonality: Circular boulder pavements - hearth base?

Site Location: In 2015 we located 3 circular pavements like those found on Indian Island in Groswater Bay, on the east shore of Punchbowl Harbor on the rocky ridge extend from shore Inland just north-east of the first two abandoned fishermen's cabins. This year we found a forth about 100 meters to the south, just before (north) of the next cabin.

Description of Site: Features 1, 2, and 3 are on exposed area of the ridge, #4 was in a declivity and more protected. F1 and F2 are about 1 meter in diameter; F3 was about 1.4m and much larger than the others. F1-3 were excavated and produced no cultural material in certain context. No artifacts, no charcoal, no fire-cracked rock, no bones. All were completely covered with lichen and embedded in the soil. Definitely no recent constructions related to the fishing harbor. Always made with cobbles and rounded rocks, not slabs.

Raw Materials: N/A

Nature of Soils/ Sediments/ Vegetation Cover: Tundra plants.

Collection Procedure(s): None.

Samples Taken: None - None.

Potential For Further Work (# of Squares, Depth of Deposit?): Nothing more than the excavations we made.

Remarks (including prehistoric geography, topography, site exposure and orientation): These features are mysterious! They appear similar to the large hearth floors of the Saunders Complex north of Hamilton Inlet, but those are always in sandy areas, have firecracker rock, and lots of associated artifacts and flakes. These are definitely different types of features and settings.

If there were fishermen's shellfish roasting hearth etc they would be filled with charcoal nails, broken glass, etc.

Color Slides: Yes

Surveyed By: Fitzhugh and Marchman

Date: 21 August 2017 Figure 7.149 Punchbowl

Harbor Cobbe Pavements, Field Notes.



Figure 7.150 Punchbowl southwest shore cobble hearth in foreground before clearing vegetation growth.

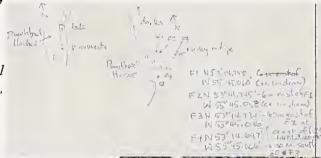




Figure 7.151 Punchbowl cobble hearth after clearing vegetation and inner rocks.

Figure 7.152 Another of the several cobble hearths found along the eastern shore of Punch-bowl barbor

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9 - Hart Chalet (EiBh-47) Artifact Catalog

Comment										CIANI, Louis, Les monnaiss royales françaises de Hugues Capet à Louis XVI, 1925, p.
Саш								44		CLANI, Louis, Les monneles royales tençales de Hugues Capet à Louis XVI, 1926, p.
Decamplion	trangular fragment, arange-red pasts, but bayely blackened surface and pasts	ibin, cuned fragment	thin, curved fragmant	large nall with slightly fattened to	one large nail with barge head but without to, one head fragment, one stem fragment aith brace of head, one iong stem fragment with beveled to.	four medium-sized nalis almost complete, this missing, two sizen fragments	small, round fron pythe	large, cylindrical vessel, fragment with part of a fiel base with slightly fishing lower wal, orange- red, hard paste with reditish gray outer surface.	large, cyfindhol vessel, wal tregment, orange-red, hard poste- with reddish grey outer surface	French Double burnols, inscription on brain, = LVO XIII O G FR JETJ NAV REEX + (Louis XIII, KNg of France and Navane by the Greec of God), on revers: + DOVBLE TOVRIOUS 1643 +; central integers hidden by contradin, but bust turned in the first on fravers can be shertified.
Measurements	5,4 x 3,7 x 1,8 cm	2,6 x 1,3 x 0,1 cm	2,4 x 1,5 x 0,1 cm	Length: 21,9 cm	Lengths: 13,5 cm; 12,5 cm (flattened ttp); 7,3 cm; 5,5 cm	Lengths: max. 10,3 cm	Olameter: 1,5 å 1,7 cm	Base dameter. 16,0 cm; hauteur: 11,5 cm; thickness: 0,5 cm	5,9 x 7,8 x 0,5 cm	Obmeter: 1,9 cm; thchress: < 0,1 cm
Fibs with								EBBh-47: 929	518h-47: 928	
Condition	Fragmentary	Fragmentary	Fragmentary	Complete	Fragmentary	Fragmentary	Campiete	Fragmentary EBBh-47; 929	Fragmentary (SISh-47: 929	Camplebe
Cultural	Historical, Basque, 16th Certury	Historical	Historical	Historical	4 Historical	6 Historical	1 Historical	Historical, French, 16th to 18th Century	Historical, French, 16th to 18th Certury	Heforical, Fench, 1643
ab	-	-	-	-	भ	மு	-	-	**	-
Material / Type	Coarse Earthenware	Glade, Brited green	Glass, Brited green	Iron, wrought	eca, wedught	iren, wrought	Iron Pyrte	Normandy Stanesare	Normandy Stringers	Copper Aley
Object Name	Roof Tile	Veissi Fragment	Vessel Fragment	Spike	Nati	Nail	Inn Pyth	Slonge Jar	Stonage Jar	ប្រក
Soil	इत्तर इत्तर्व	gray layer	ight sand (below charcost)	top layer of humas	gray layer (3k), gray sand (1x)	mixed pas sand	gray sand Iran Pyribe	derk mixed sand layer	dark mixed sand layer	dark send Coln
Depth	-121 bi	-121	141	36°	-1227-1237 -1207-127	-127 / -135 / -136 / -127 / -130	-128 bi	-109 K	-109 DE	-106 cm
Provenience	House 3, BNIZEW, NE CARLO	3 House 3, BN/26IV, NE Guad	2 House 3, BNIZEW, NE Guad	House 3, BN26W, NE Cuso	S,6,7, 10 House 3, BNIZEW, NE Guad	Ä	6 House 3, 10N26W, NE Guad	6 House 3, 12N/22W, NW Quad	6 Hause 3, 12N/22W, NIV Quad	2 House 3, 12M22W, NW Quad
Flatd Number	4	m	N	ф III	5,6,7,10	1, 2, 3, 4, 5 House 3, 10N/26IV Quad	w.	w	u)	Н
-	EBh-47:922	E18h-47:923	EIBh-47:924	EIBh-47:991	EBh-47:925	EIBh-47:926	EBh-47:937	EBh-47:928	EBh-47.929	E18h-47:936

Comment	stoa-drying									slow-dr/ing
Description	two pitchs of a bone kinde handle, stow-drying assembled with eight from nivels, one of which is missing. The handle is rectangular with a nunded enlarged end and flatting at the opticate and which is handle opticate and which is handle of and shows a nechaged markin soft for the blade which is also missing. Four includes which is also missing, from eighter, the other four form a square rear the blade weetflow. The distallend of one of the pitch of the pit	top trant beginnent of a holy water bestin? Pragment with consistance border, yellow (floral?) decoration on trantal face, best well missing but flori, 19th buff peste.	Asp from tragment of a holy water bash? Fragment with conducting bounds, yellow and late (floual?) decreasion on furnial face, back wat missing, light buripasise.	top front fragment of a holy water basin? Fragment with ondustring borner, thus (foreit?) decoration on frontial face, back wall missing, light built posite.	fragment of a holy water beaut? Fragment with condusting surface, undecorated write place with amail needs hole, opposite side masting, light built posts.	fragment of a holy water basin? Fragment with ordulating surface, undesociated wite gisze, opposite side missing, light but pass.	thin, curved trapment	mesto-proximal hagment of a side-notated arms point with a straight base, one edge is equally broken off		complete tooth plenced by han algored hotes in the center area that are connected with each other on the instite, which is largely holive due to post-depositional not growth
Meacurement	14,7 x 3,1 x 1,5 x 0,5 cm	cm cm cm	2,0 x 2,1 x 0,1 cm	1,5 x 1,0 x B,2 cm	0,9 x 1,5 x 0,1 CM	1,1 x 0,7 x 0,1 cm	1,4 x 2,0 x 0,1 cm	Length: 2,7 cm; width: 2,0 cm; thickness: 0,6 cm; artight: 4,7 g	1,8 x 2,5 x 0,8 cm; weight: 3,6 g	6,3 ± 1,9 ± 1,3 CM
Fibs with		EBR-47: 931	933 933		934	8811-47: 933				
Condition	Complete	Fragmentary	Fragmentary (BBh-47)	Figurenary	Fragmentary	Fragmentary EIBh-47: 933	Fragmentary	Fragmentary	Fragmentary	Complete
Cuttural	Hekaral?	Æ	Historical, French, 17th Century	Historical, French, 17th Century	.₽	Historical, French, 17th Certury	Historical	Groswater Paleocakim o	Prehistoric, Indian?	arut?
8		-	-	т-	q-	y**	apos	*	·	
Material / Type	Bone and From	Fatance, French	Fatence, French	Fatance, French	Formation ()	Figure, First	Glass, Ented green	Ramah Ohert	Cherl, gray- white	Bone, Bear Tooth?
Object Name	Knir Handle	Holy Water Basin?	Hob Water Basin?	Holy Water Basin?	Hab Water Basin?	Holy Water Basin?	Vessel Fragment	Projectie Point		Togole Handle?
Soll	fired miked sand	gray sand	gray sand	ក្នុងខេត្ត ស្វាស្ត្	pues And	gray sand		mixed pest and gray sand	pues seud	mixed pest / dark sand leyer
Depth	25	411k	411k	-11k	711 M	-11b		3	nja	44 44
Proventance	House 3, 12N22W, NW Quad	House 3, 12N/22N, 8W Gued	House 3, 12N/22W, 8W Guad	House 3, 12N/22IV, 8W Cyad	House 3, IZNIZZIV, 8W Chrisd	15 or 16 House 3, 12N/22W, BW Gusd	House 3, 12N/22IV, 9IV, Cusd		House 3, 12N/22W, 8W Gusd	
Flatd Number		15 or 16	15 or 16	15 or 16	15 or 16	15 or 16	11 or 14	40	1 -	co.
Artifaot no.	876:	BBM47:930	EB1-47:931	EBh-47:932	EBh-47:933	EBh-47:934	EBh-47:935	EBh-47:938	EB1-47:939	E8h-47:949

