

The Gateways Project 2007

Land and Underwater Excavations at Hare Harbor, Mécatina

William Fitzhugh and Erik Phaneuf

June 2008



Arctic
Studies
Center

Produced by Abigail McDermott & Lindsey Fell

St. Lawrence Gateways Project: 2007 Field Report

Table of Contents

Figure List	2
Acknowledgements	6
1. Strategies of Intervention	7
2. Project Narrative	8
3. Research Area 2001-2007	54
4. Hare Harbor-1	55
Area of Research	55
2007 Excavation Area Maps	56
2007 Profiles	61
Artifact Photos - Land Site	65
Artifact Drawings - Land Site	70
Underwater Site 2007 Preliminary Report	83
Artifact Photos - Underwater Site	95
5. Other Gateways 2007 Sites	100
Boulet Harbor/Tickle	100
Spar Point-1	103
Baies des Belles Amour	105
Hart Chalet	109
6. Conclusions	115
7. References Cited	117
Appendix 1: Field Data Form	
Appendix 2: LNS 2007 Artifact Catalog	

Figure List

Figure	Page	Caption
2.1	8	2007 field crew (l-r): Erik, Phaneuf, Marilyn Girard-Rhault, Christie Leece, Perry Colbourne, Frédéric Simard, Will Richard, Vincent Delmas, and Josh Fitzhugh.
2.2	10	Will Richard and Bill Fitzhugh confer in <i>Pitsiulak</i> cabin
2.3	11	Boyce Roberts and a friend working on the year's first cod catch at Quirpon.
2.4	12	Shark catch at Quirpon Harbor. Warming water is bringing more sharks up north.
2.5	13	L'Anse aux Meadows - Parks Canada's reconstructed Viking site is feeling its age but has hosted hundreds of thousands of visitors.
2.6	14	The Norseman Restaurant, run by Gina and Adrian, serves the best food on the Northern Peninsula!
2.7	15	The Strait of Belle Isle in a moment of meteorological splendor.
2.8	16	Perry Colbourne and Christie Leece in a rare photo of the captain.
2.9	17	Pitcher plants abound along the Lower North Shore.
2.10	18	Wilson Evans and Christine Vatcher's well-tended home at Harrington Harbor.
2.11	19	Erik, Frédéric, and Marilyn preparing to dive at Hare Harbor.
2.12	20	Fig. 2.12: Setting up the pumps and dredges supplied by Brad Loewen and the University of Montreal's dive program.
2.13	20	Striker plate and French gun spall from the first square excavated at Hare Harbor in 2007.
2.14,15	21	Frédéric's great find of 2008 - a porringer in 16/17 c. Spanish faience style. A nearly identical vessel was recovered at Red Bay.
2.16	22	Erik with one of several glazed earthenware vessels recovered at the end of a Mécatina rainbow.
2.17	23	Josh Fitzhugh savors his first ever archaeological dig at the HH-1 blacksmith shop.
2.18	24	Charred timbers at North wall at 18N 24E
2.19	25	The Evan's family visits HH-1, some still in PJs! Josh, Christine, Wilson, Christie, Will, Sarah and Alexandra.
2.20	26	16th century mustard-yellow glazed platter recovered along the 18N wall in the blacksmith shop.
2.21	26	Young Evans-Vatchers canoeing in Hare Harbor.
2.22	27	Brothers Bill and Josh Fitzhugh at Harrington Harbor.
2.23	28	The Evans-Vatcher sisters, Sarah and Alexandra, aboard the <i>Pitsiulak</i> .
2.24	31	Christine Vatcher preparing one of her baked masterpieces
2.25	32	View of NW corner of blacksmith shop on a muddy day.
2.26	32	Vincent Delmas and his joie-de-vivre smile and coiffeur.
2.27	33	Lead sounding weight with remains of a small iron coring tube molded into its side.
2.28	33	Christie's nail feature at the south side of the blacksmith shop.
2.29	34	Crushed roof-tile walkway extending from the west side of the blacksmith shop toward the cook house.
2.30	34	Will Richard working at 12E 16N in the blacksmith shop, view toward the east.
2.31	36	Frédéric sampling whale bones for DNA analysis.
2.32	37	Erik and another earthenware storage vessel from the underwater site.
2.33	38	Baleen strip recovered in test pit B-1 underwater.
2.34	39	Blacksmith shop at the end of the 2007 excavation - view south.
2.35	39	Blacksmith shop back-filled and covered with tarps for the winter season.
2.36	40	Mutton Bay village, view to the northeast.
2.37	41	Boulet Harbor site seen from the tickle.
2.38	41	Pitsiulak anchored in Boulet Tickle.
2.39	42	View south over Tabatière.

2.40	44	Near glassy conditions early in the morning at the La Grande Rigoulette.
2.41	45	17th/18th c. Inuit stone cairn grave at Baie des Belles Amours site.
2.42	45	Belles Amours Inuit winter houses - view north.
2.43	46	Testing H2 at Belles Amours - view up entrance passages to the north.
2.44	47	Test pit at H1, Belles Amours Inuit winter site, trowel pointing north.
2.45	48	Clifford and Florence Hart and Christie Leece at the Inuit/Basque Hart Chalet site.
2.46	49	Test pit with Inuit sled runner, iron point, stone tubular bead and other materials at Hart Chalet.
2.47	49	One of the strait's icebergs - tantalizing and dangerous.
2.48	50	Storm brewing over the Strait of Belle Isles.
2.49	52	Early Thule-style Labrador Inuit needlecase of walrus ivory from the Hart Chalet site.
2.50	53	René Levesque, 2001.
3.1	54	Area of research 2001-2007
3.2	54	Map of 2007 voyage area, including 2007 survey sites
4.1	55	Map of Petit Mécatina Hare Harbor-1 site. Section of map 12 J/11
4.2	55	HH-1 areas of excavation 2001-2007.
4.3	56	HH-1 Area 3N, rock floor showing 2006 and 2007 excavation areas.
4.4	57	HH-1 Area 3N wood and planking distribution in 2006 and 2007 excavations areas
4.5	58	HH-1 Area 3N roof tile distribution in 2006 and 2007 excavations areas.
4.6	59	HH-1 Area 3N artifact distribution in 2006 and 2007 excavations areas.
4.7	60	HH-1 Area 3N iron distribution in 2006 and 2007 excavations areas and notations of profiles featured in Figures 4.8 - 4.14
4.8	61	Profile of balk running from 14N 14E to 14N 16E in HH-1 A3, facing north
4.9	61	Profile of half of the west wall for 2007 excavation area of HH-1 A3
4.10	62	Half of east wall profile for 2007 excavation of HH-1 A3
4.11	62	Half of east wall profile for 2007 excavation of HH-1 A3
4.12	63	Half of north wall profile for 2007 excavation of HH-1 A3
4.13	63	Half of north wall profile for 2007 excavation of HH-1 A3
4.14	64	Profile of 2007 excavation balk running from 16N 20 E to 18N 20E
4.15	65	SW corner of blacksmith shop (HH-1 Area 3N)
4.16	65	16th c. yellow glazed platter from blacksmith shop 18N 22E (north wall)
4.17	65	Northern squares showing charred footing timbers and charred deposits (view west)
4.18	65	Hearth feature in north wall of 18 N 20 E
4.19	65	Detritus rock pile in NW corner of the blacksmith shop (18N 18E)
4.20	65	18E line at 18N, view north
4.21	66	18N 22E with hearth, view north
4.22	66	18N 24E at completion; the NE corner of the blacksmith shop
4.23	66	Charred wood spoon or vessel fragment from 12N 24E
4.24	66	Glazed faience fragment with glaze spalling from 12N 24E
4.25	66	Charred N-S floor board and unburned E-W timber from NE corner (16N 22E)
4.26	66	Charred planks in blacksmith shop
4.27	67	Barrel stave with bung hole from base of 18N 24E
4.28	67	Barrel top and tub bottom pieces from 14-16N 24E\
4.29	67	Burned and unburned tile fragments from blacksmith shop
4.30	67	Western side of blacksmith shop at the end of the 2007 season
4.31	67	Eastern side of blacksmith shop at the end of 2007 season.
4.32	67	Artifacts from from 14N 16E
4.33	68	Artifacts from 14N 24E
4.34	68	Artifacts from Feature 1 in 12N 22E
4.35	68	Artifacts from 12N 22E
4.36	68	Artifacts from 16N 16E