Artifact no. Finitis Number	Preveniance	Depth	Hog	Object Name	Material /	di di	Cultural	Condition	File with	Mescurements	Description	Comment
1, 3, 4, 5, 9, 13	House 3, 3 12N/22W, NW-3W Quad			Z R R	Iron, wanught	60	Historical	Fragmentary		Lengths: mar. 5,7 cm	small nati fragments, six with freeds and two stem fragments, two caught in cristalized wood	
EBr-47:940	House 3, 12NG2W, NW-BW Quad			Flake	Formath	14	Prehistoric, Indian?	Fragmentary		3,2 x 2,1 x 0,6 cm / 0,9 x 0,8 x 0,1 cm; weights: 0,1 and 3,9 g	large fragment and small flake	Alle
5Bh-47:941	House 3, 12N/22W, NW-8W Qued			Plake	Quartate, milky white	7"	Prehistoric, Indian?	Сатресе		3,6 # 2,4 # 0,8 cm; # e/g/# 5,6 g	large dake	ΛIF
EBh-47:942	House 3, 12N/23W, NW-8W Quad			Flake	Questate, brown	~	Prehistanc, Inclan?	Fragmentary		1,9 x 1,3 x 0,3 cm; weight 0,5 g	small fish	ΛIE
EBh-47:943	House 3. 12N/22W. NW-8W Quad			TI CAN	Quartelle, purple	-	Prehistoric, Indian?	Сатресе		2,5 x 2,9 x 0,5 cm; weight 3,3 g	large dake	Alle
E18h-47:944	House 3, 12Ni22W, NIV-BIN Quad			Flake	Chert, Ilgitt 9750', Newfounden 47	7	Prehistoric, Inclian?	1 complete, 1 fragmentary		1,5 x 2,2 x 0,3 cm / 1,6 x 1,0 x 0,2 cm; weight: 0,2 and 0,5 g	smail fighes	ABe
EBh-47:945	House 3, 12N/22W, NW-8W Quad			Flake	Chert, medium gray	4-	Prehistant, Indian?	Complete		3,2 m 1,9 m 0,5 cm; m 2/g/tt 3,1 g	large flake	Alle
EIBh-47:946	House 3, 12N/22W, NW-8W Quad			Flace	Sillstone, light gray, Brador	-	Prehistoric, Indian?	Сатребе		3,7 x 5,0 x 0,9 cm; weight: 9,2 g	very large flake	
	House 3, 12N/22W, NW-SW Quad			Flake	Obert or Film, mothed gray	-	Prehistand, Indian?	Complete		1,3 x 0,9 x 0,3 cm; weight 0,1 g	small flake	Ale
E18h-47:950	House 3, 12N/26W		************	70 Tel	Ramah Cheri	4	Prehistoric, Inclan?	2 complete, 2 fragmentssy		max. 2,4 x 2,2 x 0,4 cm; weight: 1,5 g / 1,1 g / 0,4 9 / 0.3 g	eags) (rous a) unpeu	
EBh-47:951	House 3, 12N/26IV			Flake	Questafe, blackened		Prehistoric, Inclan?	Complete		1,5 x 1,4 x 0,1 cm; weight: 0,3 g	small Sale	
EBh-47:952	House 3, 12N/26W			Flate	Quartz, white	-	Prehistoric, Indian?	Fragmentary		1,5 x 1,9 x 0,5 cm; aeigitt 1,4 g	smoll hake	
	House 3, 12N/26W			Flake	Quartz, white	-	Prehistoric, Inclan?	Fragmentary		1,4 x 1,2 x 0,4 c cm; weight: 0,4 c	small fragment	
	House 3. 12N/26W			Fishe	Chert, dark	da	Prehistaric, Inclini?	Сатрые		4,4 m 2,0 m 0,5 cm; weight 3,6 g	large flabe	
88h-47:955	House 3, 12N/26W			Flake	Chert, dark and light gray	-	Prehistoric, Inclini	Complete		2,6 x 2,7 x 0,3 cm; meight: 1,7 g	modum flake	
EIBh-47:956	House 3, 12N/26W			F State	Chert, bluish gray	da.	Prehistoric, Indian?	Camplete		3,2 x 1,9 x 0,2 cm; weight 1,2 g	medium flake	
	House 3, 12N/26W			748F	Chert, green- gray	N	Prehistoric, Inclan?	1 complete, 1 fragmentary		2,0 x 2,6 x 0,4 cm f 1,6 x 1,2 x 0,2 cm; weight: 1,0 o f 0,3 o	small and med lum fight	
EBh-47:958	House 3, 12N/26W			Flake	Chen, white	-	Prehistoric, Inclini?	Сощребе		1,4 x 0,8 x 0,3 cm; weight: 0,2 g	small dake	
EBh-47:959	House 3, 12N/26W			Flake	Chert, cream-white	-	Prehistanc, Indian?	Fragmentary		1,4 x 1,1 x 0,3 cm; weight 0,3 g	<u>អាចពី កីខាខ</u>	

House 3,	Artitaol no.	Fleid	Proventence	Depth	a cuit	Ottjeot Name	Maborial / C	A)	Cultural	Condition	Fife with	Measurements	Description	Comment
House 3	EBh-47:960		House 3,			Flake	Chert, blue-	7	Prefisitation,	Fragmentary		1,2x1,4x0,2	small fishe	
Fight 20 Figh 20 Fight 20 Fight 20 Figh 2	EBh-47:951		House 3.			Flake or	Chert, Due-		Prehistoric,	Camplete		1,6 x 0,7 x 0,1	small, ekingshed and rectangular	
Hollier 3, Hol			12M2BW			Microbiate?	Marke.		molan?			cm/1,2x0,8x 0,1cm; weight: 0,20/0,10	the state of the s	
House 3, Flate Chert, gray Fleshedt. Chert, gray Chert, gray Fleshedt. Chert, gray Chert	EBh-47:962		House 3, 12N/26W			Flake	Chert, light gray	4-	Pretistado, Indian?	Damplete		1,2 x 1,8 x 0,2 cm; melaht 0,3 g	अत्यक्ष देवाह	
House 3. House 3.	EBh-47:963		House 3, 12N/26W			Flake	Cherl, gray	7-	Prefitstoric, molan?	Complete		1,3 x 1,5 x 0,2 cm; weight 0,3 g	small flate.	
15 16 16 16 17 17 18 18 18 18 18 18	EBh-47:964		House 3, 12N2GW			Flake	Ohert, mothed gray		Prehistoric, Inclan?	Camplebe		4,9x4,3x0,7 cm/2,7x3,6x 0,5 cm/2,0x1,0 x0,2 cm/1,7 x 1,1x0,2 cm weight i1,3 g/ 3,5 g/0,5 g/0,3		
12 House 3, -66 Purusa Strop Puru, wrough: 1 Historical Flagmentary S.2.x 3,1 cm 18 Nazaw	E18h-47:966	7.		42 PK	dark mized sand	Bottle?	Normandy Suncaure	-	Historical, French, 16- 18th Century	Fragmentary		2,0 x 2,3 x 0,3 cm	boliteneck fragment? Small, serrated tragment, blackened paste, brown surfaces	NW / SW Quadrants?
1900 1900	EIBh-47:971	grit	House 3, 16N22W, NW Quad	3	MINIS	orta orta	Dran, wrought	-	Historical	Fragmentary		5,2 x 3,1 cm	fat inn hagment, folded 90 degrees in centre, one side with thet	NW / SW Guadrants?
10 10 10 10 10 10 10 10	EBN-7:972	ž	House 3, 16N22W, NW Quad	-76 bt	भित्रमें स्पष्टित sand	d Musket Ball	Lead	-	Historical	Complete		Diameter: 1,7 om		NW / SW Quedrants?
150 House 3, 75 1971 mbed 1971 mbed 1972 mbed	EIBh-47:974	ž	House 3, 16N/22W, NW Quad	-92		Endscraper	Ramah Chert		Prehistoric, Indian	Fragmentary		1,4 x 1,8 x 0,5 cm; weight: 1,5 g	dakai end	NW / EW Quadrants?
172 House 3, 62 mised Endbade Perform Cherl, being Ferbishork, Fragmentary 3,612,310,8 18022W, Natural Marcal Marcal	EIBh-47:975	Ħ	House 3. 16M/22W, NW Quad	š	ियम महित इवाव	d Bilane	Chert, beige		Prehistoric, Indian	Camplete		4,4 ± 2,9 ± 0,9 cm; = elgit: 9,4 g	trianguler shape	Squapeno NS / MN
17.7 House 3, 17.1 Aght mixed Flake, udized? Cherl, gray 1 Prehistors, Flagmentary 1,4 x 2,1 x 0,4 16 Nazawa	EIBh-47:976	22	House 3, 16N/22W, NW Quad	6 2	pes	Endblade Preform	Oherl, beige	4	Frethstark, Indian	Fragmentary		3,6 x 2,3 x 0,8 cm; a elght: 10,1 g	mestal fragment	NW / SW Quedrants?
11 House 3, 116 bk peaky floor Stange Jur Normandy 1 Habancal, Flagmentary 9,1 x 6,5 x 0,5 Land Caud Caud	EIBh-47:979	da da		F.	light mixes	d Flake, utilized?	Chert, gray	4-0	Prehistoric, Indian	Fragmentary		1,4 x 2,1 x 0,4 cm; weight 0,9 g		NW / BW Quadrants?
Thouse 3, 455 dark gray Vessel Fragment Glass, third 1 Historical Fragmentary 3,1 x 2,5 x 0,1 Change 3, 75 EK mixed Fishing Live Lead and 2 Historical Complete Lengtht 8,9 cm; Language 3, 75 EK mixed Fishing Live Hemp 2 Historical Complete Lengtht 8,9 cm; Language 3, 75 EK mixed Fishing Live Hemp 2 Historical Complete Lengtht 8,9 cm; Change 3, 65 Cm; Roper Chert, gray 1 Frehistoric, Complete 3,3 x 2,5 x 0,5 Change 4, 75 Cm; Chert, gray 1 Frehistoric, Complete	EIBh-47:955	**		A	pessly floo. deposit	Storage Jar	Normandy Stanceare	-	Historical, French, 16- 18th Century	Fragmentary		9,1 x 6,6 x 0,5	large wall tragment, red paske and surfaces	NW / BW Quadrants?
2 House 3, -75 bt mixed Fishing Line Lead and 2 Historical Complete Length 8,9 cm; 16M22W, 8W Grad Permp 2 Historical Complete Length 8,9 cm; 10 to dameter 1,0 to dameter 1,1 cm; 16 to dameter 1,2 cm 16 to dameter 1,3 cm 16 to	E1814-47:957	1.77	/ House 3, 16N/22W, 9W Gued		dark gray mixed sand		Glass, United green		Historical	Prograentary		3,1 x 2,5 x 0,1 cm	large, thin, curred hagment	NW / BW Quadrants?
B House 3, 65 dark gray Brace Chert, gray Prehistoric, Complete 3.3.12,5.10,5 This contract Chert, gray Prehistoric, Complete 3.3.12,5.10,5 This contract Chert, gray Ch	EBP47.973		House 3, 16N/22W, SW Chad		mixed gray sand	Fishing Une Weight	Lead and Herro		Historical	Camplebe		Length: 8,9 cm; dameter: 1,0 to 1,6 cm; Rope: length: 4,1 cm; dameter: 1,3 cm	Long cylindrical tibe formed by an irrepliary rolled-up lead sheet, paidy dathened; hatte was found a fragment of a thin rope formed of three shands of hemp	NW / SW Quedrants?
	EIBh-47:977		House 3, 16N/22W, 8W Gued		dark gray mixed sand		Chert, gray		Prehistoric, Indian	Complete		3,3 x 2,5 x 0,5 cm; weight: 5,2 g	triangular shape	NW / BW Quadrants?