4.37	68	Artifacts from 18N 22E
4.38	68	Artifacts from 18N 20E
4.39	69	Artifacts from 18N 18E
4.40	69	Pipestems from 18N 18E
4.41	69	Gun parts and flints from 16N 24E
4.42	69	Artifacts excavated from the HH-1 A3 shop excavation balks
4.43	69	Artifacts from 12N 24E
4.44	70	HH-1 A3 14N 24E artifact drawings
4.45	71	HH-1 A3 14N 24E artifact drawings
4.46	72	HH-1 A3 16N 24E artifact drawings
4.47	73	HH-1 A3 18N 22E artifact drawings
4.48	74	HH-1 A3 18N 22E artifact drawings
4.49	75	HH-1 A3 18N 18E artifact drawings
4.50	76	HH-1 A3 18N 20E artifact drawings
4.51	77	HH-1 A3 18N 24E artifact drawings
4.52	77	HH-1 A3 16N 16E artifact drawings
4.53	78	HH-1 A3 14N 16E artifact drawings
4.54	79	HH-1 A3 12N 22E artifact drawings
4.55	80	HH-1 A3 12N 22E artifact drawings
4.56	81	HH-1 A3 12N 24E artifact drawings
4.57	82	HH-1 A3 2006 balks artifact drawings
4.58	84	Site plan with 2007 excavation units
4.59	85	Top view of the porringer.
4.60	86	Back view of the porringer handle
4.61	86	Stratigraphy of north wall of TPB-1
4.62	87	Stratigraphy of north wall of TPB-2
4.63	87	Ceramic pot fragments
4.64	88	Decoration and stamp found on one ceramic pot
4.65	88	Two glass fragments
4.66	88	Different rope sections
4.67	89	Barrel hoop wedges
4.68	89	Stratigraphy of the east wall of TPB-1
4.69	90	Wooden stopper blank
4.70	90	Top plan view of TPB-1
4.71	91	Top plan view of TPZ-1 during excavation and when mapped.
4.72	92	Stratigraphy of the west wall of unit TPZ-1
4.73	92	Wooden stopper
4.74	93	Stratigraphy of north wall of TPY-1
4.75	93	Fish bones in Layer 3 with whale vertebrae
4.76	94	Erik Phaneuf and Marilyn Girard-Rheault, two members of the <i>Pitsiulak</i> dive team, topside and posing for the camera.
4.77	95	Faience bowl with flange handle from surface of sediment
4.78	95	Bottom of bowl in 4.77
4.79	95	Earthenware storage vessel
4.80	95	Storage vessel with decorative frieze panel
4.81	95	Storage vessel
4.82	95	Earthenware vessel
4.83	96	Earthenware vessel
4.84	96	Notched handle of earthenware vessel
4.85	96	Earthenware vessel
4.86	96	Limestone ballast
4.87	96	Molded glass fragment

4.88	96	Earthenware fragment showing glazing detail on rim
4.89	97	Wood barrel bung/plug
4.90	97	Knotted rope
4.91	97	Salvaged rope
4.92	97	Rope varieties
4.93	97	Cut fragment of birch bark
4.94	97	European flint finds
4.95	98	Limestone nodules
4.96	98	Whale bone phalanges
4.97	98	Whale bone phalanges
4.98	98	Bones recovered from the underwater site
4.99	98	Fish bones
4.100	98	Whale phalange
4.101	99	Bird skull - possibly a loon
4.102	99	Whale vertebra
4.103	99	Bird remains
4.104	99	Wooden barrel hoops with lashings
4.105	99	Barrel hoop fragments
5.1	100	Map of Boulet Harbor site. Section of map 12 J/14 Edition 2 (1984)
5.2	100	Satellite image of Boulet Harbor (2002)
5.3	101	Grey British gun flint from TP7.
5.4	102	Boulet Harbor/Tickle field maps
5.5	103	Map of Spar Point-1 site. Section of map 12 J/15 Edition 2 (1984).
5.6	104	Spar Point site map showing locations of excavated test pits
5.7	105	Map of Baies des Belles Amours site. Section of map 12 P/6 Edition 2 (1984)
5.8	105	Satellite image of Baies des Belles Amours Site (2002)
5.9	106	Baies des Belles Amours House 1 field map, diagrams, and profile
5.10	107	Baies des Belles Amours House 2 field map, diagrams, and profiles
5.11	108	Baies des Belles Amours artifact drawings
5.12	109	Map of Hart Chalet site. Section of map 12 P/6 Edition 2 (1984)
5.13	109	Satellite image of Hart Chalet site (2002)
5.14	111	Artifacts from TP1 and TP4 including: 1) an iron point; 2) an Inuit needle case; 3) a stone bead; and 4) a whalebone sled runner. For further details see following artifact drawings.
5.15	112	Hart Chalet field maps, diagrams and profiles
5.16	113	Hart Chalet Test Pits 1, 2 and 3 artifact drawings
5.17	114	Hart Chalet Test Pits 4, 5 and 6 artifacts
6.1	116	Our whalebone “ET” mascot watching over our underwater operations in 2007.