Comment	NW / SW Custants? Custate Blade Fragment	NW / SW Quadrants?	NW / SW Quadrants?; Jake	NW / SW Guadrants?	Haley			Haley	2	81	1 Knife ? Haley	Beg 1, 15NZ6W?	840 1, 15N25W?	85g 1, 15N26W?	Bag 2, 12N/22W7; cortbou shale from 10N/26W, NE comer
Description		small, thin, curved tragments	medium-sked to kaye nalis, 10 with heads, 2 stem fragments	small carular hagment	medum-sted nais, one with a fattened to	fragmentary blade (2) with large Insertion rod	hinge fragment with fish-tall shaped extremity, one hale for mounting	large rais, two fragments of, two with head; one fragment caught in crisialized wood	large flake	medum-sted fishs	medium-sized fakes	Mail head tragment	various caribou bones, including six separate teeth		carbou bones including shall frogments and one separate footh
Measurements	1,0 x 1,2 x 0,2 cm; acight: 0,2 g	1,3 x 1,1 cm max.	Lengths: 3,3 to 15,3 cm	Dismeter: 1,9 cm; thichness: 1,0 cm	Lengths: 7,3 to 10,8 cm (complete mails); 5,8 to 8,5 cm (fragments)	Length: 13,6 cm; blade(?): 5,2 x 2,5 cm; md: 8,1 cm	7,7 x 4,5 cm	Lengtic 14,5 cm (2 tragments assembled) / 11,6 cm / 7,7 cm	5,1 x 2,6 x 0,4 cm; = 2)g/£, 5,1 g	2,0 x 2,1 x 0,4 cm; weight: 1,5 g	28x1,4x0,2 cm/2,1x0,9x 0,2 cm; weight: 0,9g/0,2g				
Fife with		2 x 2 fragments ft													
Condition	Fragmentary	Fragmentary	5 Complete, 12 fragmentary	Fragmentary	s complete, 3 fragmentary	Fragmentary	Fragmentary	Fragmentary	Camplebe	Fragmentary	Fragmentary	Fragmentary	Fragmentary	Fragmentary	Fragmentary
Cuthural	Prehistoric, Indian	Historical	Historical	Historical		Historical	Historical	Historical	Prehistoric, inclan?	Prehisfaric, Indian?	Prehistoric, Indian?	Historical	bruff?	Breat?	193 PLLT?
ap	4	4	17	-	οņ		-	약	~	ther	и	_	378	**	193
Material / Type	Ramah Cheri	ರಿಜಿನ್ನ ಕರ್ಗಲ ೧೯೬೫	iran, wraught	iran, wrought	ban, wraught	uoli	Iron, wraught	bran, wraught	Chert, dant gray	Chert, mottled gray	Chert, gray. (Newfoundland?)	from, wrought	Nammai Bone	Shell, Scalop?	Mammal Bane
Object Name	Flabe	Veses Pragment	Han	Flat Fragment	Nati	Knfe?	Hinge?	Nati	Plake	Flate	नकत	Nati	Bane Fragment	Shell Fragment	Bane Fragment
8011	Aph mosed Flake sand beneath dark layer	dark mixed sand / light mixed sand				dark gray mixed sand	dark gray mixed sand	dark gray mixed sand / Ight tan mixed sand	dark gray sand	sod layer	dark gray mixed sand / humas				
Depth	ş	-50 / -75				-113 k	50 bk	-567-1027 -1047-108	09	- - -	5760F				
104	House 3, 15Ni22W, 8W Cozd ?	House 3, 16N22W, HW-BW Quad	House 3, 16N/22W, NW-3W Quad	House 3, 16N/2ZW, NW-2W Qued	House 3, 16N/22W, 3E Guad	House 3, 15N/26W, 8E Cuzd	House 3, 16N/26W, 8E Casa		35 House 3, 16NCZW, 8E Gasd	House 3, 16N/22W, 8E Cusd	.3, 6W, 3E	House 3, rati	House 3, rad	House 3, rati	Hause 3, rad
Fleid	2.0 40	r. di e oi	1, 3, 4, 5, 6, 13, 14, 15, 16, 18, 18, 22, 23, 24, 27, 28, 23,		32, 33, 34,36, 37, 38, 39, 40	5	igns	त्र स् स	SE	er Fil	7, 11/8				
	EBh-47:978	E18h-47:968			586-47:980	EBh-47:981	E16h-47:982	E18h-47:383	EIBh-47:984	E18h-47:985	EBh-47:986	EBh-47:987	EBh-47:388	EBh-47:989	E6h-47:990

10 - Grand Plain-1 (EiBj-41) Groswater Site Catalog

Arthrof Field Pri Number Number EBJ-41:19 8 90 EBJ-41:20 22 80 EBJ-41:21 23 90 EBJ-41:21 99	Proventence	Depth toll	Object Name	Maberial J Type	oby Cuttural amiliation	Condition File	Measurements	Decampton	Comment
100 KI						with			
R	Square 1. CN/NG		Endscraper?	Chert, light brown	i Groswater Paleoeskimo, 2400-2200 8P	Fregmentary	1,9 x 1,0 x 0,7 cm; weight: 1,0 g	edge fragment, smaf, hregular shape	
	Square 1, DNVDE		Bitace:	Chert, dant gray	1 Gruswater Paleoeskimo, 2400-2200 BP	Fragmentary	2,3 x 1,6 x 0,3 cm; a eight 1,3 g	dskal znd?	
5	aquere 1, ON/OE		Fragment	Stone, Conglomerate? Red	2 Groswater Paleoeskimo, 2400-2200 BP?	Fragmentary		any tragments of dark red-brown colour	
EBJ41:22 3q	Square 1, DN/OE		Flake	Chert, white	1 Groswater Paleoesking, 2400-2200 SP	Complete		Andi fate	
	Squere 1, CNNDE .		Fibre	Chert, mother gray-white	i Groswater Paleoeshimo, 2400-2200 8F	Fragmentary		Small flate	
	Square 1, CN/OE		Flate	Chert, dant gray- shife	3 Grosweter Paleoeskimo, 2400-2200 8P	Fragmentary		iny tragment	
	Squere 1, CNINE		98 A	Chert, gray- brown	2 Groswater Paleoeskino, 2400-2200 BP	Complete and fragmentary		small faltes	
	Square 1, DN:DE		Flake	Chert, dark gray	1 Grosweter Paleoestômo, 2403-2200 8P	Fragmentary		វិពទ្ធ វិធន្ធកានាក់	
M	Square 2, CNV1E		Microbiade Knife		1 Groswater Paleoeskimo, 2400-2200 8P	Complete	2,1 x 0,8 x 0,3 cm; weight 0,6 p	one edge retouched (bisde?)	
ŧ	Square 2, ONVIE		Bitace Blade?	Chert, black	1 Groswater Paleoeshimo, 2400-2200 BP	Fragmentary	2,6 x 1,7 ± 0,6 cm; weight 2,6 g		
	Square 2, DNV1E		Endscraper	Chert, gray- brown	1 Groswater Paleoeskimo, 2400-2200 BP	Fragmentary	2,2 x 2,7 x 0,6 cm; weight: 4,4 g	tared edges formed with notches, part of detail and missing	
	15 Square 2, DWME		Microbibate	Chert, dark gray	1 Groswater Paleoestimo, 2400-2200 8P	Fragmentary	1,0 x 0,9 x 0,1 cm; weight 0,2 p	mestal fragment	
	Square 2, DN/ME		Endscraper	Chert, black	1 Groswater Paleoestimo, 2400-2200 8P	Complete	2,4 x 2,9 x 0,6 cm; weight 5,3 g	tared edges farmed with notches	
	24 Square 2, OWME		Endscraper	Chert, gray- brown	1 Groswater Paleoeskimo, 2430-2200 8P	Complete	2,2 x 2,8 x 0,6 cm; weight 4,3 g	tared edges farmed with notches	
	25 Square 2, CN/1E		Microbiade	Ramah Chert	1 Groswater Paleoeskimo, 2400-2200 BP	Fragmentary	2.2 x 1,2 x 0,3 cm; weight 0,8 p	data and	
Я	Square 2, ON/1E		Burin?	Chert, gray	1 Groswater Paleoeskinso, 2400-2200 BP	Fregmentary	2,3 x 1,7 x 0,3 cm; weight 1,4 p	tat fragment, ground on both surfaces, edges spailed	
EB -41:33 31 80	Square 2, CN21E		Microbibide	Ramah Chert	1 Groswater Paleoeshimo, 2400-2200 8P	Fragmentary	1,5 x 0,8 x 0,2 cm; weight 0.3 g	mestal nagment	
	Square 2, ON/HE		Fiake	Chert, green	1 Groswater Paleoeskimo, 2400-2200 88	Fregmentary		large fragment	
11	Square 3, CN/2E		Mcroblade	Chert, white	1 Groswater Paleoeshimo, 2403-2200 8P	Fregmentary	2.9 x 1,1 x 0,4 cm; weight 1,4 g	mesto-proximal fragment, large, retouched edges on ventral surface	
	Square 3, ON;2E		Endscraper	Chert, white	1 Groswater Palecestimo, 2430-2200 BP	Fragmentary	1,6 x 2,1 x 0,7 cm; weight 1,5 g	adpa payon ano ign jirandag	
	21 Square 3, 0%2E		Surper	Chert, dark gray	1 Groswater Paleoeskimo, 2403-2200 BP	Fragmentary	3,9 x 4,1 x 1,4 cm; artight 16,8 9	large fragment (core?), one worked curved edge	
8	Square 3, ON/2E		Bithce	Chert, dark gray	1 Groswater Paleoeskimo, 2430-2200 BP	Fragmentary	1,8 x 1,2 x 0,3 cm; weight 0,9 g	mestal fragment	possibly no. 19
77	Square 3, CN2E		Projective Point	Cheff, dark gray	1 Groswater Paleoeskimo, 2400-2200 BP	Complete	2,8 x 1,5 x 0,4 cm; seight 1,9 g	smail complete point, side,notched with large, rectangular base	harpoon point?
8	Squere 3, CN/ZE		Bitace	Chert, dark gray	1 Groswater Paleoestimo, 2400-2288 8P	Fragmertary	3,3 x 2,4 ± 0,5 cm; weight: 4,3 g	dstal fragment	
	Square 3, ON/2E		Fishe or Microbiade?	Chert, gray-white	1 Groswater Paleoeskimo, 2430-2200 BP	Fragmentary		medium-sized fishe	
EBj41:46 5 3q ON	Square 4, DN/3E		Endscraper	Chert, gray- brown	1 Groswater Palebeshimo, 2400-2200 SP	Complete	2,9 x 2,9 x 0,8 cm; weight 7,5 g	large, flared edges formed with side notches	