Acknowledgments

The 2008 Gateways Project was supported financially by the National Museum of Natural History (Bateman Fund) and donations from Mr. Robert Malott and General and Mrs. Raymond E. Mason, Jr., and by a substantial donation of travel, personnel, and equipment resources from the Marine Archaeology Program of the University of Montreal directed by Dr. Brad Loewen. UM provided support for students Frédéric Simard, Marilyn Girard-Rheault, and Vincent Delmas; loan of pumps and dredges, and cameras; and Dr. Loewen has provided advice and assistance in a variety of areas that have advanced the Basque aspects of the project. Frédéric Simard directed part of the underwater excavations and produced excellent video documentation. Vincent and Marilyn provided excellent support for the underwater work, and found the 38°F water truly invigorating. Overall direction of the underwater work was overseen by veteran diver-archaeologist Érik Phaneuf, whose skills and verve never cease to amaze. All of our Québécois team also made elegant contributions to our ship-board dining menu as well! Christie Leece from the Smithsonian joined the project for a fifth (and, hopefully, not a final year) diving and helping with land excavations and project organization. As my assistant for the past five years, I cannot thank her enough for her support and initiative, which includes production of last season's field report (Fitzhugh, Phaneuf, and Leece 2007). This year's report was produced by my current assistant Abigail McDermott and our graphic design volunteer Lindsey Fell - thanks to them both for their efforts! Also, I have to thank Anja Herzog, whose work cataloging and preserving our artifacts leads to exciting new discoveries even after the field season is over. Will Richard, now a Smithsonian Research Collaborator, returned again to provide the project with expert professional photographic documentation and was also a valued participant in excavation and boating activities. One of his salient contributions this year was beans, which he brought from Maine in great quantity. There was one special participant making his first trip into the north who had a special genealogical connection with the project: my brother Josh (John Hardy Fitzhugh), from West Berlin, Vermont. Very familiar with maritime venturing, he is the last of my siblings to explore the wonders of the North and the trials and of archaeological exploration, all of which came in great abundance on this trip. Finally, we could not have had any results at all were it not for our skipper, Perry Colbourne, who masterfully guided us through the shoals, kept the divers in air and hydro power, and filled our stomachs with culinary masterpieces. To Perry and his extended family we offer our deepest sympathy for the personal loss they suffered from a boating accident that occurred in the village at the time of our departure.

Finally I would like to once again express our appreciation for the support and assistance provided by many individuals and communities we worked and visited with during the course of the project: Greg Wood and Joanne Farrell; Kelly and Robert Linfield; Dennis and Stephen Colbourne and the Long Island Ferry crew; Louise Colbourne, Boyce Roberts; Gina and Adrian Noordhof; Christine and Wilson Evans; Helen and Miles Evans; the Harrington Community Seafood Corporation; the Harrington Medical Center; Paul and Cynthia Rowsell and CRM Sales; the Philip Vatchers of Mutton Bay; Clifford and Florence Hart of Brador; and the towns of Harrington Harbor, La Tabatière, and Lushes Bight. All helped make the 2007 Gateways Project enjoyable, safe, and productive.



Pitsiulak at anchor in Hare Harbor.

1-Strategies of Intervention

The Smithsonian's St. Lawrence Gateways Project utilizes a variety of archaeological methods during different phases of the project: investigation and research to find new sites; preliminary area surveys; mapping and recording; systematic excavation; and the production of archaeological reports.

Investigation: During the 2007 summer season we spent three weeks in the field doing archaeological research in the Hare Harbor/Petit Mecatina area. Most of the fieldwork was directed to the Hare Harbor-1 (EdBt-3) site on Petit Mecatina Island, which has been investigated yearly since 2002. Attention was split between the land site and underwater site. Survey work was done this summer at Boulet Harbor (EeBr-13), Spar Point-1 (EfBr-6), Baies des Belles Amours (EiBi-12), and the Hart Chalet site (EiBh-47) in Brador.

Site Surveys: At shore sites, the same survey, evaluation and mapping techniques, using standard field data forms were employed as in previous years. Sites were photographed and sketched, and test pits were used to determine subsurface stratigraphy and presence of cultural deposits. Notes on the soil, cultural deposits, and notable features were measured and drawn. Ground surface elevations were taken and depths of rocks and excavated artifacts, samples, and features were also measured. Several balks were mapped as well to identify the stratigraphy of the soil. Artifacts recovered were given temporary field numbers for identification and were recorded as to location and depth recovered. If portions of a structure were visible, they were mapped in relation to the grid as well.

Systematic Excavation: For a site which requires a full scale excavation, such as Hare Harbor-1 (EdBt-3), we establish a grid of coordinates based on a datum point with a recorded height above sea level and latitude/longitude. Should excavation occur, a grid is established with one or two meter units to maintain accurate recording and maps. Artifacts uncovered are numbered in the field so as to be able to trace in field notes. Significant artifacts are photographed in situ, and immediately after removal, and drawn in field notes. Photographs and maps of the structural aspects are also made. Excavation and testing in 2007 focused on expanding the A3 excavation area at the Hare Harbor-1 (EdBt-3) site in an area that appears to be a blacksmith shop, at which excavation began in 2005 and was expanded in 2006. The 2007 excavation expanded the 2006 work in a U-shaped ring of 2x2 meter squares around the east, north, and west sides of the blacksmith shop floor pavement. Upon completion of the excavation, the squares excavated in 2007 were back-filled and sodded over to maintain the structural integrity of the site as Area 3 is part of the natural drainage system for the overall site. Tarps and sods were then placed over the blacksmith shop paved floor to protect it from the elements.

Systematic Underwater Survey: For the Hare Harbor-1 underwater site (EdBt-3) excavation, experienced divers were brought in to expand excavations begun in 2006 in the central areas of the submerged deposits. The depth of and slope of the area was recorded using a depth gauges on dive computers, and a map of features was made using a triangulation from the master site grid. A line extension was also made to make triangulation more precise given the steep grade of the site area. Two dredge units were employed to excavate four 2x2 meter test pits, one set near a central ballast pile and another set in an area where we had discovered butchered whale bones (see map in Phaneuf report). Each of these test pits was excavated by trowel and resulted in recovery of large amounts of artifacts, animal and fish remains, wood and other materials. All finds were photographed and were kept submerged in salt water until they could be cared for in the lab.

Processing, Analysis, and Reporting: All of the artifacts collected were catalogued in the field and photographed, then packaged to be delivered to an archaeological laboratory of the Ministère de la Culture du Québec for cleaning, preservation, and cataloguing by Anja Herzog at the Center of Conservation. All field notes and details of activities are kept with the records of the excavation in previous seasons. Photographs, illustrations, maps and field notes appear in this report. A detailed report of the project is presented here and several published reports have also been issued.

2 - Project Narrative

Introduction



Fig. 2.1: 2007 field crew (l-r): Erik Phaneuf, Marilyn Girard-Rheault, Christie Leece, Perry Colbourne, Frédéric Simard, Will Richard, Vincent Delmas, and Josh Fitzhugh.

This year's Gateways Project began on the heels of my lecture cruise in the Russian Arctic to Wrangel Island with Smithsonian Journeys. Ten Smithsonian scientists and about ninety clients from other organizations signed on to take part in a cruise seminar titled "Symposium on Global Warming" organized by Peter Voll and operated by High Country Passage. We traveled aboard the *Kapitan Khlebnikov*, a wonderfully-appointed medium-size Russian icebreaker. Spending nearly two weeks participating in lectures and field study tours, meeting Chukchi and Siberian Yupik Eskimos, Wrangel Island wildlife wardens, and others

discussing climate and environmental change and experiencing very noticeable effects of warming in the eastern Russian Arctic, I was eager to see how people were experiencing things in the Eastern Subarctic, where last year we found the cod fishery rebounding somewhat and southern species like sharks appearing along the Quebec Lower North Shore where they had never been seen in recent times.