Commant						possibly no. 25																			
Description	large blade, mesto-proximal end	medium-steed blade	datal end, large blade	small blode	side-notatied point with large, rectanguist base, to missing	Guara	large tragment with multiple traces of flaking on both surfaces, one edge worked	अताव विकास	small fiate	small fishes	small fake	small flate	one large fragment and three small fakes	tny fake	small fisher	small faire	medium-stred fishes	small to medium-stood flakes	notched fragment	blace trapment, reused as endoranger, one curved fished sage (blace), one straight laived edge (endocaper) and one broken side	tagment with one worked edge	mestal fragment, tingr	polished edges and faces, utilized distal end	small blade with larger base	small blade
Measurements	3,0 x 1,3 x 0,3 cm; aekht: 1,2 o	3,0 x 1,2 x 0,4	1,8 x 1,2 x 0,2	23 x 0,8 x 0,2	3,3 x 2,3 x 0,5 cm: weight 4.9 o	1,6 x 1,7 x 0,4 cm; aekpt: 1,2 p	3,5 x 2,7 x 0,8 cm; weight 7,5 g				· money								1,6 x 1,5 x 0,3 cm; welotic 0.9 o	2,2 x 1,7 x 0,3 cm; weight: 1,3 g	3,2 x 2,0 x 0,4 cm; weight 2.6 g	0,7 x 1,0 x 0,1 cm; weight 0,1 p	1,4 x 0,5 x 0,2 cm; metofat: 0.2 c	2,5 x 1,2 x 0,2 cm; seight 0,6 p	2,3 x 0,7 x 0,2 cm; setobb 0.3 o
H.																									
Condition	Fragmentary	Complete	Fragmentary	Complete	Fragmentary	Fragmentary	Fragmentary	Fregmentary	Complete	Fragmentary	Complete	Complete	Fragmentary	Complete	Complete	Complete	Complete	Complete and framentan	Fregmentary	Fragmentary	Fragmentary	Fragmentary	Fragmentary	Complete	Complete
oty Cultural affiliation	Groswater Paleoeskimo, 2400-2200 SP	Groswater Paleoeskino,	Grossater Paleoesting, 2400-2200 RP	Groswater Paleoeskino, 2400-2300 ap	Groswater Paleoeskimo, 2400-2200 8P	Groswaizr Paleoeskimo, 2403-2200 8P	Groswater Paleoeskimo, 2400-2200 8P	Groswater Paleoeskimo, 2400-2200 8P	Groswater Paleoeskimo, 2400-2200 SP	Groswater Paleoeskimo, 2400-2200 BP	Groswater Paleoeskimo, 2400-2200 8P	Groswater Paleoestimo, 2400-2200 BP	Groswater Paleoeskimo, 2400-2700 8P	Groswater Paleoeskimo, 2400-2200 8P	Groswater Paleoeskino, 2400-2200 BP	Groswater Patroeskimo, 2400-2200 8P	Groswater Paleoeskimo, 2400-2200 BP	Groswater Paleoesatmo, 2400-2200 BP	Groswater Paleoeskimo, 2400-2200 BP	Groswater Paleozskhno, 2400-2200 BP	Groswater Paleoeshimo, 2400-2200 BP	Groswater Paleoeshino, 2400-2300 BP	Groswater Paleoeskimo, 2400-2200 BP	Groswater Paleoeshimo, 2400-2200 BP	Groswater Paleoeskimo, 2400-2200 BP
de de	-	-	-	-	-	-	**	-	4-	М	-	g-i	च	-	-	+	N	00	-	-	-	-	-	-	-
Material / Type	Chert, white	Chert, gray-	Chert, dark gray	Chert, gray-	Ramah Chert	Cherl, motted gray	Chert, gray- brown	Cheri, cream- white	Chert, gray-white	Chert, light gray	Chert, light brown	Chert, gray-white	Chert, tan to dark gray	Chert, Halft gray	Chert, green	Cherl, black	Chert, mothed black-light gray	Chert, gray- brown	Chert, brown	Ramah Chert	Chert, gray- brown	Chert, gray- brown	Chert, gray	Chert, durk gray	Chert, gray- brown
26		Microbiade	Mkroblade (Mcrablade	Projectie Polm					Fishe		Fake			Fight			Fight		Endscraper	Utilized Fishe	Microbiade	Burth Spali?	Microbiade	Microbiade
\$0\$																									
Proventence Depth	Square 4, CN/3E	Square 4,	Square 4,	Square 4,	Square 4, Chite	Square 4, DN/3E	Square 4, CNVSE	Square 4, CNISE	Square 4, CN/3E	Square 4, CN/3E	Square 4, CN/36	Square 4, CN/3E	Square 4, ON/3E	Squere 4, CN3E	Square 4, CN3E	Square 4, DN/3E	Square 4, ON/3E	Square 4, DN/3E	Square 5, CN:46	Square 5, Dy,4E	9 Square 5, DNME	Square 5,	14 Square 5, Ow/4E	Square 5, CNIME	29 Square 5, Owyde
Fleid	9	Ę,	16	17	13	66	ลิ												-	N	ďì	Ot.	캠	82	81
	EBJ-41:47	EB] 41:48	EBJ-41:49	EBJ-41:50	EB -41:51	EBJ-41:52	EBJ-41:53	EBJ-41:54	EEJ-41:55	EBJ-41:56	EBJ-41:57	EBj-41:58	EBj-41:59	EBJ-41:60	EB ~1:61	EBJ-41:62	EB -41:53	EB]-41:54	EBJ-41:66	EBJ-41:66	EB]-41:57	EBJ-41:58	EB]~11:59	EBJ-41:70	EBJ-41:71