The primary objective of the 2007 field season was to continue exploration of the underwater deposits at the Hare Harbor Basque site at Mécatina and complete the excavation of the land site's blacksmith's structure. Last summer we established a grid over a 50x70 square meter area of the underwater site at depths ranging from 10-60 feet; excavated a series of one meter square test pits along a transect from the shore to the lower limit of the site at ca 60 feet depth; acquired faunal and artifact samples; and created a map of the entire site area. At the land site, we excavated north of the blacksmith shop and discovered the paved floor of the shop interior. These results are described in our 2006 field report (Fitzhugh, Phaneuf, and Leece 2007), which includes a preliminary analysis of the underwater stratigraphy with its discrete levels of wood debitage and faunal remains. The latter consisted of a thick lens of concentrated fish bones, mostly codfish, but also including bird and seal remains. Significant artifact recoveries included part of a wood platter or plate, fragments of a leather shoe, small amounts of ceramics and tile, and large numbers of barrel hoops and wedges. During the 2007 season we also hope to expand surveys along the Lower North Shore (LNS) between Blanc Sablon, test the Inuit winter house complex at Baies des Belles Amours and expand test excavations at other sites.

25 July I left Washington on an early morning flight to Montreal, where I met Moira McCaffrey for breakfast at Dorval (Trudeau) Airport, and my brother, Josh Fitzhugh, who was joining the project for two weeks. Other than my mother, who does not indulge in northern voyaging, Josh is the only one of my immediate family who has not yet experienced a northern archaeological project. We flew to Halifax and on to Deer Lake, where we were met by photographer Will Richard, who has been with the Gateways Project since its inception in 2001, and his friends Greg Wood and Joanne Farrell of Deer Lake, who shuttled us to Ivy Nault's B&B and then on to Greg's and Joanne's home for a delicious dinner of snow crab, lobster, and local corn, where we met his brother Peter and this wife Susan. Joanne comes from the Newfoundland south coast and, like Greg, is an avid outdoors enthusiast who hunts and kayaks and is also a delightful host. Her father, Don, had recently joined her in Deer Lake and had taken a job with the airport staff, where Joanne also works as a Thrifty car rental agent. My most immediate impression arriving in Canada this year was sticker shock at the currency exchange booth; for the first time I can remember, I received Canadian dollars at par with American: 1.0115 to be exact. Like Perry Colbourne's summer salary from the Smithsonian, I am about to discover the loss of equity that has been so important in meeting field expenses over the last thirty years. My other impressions were the luxuriant vegetation growth in the Deer Lake area and the abundance of mosquitoes, perhaps a foretaste of what we may encounter on the Lower North Shore after several seasons of relatively bug-free conditions. We also heard from Greg of the phenomenal economic growth of the Deer Lake area, the result of a burgeoning tourist and recreation and resort industry; reportedly, there are now six golf courses in the region.

26 July – Deer Lake to Lushes Bight Will had driven up from Maine, as usual, and in the morning we drove to Perry's home at Lushes Bight by way of Springdale, where we exchanged money and introduced Josh to the Canadian coffee shop standard – Tim Horton. We were soon on the Long Island ferry, skippered at this time by Perry's brother, Steven, and arrived at the 'Colbourne compound.' Wife Louise and daughters Jane and Jill were there to greet us, with their cat, who parades the blueberry patch next to the house harnessed to a zip-line. By some miracle and with help from Leonard Harvey's Accounting firm in Springdale, Perry had this year received his Smithsonian funding more than a month before our arrival and had been able to prepare *Pitsiulak* in advance. She was sitting at the Lushes Bight wharf virtually ready to go but for a few last-minute tasks. And she had even been christened with a turkey dinner outing (a.k.a. "sea trial") with the family. Life raft and fire-extinguishers had been serviced, and Perry had rotated the engine vent to face aft so we would no longer scoop up salt spray and mainline it into the engine room generator plant. All electronic gear was installed and she had been painted inside and out and was truly gleaming. Our old *Tumuyak* radar set, used for many years as a spare, had finally given up the ghost and been replaced by the Pits' equally ancient model, and there was real progress with the GPS navigation system, which was now working properly, giving Perry some auto-piloting so he would not be chained permanently to the Conn.

During the afternoon Will and I gave Josh a tour of Pilley's Island, visiting the Marine Service Center where we said hi to Ben Fudge and learned that the ship-building business was in a bit of a lull. He had just launched a new 80-footer and a 65-footer that he had extended by cutting in half and building a new midsection. But no new orders were in hand, and the rumor mill reported that the yard might soon be under new management with re-direction toward oil industry construction. On the other hand there was lots of action in the fishery, with capelin running strong, a growing commercial cod fishery and a recreational fishery (five fish per day per person

and no more than fifteen fish per boat). Our bills had been settled up with Ben through the SI, but charges from Perry's preps was lurking in the local hardware store and at Budgell's Sports, now under new ownership after a financial catastrophe had unseated its previous owner, Doug, who had served us well as ship chandler for more than fifteen years. Fortunately for us, the pain this year was minimal, mostly consisting of a new VHF radio, the work-horse of our communication system. We also had a chance to sample Fudge's Restaurant's treats, though at mid-afternoon I could not get Josh interested in the fried squid special! Although the temperature was cool by DC standards, Newfoundland was in a 'heat-wave' and the Triton town swimming pool was busy. The huge mussel farm business was also flourishing and had been greatly expanded. Now there



Fig. 2.2: Will Richard and Bill Fitzhugh confer in Pitsiulak cabin.

after a wet night and a rain-soaked hike in Terra Nova Park, to Long Island. The slide show of their trip, selected from a composite of 1800 pictures, was a real treat with highlights including Phil's sign-board scrabble and Christie's (proto) award-winning shot of a humpback breaching with minnows flying in all directions. In addition to a culture tour of Canadian historical sites, peoples, and back-ways, the trip was a gastronomical safari from one food delight to another, including a visit to Chess' fish-fry house in St. John's. Callum and Jane Thomson had introduced me to Chess' years ago, then having the best fried fish and chips in Newfoundland, but it now has been fancied up and is catering to tourists big-time. Once all assembled in Lushes Bight, we caught up with the Colbourne crowd: Nan, Perry's mother, chipper as ever; Stephen, whom we'd met on the ferry; Barb and Maurice, who was under the weather with a bad back; and Dennis, who was building a garage cum loft-pad for one of his sons. Andy was away working in Alberta; Bradley had graduated from the local high school and was out in Toronto on his first job away from home; Jill was setting off in September for MUN in St. John's, thinking about a social service career; and Jane is enrolled in Grenfell University (which was trying to shake off its MUN subsidiary status and become independent) in the wildlife biology program. Soon Perry and Louise will be empty-nesters, which Louise is anticipating by doing home-care work for the elderly, a role Ivy Nault has also taken on to fill the income deficit during the months when her B&B business is slow.

27 July – Lushes Bight A full day of preparations. Will drove Josh and I to Springdale in the morning, where I paid the Western Petroleum fuel bill and exchanged US for Canadian money.

was hardly any open water left among the islands, making local boat travel a highly channeled affair between vast expanses of blue floats.

As we pulled up for the ferry, a black bronco lined up behind us and out popped Christie, Lena, and Phil, arriving from the east (St. John's) after a circuitous holiday romp that took them to Quebec City and across the St. Lawrence to New Brunswick and Nova Scotia; then by ferry from North Sydney to Argentia and St. John's, Newfoundland, and finally

A phone call to Kelly Linfield at their Dive Master shop in Gander alerted us that her husband, Robert, had returned from capelin-fishing and would set up the gas engine on the compressor we were renting from them again this year, and get together the tanks and weights. But we had to come immediately, so we arranged for Christie to be waiting for us at the Pilley's Island side of the ferry with Dennis' truck. Will and Christie returned to Long Island and Josh and I drove the truck to Gander, arriving at the Linfield's about 4:30 PM. They have given up their commercial premises and set up shop in a small addition to their home, and the rent saved has made all the difference in the success of their business. We got checked out on the compressor operation and had our ten tanks filled, and learned Rob's take on the news reports we had heard about the spring seal catastrophe in the Gulf, which cited a major loss of pups to the early melting of pack ice, before the pups were ready to begin life on their own. Rob was not sure of the actual situation in the Gulf, but on the 'front' – the ice pack off northeastern Newfoundland – an unusually large population of harp seals congregated to have pups, apparently augmented this year by many seals that would normally have gone to the Gulf. "The seals know where to go," Rob said, "and if the ice is thin or conditions are bad in the Gulf, they figure it out." The problem that developed on the front with the large crop of baby harps was weather: a set of bad storms caused many of the young to die, crushed among the outer fringe of the ice pack, and many sealer boats were isolated for days, trapped in the jammed pack and unable to get back to land. It will be interesting to see what the Harrington men have to say about their seal hunt this past spring [they had a very good sealing season, it turns out]. After collecting the compressor we stopped to have a faulty fire extinguisher re-filled at Gerard Lynch's tank shop in Grand Falls before returning to Long Island and stashing our gear on board. We were now ready to go, and the weather looked good for a morning departure.



Fig. 2.3: Boyce Roberts and a friend working on the year's first cod catch at Quirpon.

28 July – Lushes Bight to St. Anthony

Perry was up at 6 raring to go, sensing weather conditions with light winds that would last at most only a couple more days, and after goodbyes to the family and to Lena and Phil who were catching the 8 AM ferry and heading for a day of kayaking and hiking in Bonne Bay and Gros Morne Park, we cast off and set out across Green Bay for Cape St. John. It was 'Little Bay Islands' Day and the calm weather would attract lots of boat traffic to this small island town near Lushes Bight. At the cape all seemed propitious for going on direct for St. Anthony through the Horse Islands, by-passing the 'wind-tunnel' at the mouth of White Bay, but also losing a chance to show Josh the pretty harbor of Fleur-de-Lys and its Dorset soapstone quarry. We would also lose out on checking in with Elaine Anton and her husband John Erwin who were probably working at the Coachman's Cove site near Fleur De Lys again this year. However, we were also a bit late in our schedule and could not afford to get caught in a string of windy days, so it was a relief to see the miles passing and the southwest winds remaining moderate as the day progressed – no boats, no whales, and only a porpoise or two, but the day was very hazy due to the hot weather on land. We immediately could see a major difference from

last year's voyage, when there was not an iceberg to be seen; this time there were many large bergs, and we saw them all along the route, from right outside Lushes Bight to the Strait of Belle Isle. This year northern Newfoundland had also had an exceptionally heavy pack ice year, with the result that spring came a couple weeks later than usual, Perry's garden was late, and there had also been lots of snow late in the winter, but nothing at the early end.

Our only concern at this point in the voyage was the engine, which was leaking a considerable amount of oil, a problem that had been developing last summer and which Perry had not been able to fix, despite staunching a few minor leaks. Unable to determine oil levels without shutting down the engine – which you don't do underway offshore – we had no way of checking our oil consumption, and so Perry kept adding oil en route just to be safe. After arriving at St. Anthony, where we were welcomed by a close-passing grampus (who according to local salts is working for the local tourist agency that runs a whale-watching business), we checked and found we'd lost six liters of oil in the 12-hour passage. Not only unacceptable in terms of mechanics, this also creates a disposal problem, as you can't pump it out into the sea with the bilge; you have to soak it up with sponge pads and dispose ashore.

We tied up at the town dock, joining several boats that were waiting to unload their shrimp catch. Will and Christie prepared Will's traditional home-brought meal – this time spaghetti, with a touch of the past, Lena-style garlic bread à la Christie – and a bottle of wine. A great culinary beginning. While dinner was cooking we chatted with the local fishermen, one a talkative fellow from Flowers Cove, and a fine old story-teller named Robert Symms, whose father had been the manager of the Grenfell Mission's orphanage. Among his other stories was one about a dog they had which disappeared for several days and then returned with an Inuit kayak model in his mouth. Where it came from, no one could tell; but it was undamaged except for a bite-mark. When he heard I might be able to identify its origin he promised to bring it down before we left in the morning, but the next day – Sunday – we left soon after 9 AM without seeing him. I suspect the kayak must have been made by one of the Labrador Inuit patients at the hospital, but how it found its way to the dog is more curious. Symms knew Perry's dad from the old days when he fished at Belle Island and nearby.



Fig. 2.4: Shark catch at Quirpon Harbor. Warming water is bringing more sharks up north.

Bottom line from the fishermen: “There’s lots of shrimp and lobster, and more plentiful cod, but because fish is sold in dollars, the high Canadian dollar and increased competition from farmed fish from Asia is killing the fishermen. Hard to make ends meet, but what else can you do but keep fishing. The bills and boat mortgage has to be paid, but where it is going, God only knows.”

29 July – St. Anthony to Cook’s Harbor

The sea had been very confused yesterday, and the fisherman from Flowers Cove had also noted the multiple layers of swells during his last trip out to the edge of the

shelf, about 150 miles from shore. But this morning, the conflicting swells had subsided and our passage to Quirpon was relatively smooth, though foggy. We passed the Canadian CG icebreaker *Harp*, unseen as she was heading into St. Anthony, and at the entrance to Quirpon Harbor we found a small boat of fishermen working a net. They finished as we approached and proceeded into Quirpon Harbor. Upon tying up we called Boyce Roberts (of “Robert’s Rooms”) and found he was preparing a feast for us, as usual, and for a group of his relatives from St. John’s and Michigan. This was the same group we’d seen at the net, and we discovered they not only had a good batch of codfish, but had caught an eight-foot long mako shark. They have seen makos here before, but not of this size. We photographed it on the stage, hamming it up a bit with a bottle of drinking water in its mouth, for the summer’s field report. By this time they had butchered it and divided up the meat, which some – excepting Perry – seem to love.