Auftract Number	Fletd Number		Depth tos		Material Jype	ofy Cu	Gty Cultural effiliation	Condition Fits		Messurements	Dekorbiton	Comment
EB 44:32	32			Merchinde	Chert, gray-	1 Gr	Groswater Paleoeshino,	Fragmentary	1.	1,5 x 0,9 x 0,2	proximal fregment, small blade	
100 m	-	ONIGE OFFICE		I discussion of a	brown	7	2400-2200 BP		5 (Cm; weight 0,2 p		
	ત્ર	Square 5,		MACIODORE	Chen, white	5 7	Groswater Paleocskano, 2400-2200 BP	Figurensy	4 5		mesto-proteinal magment, range blade	
EBJ-41:74	ж			Britice	Chert, gray	1 95	Groswater Paleoeskimo, 24nn-25nn RP	Fragmentary	N E	2,2 x 1,5 x 0,2	distal end	
EBJ-41:75	9	Square 5,		Mcrobade	Chert, Gray-	1 94	Groswater Paleoeskimo,	Complete	4,	1,9 x 0,7 x 0,2	shall blade	
EB 41:76	4			Wkrobade Core		167	Groswater Paleoeskino,	Fingmentary	9 19 5	27 x 1,4 x 0,6	dongalad, imagular Tagment,	
EBJ-41:77	7			Mkrabiade	Check, light gray	+ +	Groswater Paleoeskino, 2400-2200 BP	Fregmentary	N 5	2,4×1,2±0,4 cm; seidk: 1,1 o	meski-provinsi end	
EB]41:78		Squere 5, CNINE		Fish	Chert, white	- X	Groswater Paleoeskimo, 2400-2200 BP	Fragmentary			iny take	
EBJ-41:79		Square 5, DNME.		まる	Chert, cream- write	<u>8</u>	Groswater Paleoeskimo, 2400-2200 BP	Complete			small to med lan-sized flakes	
EB141:80		Square 5, ONIME		Fibke	Chert, light gray	<u>57</u>	Groswater Paleoeskino, 2400-2200 BP	Complete and framentory			snall to medium-sized flakes	
EB 41:81		Square 5, Chivae		3485	Chert, silver gray	<u>5 %</u>	Groswater Paleoeskimo, 2400-2200 BP	Fragmentary			snali fate	
EBJ-41:82		Square 5, CNME		下温水产	Chert, light brown	10 24 24	Groswater Paleoeskimo, 2400-2200 BP	Complete			small in median-slaed habes	
EB)-41:83		Square 5, ONINE		Fishe	Cherl, green	2 300	Groswater Paleoeskimo, 2403-2200 89	Fregmentary			多四世間 你我就是	
EBJ-41:84		Square S, CNAE		Nation of the state of the stat	Chert, gray-white	75 75 T	Groswater Paleoeskimo, 2400-2200 BP	Complete			small flates	
EEJ-41:85		Square 5, ON/4E		Flace	Chert, tan to dark gray	± 24.5	Groswater Paleoeskimo, 2403-2200 BP	Complete			अनावंति विकास	
EB]-41:86		Square 5, CMME		F18.6e	Chert, motted gray-brown	<u>6</u> %	Groswater Paleoeskimo, 2400-2200 BP	Complete			small and medium-sized fighes	
EEJ-41:87		Square 5,		Finke	Cherl, gray	2 90	Groswater Paleoesking, 2400-2500 sp.	Fregmentary			snall fakes	
EB)-41:88		Square 5, CN:4E		Finke	Chert, bruan	45 24 24 24 24 24 24 24 24 24 24 24 24 24	Groswater Paleoesking, 2400-2200 BP	Complete			small flates	
EB]-41:89		Square 5, CNAE		Flake	Chert, dark gray, stitated	3 34	Groswater Paleoeskimo, 2400-2200 BP	Complete			small to medium-sized flakes	
EB]-41:50		Square 5, CN:4E		Fight	Cherl, gray	25 24 24 36 37	Groswater Paleoeshimo, 2400-2200 BP	Complete and fragmentary			small to medium-sized fishes	
EB]-41:51		Square 5, CN4E		Fight	Chert, dark gray- brown	12 Gr 240	Groswater Paleoeskimo, 2400-2200 BP	Complete and fragmentary	**************************************		smail to medium-sized flakes	
EBJ-41:52		Square 5, DN/4E		Finke	Chert, black	1 240 240	Groswater Paleoeskimo, 2403-2200 BP	Fragmentary			small fragment	
EBJ-41:53		Square 5, CNAE		Chartozi	Charcoal	1 Gr	Groswater Paleoeskimo, 2400-2200 BP	Затре	***	weight 9,0 g	ajduks jeonsijo jisus	
EBJ-41:54		8quare 6, 18/5E		Charcosi	Charcoal	1 Gr 24:	Groswater Paleoeskimo, 2400-2200 BP	Sample	W	weight: 5,4 g	adues poorus gambie	
EB3~41:95		8quare 7, 19:DE		Fight	Chert, dark gray	1 19 14	Groswater Paleoeshimo, 2400-2200 BP	Fragmentary			ayat pags-unipau	
EBJ-41:56	ス	A Square 8,		Bitace	Chert, motified dark gray	1 Gre	Groswater Paleoeskimo, 3400-2200 BP	Fragmentary	-, <u>p</u>	1,5 x 2,4 x 0,6 cm; meight 2,8 g	рацором-арук ізпамбец құқам	

Artifisot Number	Fladd Number	Proventence Depth	202	Object Name	Maberial Jype (Gty Cultural affiliation	Condition Filts	Measurements	Decompton	Commant
t _z		Square 8, 13ME		Flake	Ramah Chert	1 Groswater Paleoeskimo, 2400-2200 8P	Fragmentary		երջ նեցուշու	
EE]~41:58		3quare 8, 13/16		Froment	Stane, Conglamente?, red	1 Groswater Paleoesking, 2400-2200 887	Fragmentary		foy tragment	
EBj-41:99		Square 8, 13/1E		Flake	Chert, white	1 Groswater Paleoeskitmo, 2400-2200 8P	Fragmentary		large date	
EBJ-41:100		Squere B, 13ME		NA PER	Chert, cream- white	2 Groswater Paleoeskimo, 2400-2200 BP	Complete and fragmentary		small and thry flake	
EBj-41:104		3quare 8, 13/1E		Flake	Chert, light brown	2 Groswater Paleoeshimo, 2400-2200 8P	Complete		medium-sized fakes	
EBJ-41:102		8quare 8, 12/15		Flabe	Chert, motted gray-white	1 Groswater Paleoeskimo, 2400-2200 BP	Fragmentary		medlum-sized fake	
EE3-41:103	ş	Square 8, 13/1E		Fake	Chert, grey- brown	1 Groswater Paleoesking, 2400-2200 8P	Fragmentary		small fragment	
EB ~41:104		8quare 8, 18/1E		Fight	Chert, gray	4 Groswater Faleoeskimo, 2400-2200 BP	Complete and fragmentary			
E19-41:105		Square 8,		Plake	Chert, dark gray- brown	2 Groswater Paleoesking, 2400-2200 8P			small and medium-sized flakes	
EBj-41:106		Square B, 13/1E		Flake	Chert, dark gray	1 Groswater Paleoesterno, 2400-2200 BP	Complete		small fishe	
EBJ-41:107	37			Flake, utilized?	Chert, dork and light gray	1 Groswater Paleoeskimo, 2400-2200 BP	Fragmentary	2,8 x 1,5 x 0,4 cm; areight 1,2	retouched?	
EE3-41:108		3quare 9, 13/2E		Flake, utilized?	Chert, gray	1 Groswater Paleoeskimo, 2400-2200 8P	Fragmentary	3,0 x 1,7 x 0,4 cm; weight 1,6	proximal tragment with unitacial proximal metasting along one edge.	
EBJ-41:109		3quare 9, 1872E		Flake	Ramah Chert	1 Groswater Paleoeskimo, 2400-2200 BP	Fragmentary			
EBJ-41:110		8quare 9, 19/2E		Flake	Chert, white	2 Groswater Paleoeshimo, 2400-2200 8P	Fregmentary		small flakes	
EBJ-41:111		3quare 9, 13/2E		Flake	Chert,gray	1 Groswater Paleoeskino, 2400-2200 8P	Complete		small fiste	
EBJ-41:112		3quare 9, 13/2E		Finks	Chert, white- brown	2 Groswater Paleocskitno, 2400-2200 8P	Fragmentany		small and medium-sized hakes	
EB]-41:113		3quare 9, 13/2E		Flake	Chert, Ilght brown	1 Groswater Paleoeskimo, 2400-2200 8P	Fragmentary		medium-stred fake	
EB]-41:114		3quare 9, 13/2E		Fishe	Chert, green	1 Groswater Paleoeskimo, 2400-2200 BP	Fregmentary		iny take	
EBJ-41:115		8quare 9, 18/2E		Flake or Microbiade?	Chert, mothed	1 Groswater Paleoeskino, 2400-2200 8P	Fragmentary		medum-szed	
EBJ-41:116		3quare 9, 13/2E		Flake	Chert, mother proy-white	1 Groswater Paleoesking, 2400-2200 8P	Complete		अध्यक्ष प्रकार	
EB -41:117		3quare 9, 18/26		Flake	Chert, mothed, brown-gray	2 Groswater PaleoesMtmo, 2400-2200 BP	Complete and fragmentary		small fishes	
EE]-41:11B		8quare 9, 18/2E		Flake	Chert, HgM gray	1 Groswater Paleoestimo, 2400-2200 8P	Fragmentary		dongsted fragment	
EB]-41:118		3qusne 9, 13/2E		Fishe	Chert, gray	2 Groswater Paleoeskino, 2400-2200 BP	Complete and fragmentary		small and medkm-sloed fiables	
EBJ-41:120		8quare 9, 18/2E		Flake	Chertz, gray	1 Groswater Paleoeshimo, 2400-2200 BP			dongsted fragment	

Aufiliact Number	Fletd	Provantense Depth	\$04	Object Name	Material / Type 6	O App	Gfy Cultural affiliation	Condition	ales with	Measurements	Description	Comment
EB -41:121		8quare 9, 18/26		Flake	Chert, brown- gray	<u> </u>	3 Groswater Paleoeskimo, 2400-2200 BP	Complete and fragmentary			Small and medium-sized habes	
EBJ-41:122		3quare 9, 13/2E		Fight	Cherl, gray	575 an	Groswater Paleoeskimo, 2400-2200 BP	Complete and fragmentary		A24	small and medium-sized fialus	
E8j-41:123		8quare 9, 18/2E		Flake	Chert, dark gray	2 6	Groswater Paleoeskino, 2400-2200 BP	Complete			small and medium-sized fiakes	
EBJ-41:134		3quare 9, 13/2E		Flake	Chert, gray, stricted	<u>64</u>	Groswater Paleoeskimo, 2403-2200 BP	Complete and fragmentary			small flakes	
EBJ-41:125		3qusre 10, 18/3E		Flake	Chert, mothed brown-gray	<u>−</u>	1 Groswater Paleoeskimo, 2400-2200 BP	Complete			medium-sized fishe	
EBJ-41:126		3quare 10, 13/3E		Flake	Cherl, brown- gray	7 0	Groswaier Paleoeskimo, 2400-2200 BP	Complete and fragmentary			mediim-shed fakes	
EB 41:127		3quare 10, 18/3E		Flake	Chert, black	ত ম -	Groswater Paleoeskino, 2400-2200 BP	Fragmentary			4100 July	
EB -41:128	*	3quare 11, 1348		Are Blade?	Chert, green	<u>6 7</u>	Groswater Paleoeskimo, 2400-2200 BP	Fragmentary		2,1 x 2,7 x 0,6 cm; areight 3,3 p	worked edge, one intact polished surface	
EBJ-41:129		3quare 11, 134E		Flate	Chert, white	- 5 73	Groswater Paleoeskimo, 2400-2200 BP	Fragmentary			medium-sized fake	
EBJ-41:130		Square 11, 1346		Flake	Chert, cream- white	ন ন	Groswater Paleoeskimo, 2400-2200 BP	Complete and fragmentary			small fishes	
EBJ-41:131		Square 11, 13ME		Fake	Ched, green	2 4 6	Groswater Paleoeskimo, 2400-2200 BP	Complete and fragmentary			small hakes	
EB]-41:132		8quere 11, 1846		Fighe	Chert, motized light gray	<u>5 74</u>	Groswater Paleoeskimo, 2400-2200 BP	Fragmentary			small flate	
EEJ-41:133		3quere 11, 134E		Flate	Chert, gray	₩ -	Groswater Paleoeskimo, 2400-2200 BP	Complete			Small flate	
EIB]-41:134		3quere 11, 1345		Fight	Chert, mothed tan to dark gray	5 X	Groswater Paleoeskimo, 2400-2200 BP	Complete and fragmentary			smail to large fakes	
EBJ-41:135		Square 11, 1346		Flake	Chert, mothed Ian io light gray	<u>0</u> %	Groswater Paleoeskino, 2400-2200 8P	Fregmentary			small to medium-sized flakes	
EBJ-41:136		3quare 11, 134E		Flake	Chert, mothed brown-gray	6 A	Groswater Paleoeskino, 2400-2200 BP	Complete and fragmentary			medium-sized fakes	
EE3-41:137		3quare 11, 1344E		Flake	Chert, gray	⊕ 75 	Groswater Paleoeskimo, 2400-2200 BP	Fregmentary			dongated bagment	
EEJ-41:138		3quare 11, 13/4E		Fate	Cherl, dark brown-gray	2 29	Groswater Paleoeskimo, 2400-2200 BP	Fregmentary			small to medium-sized nakes	
EBJ-41:37	28	38 ma		Bitace	Chert, gray- brown	- 8 6	Grossvater Paleoeskino, 2400-2200 BP	Fregmentary		O.9 x 2,3 x 0,3 cm; weight: 0,5 g	<u>ទភានា</u> វិកន្ទនាភព	
ERJ-41:38	£4.	43 11/2		Microbiade Knife Chert, gray-	Chert, gray- brown	₩ 7	Grossvater Paleocestimo, 2400-2200 BP	Complete		2,7 x 0,9 x 0,2 cm; weight: 0,7 g	2,7 x 0,9 x 0,2 signity curved, medium-steed blade cm; weight: 0,7 g. with both edges refouched	

11- Grand Isle-2 (EiBk-54) Inuit and Innu Site Catalog

Artifact no. Fleid Number	Field	Proventenne Depth	Dspth	\$00	эше	Medental / Type	oty Cultural	Condition	Fibs with	Meacurements	Description	Comment
EBN-54:3	55		-122			Coarse Eartherware	1 Historical, Basque, 19th Century	Fragmentury	087545 687545	5,4 x 6,9 x 1,7 cm	medam-text fragment orange- red paste, underside partially brackered	
EISt-5434	je.		-123.5		Roof Tile	Coarse	1 Historical, Basque, 19th Century	Fragmentary	286-54.3; 886-54.5	e, r x 7, s x 8, 5 cm	medium-sized fragment, arange- red paske	
545-188		Location 1, 4N/SE			Raaf Tile	Course	1 Historical Basque, 15th Century	, Fragmentary	685-543; 685-544	3,214,810,9 cm	medhim-sized tragment, arange- red paste	
EIBN-54:6	51	Location 1, 4N/SE	-17.5	3	Roof Tike	Course Eartherware	B Historical Basque, 163h Century	i, Fragmentary		4,812,111,5 cm	small tragments, grange-red paste	
EBB-54:7	Ţ.	Location 1, 4N/SE	-117.5	Ш	Roof Tile	Coarse Eartherware	2 Historical Basque, 19th Century	i, Fragmentary		mar. 2,1 x 1,5 x 0,5 cm	small fragments, dark red-brown paste	
EBB-54:3			50	in consolidated peat with sand grains	Vessel Fragment	Poncelain, fine, hard, European?	1 Historical 19th-20th Century			1,7 x 0,6 x 0,2 cm	thin, curved fragment, white, without decoration	
EBR-54.9			-105		Fragment	Pissb.	1 Historical, 20th century	I, Fragmentary funy		1,0 x 0,9 x 0,1 cm	thin, hat tragment, yellowish and smooth on one side, breguler on the other side which seems to carry an inscription (NO3) (DAINO3) (IDAINO3) (IDAINO3	
EBF-5470		Location 1, 4N/SE			No.	Iron, wasught	22 Historical	Fragmentary		Max. Jength: 5,2 cm	small tragment of medium-staed to large nalls, 8 tragments with heads	
EB1-54:11		Location 1, 4N/SE			Flat Fragment	5	9 Historica	i Fragmentary		Mear. 3,0 x 2,4 x 0,7 cm	unitentifiable small fist fragments of fron, comodon?	
EIBN-54:12	N	22 Location 1, 4N/SE	-104	#	Nail	Iron, wrought	2 Historical	I Fragmentary		Lengthc 1,6 cm / 1,1 cm	small mail stem tragments	
EBN-5413	τğ		-103.5	black soll	Fragment	Glass, clear, without lead	1 Historical 19th-20th century			1,3 x 1,1 x 0,3 cm	small tregment	
EIBk-54:14		Location 1, 4NºSE			Flake	Ramah Chert	9 Prehisharic, Indian	ht, 6 complete, 3 hagmentary		0,7 x 1,0 x 0,2 cm to 1,5 x 1,9 x 0,4 cm; weight < 0,1 g to 1,0 g	small to medium-stred fielder	
EIB1-54:15		Location 1, 4N/SE			Flake	Chert, gray	1 Prehistoric, Indian	nc, Camplete		2,8 x 1,7 x 0,3 g;	large flake	
EIBI-54:16		Location 1, 4N/SE			Flake	Ohert, black	3 Prehistoric, indian	ntc, 2 complete, 1 fragmentary		1,7 x 1,2 x 0,2 cm / 1,7 x 1,0 x 0,2 cm / 1,5 x 1,6 x 0,2 cm weight: 0,3 g / 0,3 g / 0,5	medum-sizzd flakes	
EIB1-54:17		Location 1, 4N/SE			Flatsc	Chert or Quartable	1 Prehistoric, Indian	rtc, Camplete		0,9 x 1,3 x 0,3 cm; we/aff; 0,3 g	small flake	
EIS1-54:18		Location 1, 4N/5E			Flake	Chert, blue-	1 Prehistoric, Indian	ric, Camplebe		1,3x1,7x0,3 cm; weight: 0.7 g	snall fate	

Artifact no. Fleid Humb	Fleid	Proventence Dapth	Depth	2013	Object Name	Walertal /	Oty Cultural effiliation	Condition	Fifs with	Measurements	Desoripitors	Comment
EIBN-5479		Location 1, 4N/SE			카메	Chert, brown-gray, Newfoundan d?	1 Prehistoric, Indian	c camplete		2,1 x 1,8 x 0,3 cm; weight: 0,9 g	medium-sized flakes	
EIBI-5420		Location 1, 4N/SE		4000-000	Flake	Chert, white	1 Prehistoric, Indian	c Camplete		0,4 x 0,7 x 0,1 cm; weight: < 0,1 9	thy fake	
EB1-54:21		Location 1, 4N/SE			Flake	Chert, light Gray	1 Prehistoric, Indian	с сатрые		1,2 x 1,2 x 0,1 cm; weight: 0,1 g	Senal 数数数	
EISh-54-22		Location 1, 4N/SE			Flake	Chert, Delge- brown-gray	1 Prehistanc, Indian	c, Fragmentary		1,7 x 0,9 x 0,3 cm; weight: 0.4 g	अस्ता वैद्यार	
EIBN-54:23		Location 1, 4N/SE			Routte	Coarse	1 Historical, Basque, 19th Century	Fregmentary		9,4 x 8,0 x 1,7 cm	medum-size fragment, mange- red paste	
EISK-54.24		Location 1, 4N/BE			Ruof The	Coarse	1 Historical, Basque, 19th Century	Fragmentary		3,5 x 4,5 x 1,5 cm	small fragment, orange-rad paste	
EBR-54-25		Location 1, 4N/SE			RoofThe	Coarse Earthenware	1 Hatuncal, Basque, 16th Century	Fragmentary		3,3 x 3,1 x 1,4 cm	snali fragment, crange-ned paste	
EBN-5426		Location 1, 4N/SE			Mali	Bran, wrought	12 Historical	3 complete, 9 fragmentary		Lengtha: 17,1 cm 7 15,4 cm 77,7 cm (complete nails)	medium and large-stack mails, three complete, including two large mails with featzned tips, 5 fragments with head	
EISE-54:27		Location 1,			Flat Fragment	Iron	5 Historical	Frequentary			small, fist, undenthable framents	
EIB1-54:28					Compain Fragment	Iron	2 Historical	Fragmentary			unidentifiable fragments	
EBN-54-29	ŗ.	78 Location 1, 4N/SE	-125		Gooking Vessel?	Sostante	t fruit	Fragmentary		9,5% 6,8 k 1,0 cm	medium-sized, fast hagment with one had for repairs and a partial section had not state in tracture; the complete repair had a connected to one large and several thin includes on the clean surface; one surface blackened and covered with burnflound organic market.	
EB1-54:30					Flate	Rameh Ohert	5 Prehistoric, Indian	Camplete		men. 1,7 x 2,2 x 0,2 cm; a elght: 0,9 g	small and medium-sized fakes	
EBI-5431	7	40 Location 1, 4N/SE	-57	38	Flate	Chert, black	1 Prehislant, Indian	c, Complete		1,9 x 1,8 x 0,2 cm; weight: 0,9 g	medhim-stzzd fiske	

Comment	edom fregment So with one So with one the preserved, At its blackened burnt organic I tholes are I tholes are form one of form one of form one of form and f	bble with one g, one fatter e blockened	augue augue	ment, orange- daining on	ragments.
Description	sage, thick, fist bottom fregment of a sageback cot with one slightly curved edge preserved, the entire fregment is blackened, the entire fregment is blackened, and covered with burn organization and steem, a neal with a flabbaned stem prodrudes from one of them, no convolution and them, no convolution and harmonis of nail stems are visible in the three others; one partially pleared hole is also present, fift, large inclusion are included to some of the holes on both surfaces and the poit's edge; there is into corrosion stating on the bottom of the vessed.	large rounded pebble with one large flake missing, one flatter side and one edge blockened	small chercoal sample	medum-size fragment, urange- red pasize, black skalning on upper surface	large long bone fragments
Fibs with Measurements Desorbiton	20,2 x 10,9 x 1,7 cm	5,3 x 6,4 x 3,9 cm	Q 4,8	3,8 x 8,0 x 0,9 cm	
Fibs with					
Comdition	Fragmentary	Fragmentary	Fragmentary	Fragmentary	Fragmentary
oty Cultural affiliation	indt	1 Prehistoric, Indian?	Prehistanc, Indian?	Historical, Basque, 19th Century	7 Inuit
				WASTE	
Makertal /	Boapatone	Sedimentary Rock	Chartoo	Coarse Earthenware	Mammai
Object Name	Gooking Vessel?	base of back. Hammer Stone earth	Charcoal	Roof The	Bane Fragments
201		base of black earth			
Depth	£01-		-2,75 cm		
Proventense Depth	Location 1, 4N'SE, SIV Qued	75 Location 1, 4Nº9E, BW Qued	Location 1, 4N/SE, SW Quad	Bank Burface Colection	Location 2,
Field	<u> </u>	25			
Authact no. Field Numb	EBN-54-32	EB1-54:33	E181-54:34	EIBI -54:35	EB1-54:36