While waiting for Boyce to fetch us Perry dived into the engine room again and after a short while emerged with a frown saying, “We need a professional mechanic. We can’t go on leaking oil like this!” Diesel mechanics are not easy to come by in this part of Newfoundland, and parts always have to be flown in, so this sounded like a major blow to our schedule and budget. However, after a bunch of grunting sounds he re-emerged with a limp, worn-out oil gasket from a part of the oil system that had not been replaced in years because it was not part of the oil filter that gets routine maintenance. After the engine had cooled down he had been able to trace the leak back to this location and discovered a way to get at the gasket inside. This time he emerged smiling with the news that he had found our big leak, and shortly after announced the real miracle, that we actually had the replacement gasket on board. With this we went off to dinner at Boyce’s with great relief and could fully enjoy the feast, which included at least four turkeys, boiled potatoes, turnips, carrots, and salt beef, and the *pièce de résistance*, pease porridge, followed by partridge-berry pie and other delicacies. Perhaps the most important discovery, raised with some delicacy during dinner, was the fate of Perry’s bake-apples, picked and left with Boyce to store for our return trip in August. When we got into Quirpon from a 24-hour steam from Harrington, we found Boyce gone and the house empty. Perry prowled around in the basement but found no sign of his bake-apple bucket. This was a blow, as Perry counts on delivering these tangy treats to friends and family who rarely see these berries as the climate is too hot for them in central Newfoundland. What had Boyce done with the berries??? The mystery bugged Perry all year. The answer seemed obvious...eaten! But when the subject came up this time, Boyce looked shocked and said, “They’re in the freezer, boy, where they’ve been all year.” Turns out he had re-packed them in plastic bags, while Perry had been looking for his bucket. Now we’d have bake-apples for the trip to Harrington! And they tasted just as good as fresh-picked.



Fig. 2.5: L'Anse aux Meadows - Parks Canada's reconstructed Viking site is feeling its age but has hosted hundreds of thousands of visitors.

Boyce loaned us his car so we could drive over to L'Anse aux Meadows to see the Viking site and visit Gina Noordhof and her husband Adrian at their Norseman Restaurant. The weather was damp but calm, and we found the fire in the longhouse crackling and re-enactor Wade Davis holding forth. He recognized us immediately, and we got into a good riff, bantering about academic squabbles over the Sops Arm so-called 'Viking' finds (really just early French or English settler stuff), but also some kind of engraved piece that shows the image of a Viking ship, something that's been in the news recently



Fig. 2.6: The Norseman Restaurant, run by Gina and Adrian, serves the best food on the Northern Peninsula!

but is certainly the product of an over-enthusiastic publicity hound I'd corresponded with after hearing of the collection last summer. A nice guy and former teacher who had worked as a guide at the Parks Canada Viking site for awhile has been pushing this idea but seems a bit over-zealous with his interpretation of his historical collection. The day was chilly and several tour groups came through the site. Josh had a good look around at the reconstruction, the museum, and the reconstructed village, which always fascinates me even after all these years. What struck me this time was the small hut constructed in the museum display has been converted into a 'saga theater' in which excerpts from the sagas are told by colorful characters styled from the Viking age which closely parallels and was perhaps inspired by the installation we did in the Smithsonian's Viking show of 2000. Although we did not have time to visit the popular tourist attraction, Norstead, Gina told us that they had been given the props from the Newfoundland Museum's "Full Circle" Viking exhibit, and have developed new and more popular attractions. Our major regret was not having time to throw Viking axes or play 'dump the maiden' in the tank of water with a bulls-eye ball toss. While here we heard that the old 'L'Ansy Meadows' stage had been carried away by the heavy ice this winter and would be replaced with a floating dock that would be taken up each winter. They do need a good dock to handle the cruise visitor traffic. But locals are wondering what is that is giving the stages here so much trouble in recent years – they are not lasting when built new, apparently being subject to rot much earlier than in the past, or are being carried of by the winter ice. "The climate," they say, "is not like the old days."

The visit to the Norseman Restaurant, which has received much notoriety outside Newfoundland for its excellent food and fine crafts, was not only good eating, but good company. Adrian greeted us and soon Gina appeared with their 9-month-old son. Blond and blue-eyed, with a sanguine gaze, I could see this young Viking reigning over the Noordhof domain a few decades from now. Will showed Gina the mock-up of his book, with shots of the restaurant and the soapstone dancing bear that he bought here four or five years ago, which has become his professional logo. Their business is doing well despite the slight down-turn in tourism – probably a function of the high gas prices and near-negative exchange rate that tend to keep US visitors down. The government mantra here in Newfoundland and throughout Canada these days,

‘Enjoy Home,’ [‘...while the Yanks are away,’ might be the unspoken sequel], and Christie’s trip certainly indicated Canadians were indeed indulging in some well-deserved pride in their homeland and its history. However, not everyone in the States is pinching his travel budget: we met one elderly couple from North Carolina in the Viking longhouse who are on their thirteenth ‘or so’ trip to Newfoundland and L’Anse aux Meadows. They love it and can’t stay away. I think they should be identified and receive the Order of Canada award! We also were pleased to see Boyce’s daughter Jamie with a server’s job at The Norseman. We missed seeing her new baby, Nicholas, and hope to catch a glimpse on our way back in August.

Back at Boyce’s we found his relatives gathered around the kitchen table again, this time looking rosy-cheeked from a second go at the turkey and some local moonshine Boyce was dispensing, chilled with glacier ice collected from the icebergs popping away in the glasses. But by now it was evening, the wind was down and Perry was anxious to leave for Cook’s Harbor so we could get an early start across the Straits. The run was short and by 11 PM we were tied up next to a bunch of long-liners fitted out for shrimp, but not a person in sight anywhere around the pier. We turned to. During the afternoon I’d met Jerry Noble, a young manager of the Quirpon Lighthouse Inn, the fabulous (and famous) resort known around as one of the most unusual (if not elegant) retreats experiences in the world. Nothing like a week living in the historic old Cape Bauld lighthouse premises perched out on a cliff at the eastern-most edge of the North American continent, with nothing to feast your eyes on but cold Atlantic water, ice bergs, and grassy moss-covered rocks, when you’re not feasting your stomach. Jerry seemed interested in showing me around sometime, but when I mentioned this to Boyce he was somewhat affronted: “why would you want to go around with him? He’s only been there a couple of months. You need a pro like me, or the old fella here who really knows the island’s history!” He’s right! Some well-deserved local pride here. I suspect I’d need them all!

30 July – Cook’s Harbor to Tabatière The night remained quiet, with the Cape Norman fog horn sounding faintly. We were up and traveling by 5am as a dull light spread over the water. Outside the harbor the seas were calm but the fog thicker. We chose to run down along the



Fig. 2.7: The Strait of Belle Isle in a moment of meteorological splendor.

Newfoundland shore and were occasionally greeted by groups of porpoises that played around the bow for a few moments before peeling off for some other adventure. The crossing remained uneventful, and by 11 AM we were off Blanc Sablon and had turned the corner and headed west for the St. Augustine sea buoy, 48 miles away. Around Blanc Sablon the seas built up into a chop as a strengthening easterly breeze battled the current from the Gulf. The fog gradually lifted, revealing the Quebec

shore in the distance, and through the afternoon the wind died back until by the time we entered the St. Augustine channel it was quite calm. Still, not a vessel was seen on the water all day, and the only human sign noted was a couple of gill net floats off Greenly Island at Blanc Sablon. Even passing through the St. Augustine channel failed to produce sign of life; however, we found a number of new cabins in the coves along the Grand Rigoulette. Here all of the navigation aides have been up-graded with solar-powered lights, making the channel a ‘full-service’ run. We are somewhat relieved to see the lack of activity as it indicates the berries are not yet ripe...either that or they are not present, and we can’t bear to contemplate that eventuality. It seems the season has been slow here as well as in Newfoundland, for there were no signs of berries in Quirpon this year also.