12- Belles Amours Harbor Blowout Groswater Site Catalog

Comment	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017; 6,8 m a.s.1	27/07/2017	27/07/2017	27/07/2017
Description	small arrow point, side-notched with large rectangular base, one side of which is broken off	large size	medium size	medium size	large size	small fragment, square shape, one edge broken, three other edges faked	very large flake	medium-size flake	medium-size flake	small to medium-size flakes	small to medium-size flakes	very small to medium-size flakes	very small to medium-size flakes	medium-sized flakes	medium-sized flakes	medium size	medium size	Chert nodule fragment with white cortex, covered in lichen; two worked surfaces	small blade	medium size, broken in mid-section	large, flat fragment, core?
Measurements	3,3 × 1,7 × 0,4 cm; weight: 2,4 g	3,4 x 1,2 x 0,2 cm; weight: 0,7 g	3,0 x 1,3 x 0,4 cm; weight: 1,6 g	3,0 x 1,2 x 0,5 cm; weight: 1,8 g	5,3 x 1,2 x 0,4 cm; weight: 1,9 g	1,3 x 1,2 x 0,2 cm; weight: 0,5 g	5,5 x 4,2 x 1,2 cm	max. 2,1 x 1,1 x 0,2 cm	max. 1,8 x 1,8 x 0,5 cm	max. 2,0 x 2,1 x 0,8 cm	max. 1,9 x 2,7 x 0,3 cm	max. 1,9 x 1,5 x 0,8 cm	max. 1,8 x 1,0 x 0,2 cm	max. 1,5 x 1,5 x 0,4 cm	1,2 x 1,7 x 0,4 cm / 2,1 x 0,4 x 0,2 cm	3,3 x 0,8 x 0,35 cm; weight: 1,0 g	3,4 x 0,9 x 0,6 cm; weight: 0,8 g	3,7 x 2,7 x 1,9 cm; weight: 19,9 q	2,3 x 0,8 x 0,3 cm; weight: 0,7 g	2,1 x 0,8 x 0,3 cm; weight: 0,5 g	4,6 x 3,8 x 1,2 cm; weight: 14,0 g
Fits																					
Condition	Fragmentary	Complete	Complete	Complete	Complete	Fragmentary	Fragmentary	1 complete, 1 fragmentary	1 complete, 1 fragmentary	Complete and fragmentary	Complete	Complete and fragmentary	Complete and fragmentary	Complete	Fragmentary	Complete	Complete	Fragmentary	Complete	Fragmentary	Fragmentary
Cultural affiliation	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	_	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP	Groswater Paleoeskimo, 2400 BP
Qty	1	1	_	_	1	1	1	2	2	10	.e	11	19	2	2	_	1	-	-	_	-
Material / Type	Ramah Chert	Chert, beige	Chert, brown	Chert, dark grey	Chert, dark grey	Chert, beige- grey	Chert, black	Chert, white	Chert, beige	Chert, white- beige-grey	Chert, pinkish to cream	Chert, grey spotted	Chert, dark grey	Chert, mottled grey	Chert (?), dark grey	Chert, brown-grey	Chert, brown-grey	Chert?, black	Chert, dark grey	Chert, dark grey	Chert, dark grey
Object Name	Projectile Point	Microblade	Microblade	Microblade	Microblade		Flake	Microblade	Microblade Core Flake	Nodule	Microblade?	65	Fragment								
epth Soil	Surface Collection	Surface Collection	Surface Collection	Surface Collection	Surface Collection	Surface	Surface Collection	Surface Collection	Surface Collection	Surface Collection	Surface Collection	Surface Collection	Surface Collection								
Provenience Depth			3 Location 1 Su	Location 1 Su		6 Location 1 St.	1		1	Location 1 Sc		Location 1 Su	Location 1 Su		Location 1 Su	Location 2 Su	Location 2 Su	Location 2 Su	n/a Location 2 Su	n/a Location 2 Su	Location 2 Su Cc
Fletd Numbe r	_	2 1	3 [4 L	2.1	1.9									L	7 1	1 8	16	n/a L	n/a L	_
	EiBi-21:1	EIBi-21:2	EiBi-21:3	EiBi-21:4	EiBi-21:5	EiBi-21:6	EiBi-21:7	EiBi-21:8	EiBi-21:9	EiBi-21:10	EiBi-21:11	EiBi-21:12	EiBi-21:13	EiBi-21:14	EiBi-21:15	EiBi-21:16	EiBi-21:17	EiBi-21:18	EiBi-21:19	EiBi-21:20	EIBi-21:21

ent	017	017	017	017	017
Comment	27/07/2017	27/07/2017	27/07/2017	27/07/2	27/07/2017
Description	medium size	$2.5 \times 0.7 \times 0.3$ cm elongated fragment	2,5 x 1,5 x 0,5 cm mottled white to grey chert / 3,3 x 1,3 x 0,8 cm	small and medium-sized flakes, dark 27/07/2017 grey	7 × 3,3 × 0,5 cm medium-sized flakes, translucent, 1,5 × 2,1 × 0,4 dark grey chert or quartzite? Traces of lichen
Condition Fits Measurements Description with	2,1 x 1,6 x 0,3 cm medium size	2,5 × 0,7 × 0,3 cm	2,5 x 1,5 x 0,5 cm / 3,3 x 1,3 x 0,8 cm		1,7 x 3,3 x 0,5 cm / 1,5 x 2,1 x 0,4 cm
Fits					
Condition	Fragmentary	Fragmentary	Complete	Complete	Complete
Oty Cultural affiliation	Groswater Paleoeskimo, Fragmentary 2400 BP	Groswater Paleoeskimo, Fragmentary 2400 BP	2 Groswater Paleoeskimo, Complete 2400 BP	12 Groswater Paleoeskimo, Complete 2400 BP	2 Groswater Paleoeskimo, Complete 2400 BP
aty		-	2	12	2
Material / Type	Ramah Chert	Chert, light brown	Chert, mottled grey	Chert, dark grey	Chert?
Object Name	Flake	Flake	Flake	Flake	Flake
Soil					
	Surface Collection	Surface Collection	Surface Collection	Surface Collection	Surface Collection
Field Provenience Depth Numbe	Location 2 Surface Collection	Location 2	Location 2	Location 2	Location 2
Field Numbe					
Artifact Number	EiBi-21:22	EIBi-21:23	EiBi-21:24	EiBi-21:25	EiBi-21:26

13 – Isthmus Cove (EiBi -22) Groswater Site Catalog

Comment				
Description	largest fragment: small fragments with blue-tinted 3,7 x 2,3 x 0,3 cm glaze, two with traces of blue printed decoration	small flake	large and medium-sized fragments	phalange
Condition Fits Measurements Description with	largest fragment: 3,7 x 2,3 x 0,3 cm	1,0 x 1,1 x 0,2 cm; small flake weight: 0,2 g		
Fits with				
Condition	Fragmentary	Complete	Fragmentary	Complete
	16 Historical, British, Fragmentary 1775-1830	Inuit?	2 Inuit?	1 Inuit?
aty	16	-		
Material / Type Qty Cultural	Pearlware	Ramah Chert	Mammal Bone, Whale	Mammal Bone, Seal
Object Name	Vessel Fragment Pearlware	Flake	Bone Fragment Mammal Bone, Whale	Bone Fragment
Soil				
Artifact no. Field Provenience Depth	n/a Test Pit 1/2	n/a Test Pit 1/2	n/a Test Pit 3	n/a Test Pit 1/2
Field Number	n/a	n/a	n/a	n/a
Artifact no.	EIBi-22:1	EiBi-22:2	EiBi-22:3	EiBi-22:4

14 – Radiocarbon Report



Beta Analytic Inc 4985 SW 74 Court Miami, Florida 33155 Tel: 305-667-5167 Fax: 305-663-0964 beta@racjocarbon.com Mr. Darden Hood President

Mr. Ronald Hatfield Mr. Christopher Patrick Deputy Directors

ISO/IFC 2005:17025-Accredited Testing Laboratory

December 14, 2017

Dr. William Fitzhugh Smithsonian Institution Mational Museum of Matural History Department of Anthropology P.O. Box 37012 Washington, DC 20013-7012 USA

RE: Radiocarbon Daling Results

Dear Dr. Fitzhugh,

Enclosed are the radiocarbon dating results for three samples recently sent to us. As usual, the method of analysis is listed on the report with the results and calibration data is provided where applicable. The Conventional Radiocarbon Ages have all been corrected for total fractionation effects and where applicable, calibration was performed using 2013 calibration databases (sited on the graph pages).

The web directory containing the table of results and PDF download also contains pictures, a cas spreadsheet download option and a quality assurance report containing expected vs. measured values for 3-5 working standards analyzed simultaneously with your samples.

Reported results are accredited to ISO/IEC 17025/2005 Testing Accredition P.H.A.#59423 standards and all chemistry was performed here in our lateratory and counted in our own accelerators here. Since Beta is not a leaching lateratory, only graduates frained to strict protocols of the ISO/IEC 17025/2005 Testing Accreditation P.H.A.#59423 program participated in the analyses.

As always Conventional Radiocarbon Ages and sigmas are numbed to the nearest 10 years per the conventions of the 1977 International Radiocarbon Conference. When counting statistics produce sigmas lower than +2-30 years, a consensative +2-30 8P is cited for the result. The reported d13C values were measured separately in an IRMS (astrope ratio mass spectrometer). They are NOT the AMS d13C which would include tradionation effects from natural, otherwistry and AMS induced sources.