Tabatière was much the same as before, except for major renovation of the decrepit old wharf. Now their cranes are dropping in huge amounts of steel and crushed rock. The plant is processing primarily crab and shrimp and stinks of shrimp offal. It’s the major employer in town, with about 100 workers. Until last year its frozen product was shipped to Port Saunders in Newfoundland, where it was sent south; now it goes out to the west on the *Nordik*, the coastal steamer. Josh quickly sized up the town: roads, dust, and truck. Not very attractive, but serviceable. Total population now, about 450, with more people leaving for the mainland all the time. At first it’s the men, leaving their families behind for stints in Toronto or Alberta. Soon the families get fed up with the separation and follow.



Fig. 2.8: Perry Colbourne and Christie Leece in a rare photo of the captain.

31 July – Tabatière to Harrington We had been counting on a ‘fancy’ breakfast at the fish plant, but after rising soon after sunrise, we realized we had not set our watches to Quebec (Eastern Daylight) time and had an hour and a half to wait before they opened, so since the weather was great, we decided to cook underway. Soon we were in the fog that so frequently sits on this part of the coast, but at least the wind was down. Some good news from the engine room: we only used three liters of oil on the 14 hour run yesterday – our normal consumption; so it looks like Perry found the major leak. As we motored into the fog Will fried up some scrambled eggs.

Approaching Petit Mécatina we decided at the last minute to spend the day preparing the site for excavation, since we had no work that could be done in Harrington. We anchored and hauled our gear ashore and were confronted immediately by an onslaught of bugs – all sorts, mosquitoes, black flies, deer flies, stouts, and others. Fortunately the wind came up and we were able to grid up the new areas of the blacksmith shop and cut down the worst of the grass and



Fig. 2.9: Pitcher plants abound along the Lower North Shore.

tough and the taste like a blend of swordfish and tuna – we had a visit from the Mongé family group we had met two years ago when Yves was with us and we did a radio interview for the nearby Tête à la Baleine community. The family was back for a summer holiday at Providence Island and had been digging artifacts at the sealing station site north of us in Daniel Harbor. They had quite a collection of pottery, including several types of annular ware, blue transfer print, salt glaze jugs, cream-ware, plain clay TD and ornamented pipes, and other materials. I gave them a spiel about not disturbing old site, and, somewhat chagrined, they gave me the collection. One had information that about a couple who lived at the site in the early 20th c. Most of this material pre-dated that, however. While we were working at the Basque site Perry saw a zodiac enter the harbor and explore around at the head of the harbor, wearing flashy expedition gear. Last year we met people who had dived on the site, and this year with the Mécatina River hydroelectric project, there are many archaeologists and others exploring the area, but mostly on the interior.

By 5pm the wind started to drop and we packed up, muddied and tired from pulling alder roots and lugging water-saturated sod and peat. Christie was the only one to find artifacts, in her square east of the log pavement. Josh had uncovered a large rock-fall boulder and found a large spike. Will and I were working in the ‘furnace deposit’ area along the north wall. That evening the crossing to Harrington was smooth and a great sunset was in progress. Now on Quebec time, the sun was down at 7:30 PM – quite a shock after the long Newfoundland evenings. Perry made a supper of caribou stew from meat brought down from Uncle Jim at Labrador City, which we ate while Paul Rowsell recounted the events of the winter: basically a good winter, with enough snow and cold for good ice conditions. A couple of strong spring storms threatened the ice-road, but they managed to hold the ice to the shore at the critical spot by roping it in along the shore with a huge 8-inch hawser so if it broke up it would not get carried away by the wind or current. The harp seal hunt was good for most people, and there were plenty of seals along this coast, but elsewhere in the gulf there was little or no ice. Paul got a moose in an excursion up a small river near St. Augustine. The summer weather until this past week has been pretty poor, with lots of fog and rain. Lobster and crab season was OK; cod have been fairly plentiful; and they just had a successful 48-hour open on halibut, with one boat landing almost 300 fish. The downside is the flies – a bumper crop, and we’ve arrived right in the middle of it. One interesting bit of news

standing vegetation, opening up a set of squares around the west, north, and east side of the 2006 excavation. Clearing the surface of the eastern squares produced promising results. It was good to have Josh’s help for some of the heavier work removing alder stumps and heavy sods. We did not notice any falcons nesting in the cliff this year, and the bake-apples looked about a week away from ripening.

After a lunch of left-over fish stew and fried shark steak – good but not a rave, as the meat is quite

is that the town is drilling for water on the island, hoping to replace the current tannin-colored reservoir supply with deep, clear groundwater. So far one hole has been dry and one has struck water, but not enough. It's amazing to think of a fresh water well on a granite island surrounded by the sea.

1 August – Harrington to Mécatina and back to Harrington This was a bit of a confused day and not what we expected the day before our Quebec diving colleagues would arrive. We had come to town largely to see Wilson and Christine Evans and other friends and get a few supplies. But the weather was still so good we could not resist returning to Mécatina and gain a day and a half's work at the site. So after hellos to everyone we left and spent the rest of the day digging and making good progress on the blacksmith area. It showered off and on, but overall the weather was fine. However returning to the boat from the site we learned that the ship's generator had a ruptured fuel line, and we needed to go into Harrington for repairs. With the oil and fuel leaks, this project is starting to turn into a repair odyssey! The root cause of all the problems is need for a major service, since the engines were installed in 1989 and have never had a thorough overhaul. All the hoses and seals are wearing out, and all we've been able to do is make spot repairs when things go wrong. The generator fuel line looks like it's been baked in the oven it's



Fig. 2.10: Wilson Evans and Christine Vatcher's well-tended home at Harrington Harbor.

so full of cracks. Other hoses, gaskets, and seals are probably also in bad shape. This needs to be addressed next year, and the work must be done by a proper diesel mechanic; it will cost a good deal for labor and parts.

So it is back to Harrington for the evening. We'll remain in town tomorrow getting a fuel line jury-rigged, putting together the dive pumps and dredge hoses, and waiting for the arrival of the Quebec team. Too bad to lose another day's work when the weather is so fine, but we earned a few days of credit after such a

quick voyage from Newfoundland. Perry cooked a great fried cod dinner once we were alongside the pier, and the town kids regaled us until midnight carrying on at their hang-out at the end of the pier.

2 August 2007 – Harrington to Mécatina This was another in a string of great days, which has now lasted more than a week. Perry worked on the generator fuel line most of the morning and found that he could trim the deteriorated end of the hose and re-seat it, and after much air-bleeding it settled down and worked fairly successfully [we later found that the problem is a weak fuel pump that is unable to suck fuel from the main tank when its level gets low]. This is crucial for us as the ship batteries are pretty shot now and are not holding much charge. We need a new set for four, costing about \$250 each. The day gave us time for other chores like fetching the oxygen tanks that we need to carry while diving, for emergencies, checking up by email

and phone with Abby in the office, and buying groceries. Christine gave us a wonderful lunch of fruit, bean and other salads and we got caught up on the family affairs: Alexandra's first year of high school in Quebec and her turn toward science, Sarah's wry acceptance of her sister's absence; Wilson's sailing trip to the British West Indies and sojourns in Quebec, and Christine's lingering knee problem which has kept her from her beloved running, and activities at the school. He also heard about coyotes that had been seen in the Blanc Sablon area this spring, which were threatening seal pups and island bird populations, and the fox on St. Mary's Island that Wilson not been able to catch. It seems that while tourism at Harrington has dropped, perhaps as the popular film *La Grand Seduction* has wound down, Amy Evans' B&B is still fully booked for the peak summer period.