When interpreting the results, please consider any communications you may have had with us regarding the samples.

Our invoice will be emailed separately. Please furnant it to the appropriate officer or send a credit card authorization. Thank you. As always, if you have any questions or would like to discuss the results, don't he little to contact us.

Secrety.

Dardew Hood

Page 1 of 7



Bets Analytic Inc 4965 SW 74 Court Wilami, Floride 331 53 Tel: 205-667-5167 Fax: 305-663 0964 bets@hadiocalbon.com Mr. Darden Hood Bree deat

Mr. Ronald Hatfield Mr. Christopher Patrick Deputy Directors

ISO/IFC 2005:17025-Accredited Testing Laboratory

REPORT OF RADIOCARBON DATING ANALYSES

William Fitzhugh Report Date: December 14, 2017 Smillresnion Institution Malerial Receivest: December 08, 2017 Converting and Residence from Aur. (EEP) or Percent Medera Castern (MACS & Biblio business Laboratory Number Sample Code Number Colorator Calife ded Results; 95A % Protecting High Protestify Dessity Range Mellard (HPD) 2917-1 Ballon Arrows Economics Reta - 401304 24C90 +f- 30 BP RMS 613C: -28 II pása (63,2%) 350 - 405 eal BC (2539 - 2354 cal BF) (19.6%) 758 - QG sal BC (2000 - 2632 cal BP) (COM MES - COS est BC (2617 - 2582 est BP) Submiller Material: Charcoal Prefreatment: (charred material) acid/altafilacid Analyzed Material: Charrest material Analysis Service: AMS-Standard delinery Percent Modern Carbor: 73.90 +/- 0.28 pMC Fraction Modern Carbon: 0,7390 +/- 0,0028 D140: -261.04 +/- 2.78 often A140: -267.00+/-2.78 e/on(1950:2017) Measured Radiocarbon Age: (without d13C correction); 2450 44-30 8P

Calibration: BelaCal3.21: HPD method: INTCAL13

Possile we PROMICATERIZED countried. No sub-contenting or student labor was used in the sentence. All work was done at liefs in 4. In-house NEC mentioned representation and 4 Thomas Pallies. The "Communical Englishment Age" was cultried using the Linky half-the grots yound, in countried for batal houses much law months are cultration when applicable. The Age is sounded to the research 10 years and is superiod as acclosured we applicable, the Age is sounded to the research passing that the substance of the profit of the substance of the Age is sounded on protect of the Age is sounded and the substance of the Age is sounded and the Age is sounded and the Age is sounded and the Age is sounded at the belief of the Age is sounded and the Age is sounded at the belief of the Age is the Age is sounded and the Age is the



Bets Analytic Inc 4985 SW 74 Court Milami, Florida 33155 Tel: 305-667-5167 Fax: 305 663 0964 beta@adiocarbor.com Mr. Darden Hood

Mr. Ronald Hatfield Mr. Christopher Patrick Deputy Directors

ISO/IFC 2005:17025-Accredited Testing Laboratory

REPORT OF RADIOCARBON DATING ANALYSES

William Fitzhugh

Report Clade: Depember 14, 2017

Smithsonian Institution

Malerial Received: December 06, 2017

Laboratory Number

Sample Code Number

Constrained Regionarius Aug 1987 or Procesii Madiew Conton (pAIC) & Binnie burispes-

Catester Callinated Results: 55.4 % Protestilly High Protestilly Deseity Reage McNett (FPD)

Parts - 481305

7917-7 Coursi lais-5 break

1740 H- 30 RP

RMS 613C: -26.9 p/so

(61.3%) (BL1%)

12M - 750 cal AD 797 - 976 cal AO (1266 - 1170 cal EIP)

(MG3 - 1974 cal BP)

Submitter Material: Charcoal

Prefreatment: (charred material) acidialitatidacid

Analyzed Malerial: Chamed malerial Analysis Service: AMS-Standard delivery Percent Modern Carbon: 85.70 + 0.32 pMC

Fraction Modern Carbon: 0.8570 +/- 0.0032

D140: -143.04 +/-3.20 ofm

Δ14C: -149.98 +/-3.20 e/m(1950:2017)

Messured Ratiocarbon Age: (without d13C correction): 1270 +#-30 BP

Calibration: BelaCal3.21: HPD method: INTCAL13

IRCHEC-TENEZIOS counciled. No exo-community or version was not seen and the later to the counciled for least recepto research using the Libry half-the goods yeard, is conscioul for least recepto research and enter product an exclusive paper before present gard, "present" — AD since them the motion products are reported as exclusive, the App in recently of the motion privates as exclusive, the later approach of the motion privates are reported as provided as provided as the later and the



Beta Analytic Inc 4985 SW 74 Court Miami, Florida 33155 Tel: 305-667-5167 Fax: 385-663-0964 beta@udiocurbon.com Mr. Darden Hood President

Mr. Ronald Hatfield Mr. Christopher Patrick Deputy Directors

ISO/IEC 2005:17025-Accredited Testing Laboratory

REPORT OF RADIOCARBON DATING ANALYSES

William Fitzhugh Report Caste: December 14, 2017

Smithsterium Institution Makerial Received: Depember 08, 2017

Connectional Residence long (SPF) or Proceed Mackey Control (AMC) A Bilaide budgets

Laboratory Number Sample Code Number

Catorior Cathodial Results SSA '8 Potentially High Foreign Dendy Register (HPD)

Beta - 491396 2017-3 Bence blend cache 720 + 4-30 BP RNS 613C; -25.0 also

(00.5%) 1246 - 1302 cal AD (704 - 648 cal BP) (4.5%) 1365 - 1363 cal AD (544 - 567 cal BP)

Submiller Material: Charcoal

Prefreshment: (charred material) acid/altablacid

Analysed Material: Charred material
Analysis Service: AMS-Standard delivery
Percent Modern Carbon: 91.43 +/- 0.004
Fraction Modern Carbon: 0.0143 +/- 0.0034

D14C: -85.73 +/- 3.41 often

A140: -03.11 +/- 3.41 o/ox (1950:2017)

Meseured Radiocarbon Age: (without d13C correction): 720 +/- 30 BP

Calibration: BelaCal3.21: HPD method: INTCAL13

Pleases use INCHEC-(TRIRECOS) considered. No web-contensing or wholest later was used in the markets. All work was done at links in 4. In-house ARC assessment operationalists and 4 Teamor Please. The "Committeed Pleasembles Age" was calculated winty the Libry half-the (EVE) years), in consisted the later height feedom and was used in reported an authorists whose present (EVF), "present" = 70 1800.

Receive greater them the matter information one reported experienced and provide a provide and provide and the EVF the ARC of the ARC of

BetaCal 3.9

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -26.0 o/oo)

Laboratory number

Beta-481304

Conventional radiocarbon age

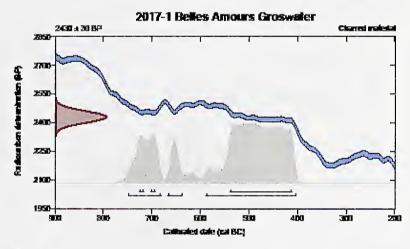
2430 ± 30 BP

95.4% probability

(69.2%)	590 - 405 cal BC	(2539 - 2354 cal BP)
(19.6%)	750 - 683 cal BC	(2699 - 2632 cal BP)
(6.6%)	668 - 639 tal BC	(2617 - 2588 cai BP)

68.2% probability

(61.5%)	541 - 414 cal BC	(2490 - 2363 cal EP)
(3.7%)	704 - 695 cal BC	(2653 - 2644 cal BP)
(3%)	727 - 719 cal BC	(2676 - 2668 cal BP)



Database used MTCAL13

References

Batieromzae to Probebility Method Brank Ramay, C. (2009). Bayesian analysis of radiosation states. Radiosation, \$1(1), 337-360. References to Detailoneo MTCAL13 References, et al., 2013, Radiosation55(4).

Beta Analytic Radiocarbon Dating Laboratory

4865 S.W. 74th Court, Miami, Florida 33155 - Tel: (305)887-5167 - Fax: (305)883-0864 - Emil: bela@naciocarbor.com Page 8 of 7

BetaCal 3.9

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -26.9 o/oo)

Laboratory number

Beta-481305

Conventional radiocarbon age

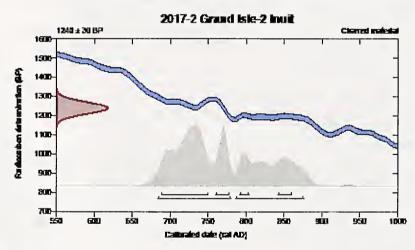
1240 ± 30 BP

95.4% probability

(61.3%)	684 - 780 cal AD	(1266 - 1170 cal EP)
(34,1%)	787 - 876 cal AD	(1163 - 1074 cal BP)

68.2% probability

(43%)	689 - 750 cal AD	(1261 - 1200 cal BP)
(11.8%)	760 - 778 cal AD	(1190 - 1172 cal BP)
(7.5%)	842 - 860 cal AD	(1108 - 1090 cal BP)
(5.9%)	792 - 804 cal AD	(1158 - 1146 cal BP)



Database used INTCAL13

References

References to Probebility Method
Bronk Ramacy, C. (2009). Bayestan analysis of radiocastion dates. Radiocastion, 51(1), 337-353.
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BetaCal 3.9

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -25.0 o/oo)

Laboratory number

Beta-481306

Conventional radiocarbon age

720 ± 30 BP

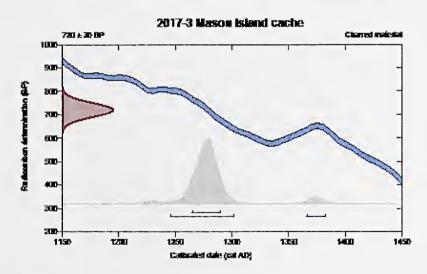
95.4% probability

(90.5%) 1246 - 1302 cal AD (704 - 648 cal BP) (4.9%) 1366 - 1383 cal AD (584 - 567 cal BP)

68.2% probability

(68.2%) 1265 - 1290 cal AD

(685 - 660 cal BP)



Database used INTCAL13

References

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