Fig. 2.11: Erik, Frédéric, and Marilyn preparing to dive at Hare Harbor.

Our divers – elegantly called ‘plongeurs’ in French– arrived on schedule by water taxi from Chevery at 4:30 PM: returning veterans Erik Phaneuf and Frédéric Simard and two new divers-in-training, Marilyn Girard-Rheault and Frenchman Vincent Delmas, with bags filled to the brim with diving gear and, we soon discovered, gourmet delicacies. They immediately set to assembling the two dredges on the pier, where we were soon joined by Wilson Evans and Christine, and Larry Ransom. For one moment we seemed to be

missing a crucial connecting link between the pump and the hoses, but the missing pieces were soon found. The dredges were assembled at University of Montreal with parts Frédéric had ordered, and then were sent to Perry at the Marine Center: two Honda gasoline-driven pumps, four 50-foot sections of 2-inch fire hose, and two dredges made out of Y-shaped pieces of plastic drain pipe with a fire hose embedded into the short section of the Y. As the high pressure nozzle spray enters the main section of the long pipe, it entrains water from the short arm of the Y and creates a section at the opposite end. To the suction end one attaches a section of 6-inch flexible, rubber tubing looking like a giant esophagus, which becomes the working end of the dredge. Very simple and efficient at moving silt, gravel and rocks – and exposing artifacts. The trick is to have a quick eye and hand so you can catch artifacts before they are sucked into the machine and dumped downstream with the rest of the sediment. You control the suction power by manipulating the distance to the soil and the freeing of sediments by a trowel, garden spade, or hand. Wilson was fascinated to see the equipment and no doubt will try his hand at a version of his own, since he frequently needs to dredge gravel and sand for construction material.

With the dredges operable, we left town immediately to take advantage of the calm weather, as Wilson warned that a strong southerly storm was approaching. We had a nice steam out that allowed the new crew to get acclimated to shipboard motion. After we launched the zodiac and got the compressor and dive gear organized, Christie made tacos for supper; with nine around the table – more of less a capacity crowd – we shared a round of stories and listened to Erik's peculiar version of Mongolian throat-singing. After dinner I had a chat with Vincent and learned

about his PhD thesis project at UM on Basque history in the Gulf of St. Lawrence, to be supervised by Brad Loewen. I hope he will also be able to find out something about our site, as we badly need historical documentation as we still don't have specific information about the ethnic and national identity of the site. Erik thinks it might be French or French Basque based on similarities between our limestone ballast and material from the vicinity of La Rochelle, north of Bourdeau. Voyages to this area in the late 1600s should be well-documented, even possibly with plans and notes on the settlement. This work would complement Anja's work on the material remains. Vincent has done several excavation projects in France, with de Lumley and others, but his specific interest is in medieval archaeology, so he is well-suited for his project.



Fig. 2.12: Setting up the pumps and dredges supplied by Brad Loewen and the University of Montreal's dive program.

3 August – Hare Harbor It was still all night and remained quite warm. Erik and Fred worked with Perry getting the dive site set up and the dredges and hoses on the bottom. They also threw in our large ship anchor – the first time it's been wet since the big storm in Frobisher Bay – to use as a dive boat mooring and a safety ascent line. The rest of us worked at the site, getting Marilyn and Vincent tuned in to that side of the dig. No spectacular finds, but we did verify that the industrial charcoal-earth deposits continue up the hill-slope north of these squares. Marilyn found a nice tiny blue seed bead and a lead musket shot, and Josh got down to some planks where he



Fig. 2.13: Striker plate and French gun spall from the first square excavated at Hare Harbor in 2007.

found several lead musket balls. Christie's square turned up planks and wood that was squared with the sills and paving of the blacksmith shop excavated last year. The air was strangely still all morning, yet the flies stayed down as though they knew something was coming, and by afternoon swells began entering the harbor from a south wind that had built up. We were in a complete lee, however, and easily made our first large group dive to get everyone oriented to their gear and the site. After I got enough weight on (38 pounds!) and was able to sink, Christie and I went down to the A-baseline and repaired one of the breaks; we then set an east-west line along which we will dredge a trench. I had a few problems with neutral buoyancy and puffy eyes, a problem I've never encountered before. I noticed I was having

trouble reading the grid labels on the bottom, and when I surfaced my eyes were watery and I had fluid bulging under the lower skin of my eyes distorting my vision. The problem might have arisen from mismanaged pressure in my mask. Despite a few problems, we managed to get the new line installed before my air ran low and we surfaced, this time with the proper safety stops, using the ascent line. At the surface it was clear that stormy weather had arrived; it was raining and grey and a swell was entering the harbor. The others followed shortly to the surface, having had good dives, but all were noting the extremely cold water -- 38°F at 55 feet, with a sharp thermocline at 50 feet. Perry as usual provided expert assistance, collecting our belts and BCs so we could get aboard. Will covered the operation photographically from the zodiac. The rest of the afternoon was devoted to re-filling tanks, writing notes, and reading. Dinner was spaghetti à la Frédéric and Christie.

4 August 2007 – Mécatina We got a late start this morning. The boat had been rolling gently most of the night and by morning the wind was in the southwest and it was foggy and drizzling. Will and Erik made some pancakes, and Erik reviewed the plans for the excavation with the team. I decided not to dive, to give my eyes a bit more time to recover from whatever made me so bug-eyed; they were a bit red and had fluid sacs at the bottom. Christie, Josh, Will, and I dug at the land site, without great new progress, dodging occasional rain showers. The divers got their dredges in place and began work. A big surprise came when Fred had to leave his dredge to check the pump, and spotted a piece of ceramic showing through the surface of the mud. When he lifted it up he discovered it was a small, nearly intact bowl with flange handles, one of which was missing, decorated with faience floral designs in green and blue. It's a beautiful piece and by far the finest to come from the site. I've seen similar designs on ceramics from Red Bay, but nothing as fine as this vessel that I recall. What a surprise, and a great way to get the underwater work started. The piece comes from a part of the site near the upper stone piles where there is little sediment accumulation, so perhaps we need to do further exploring here.

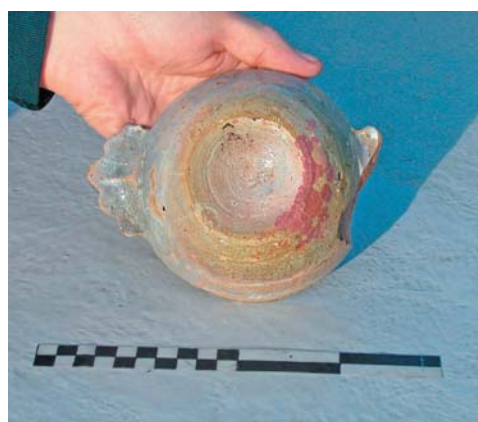
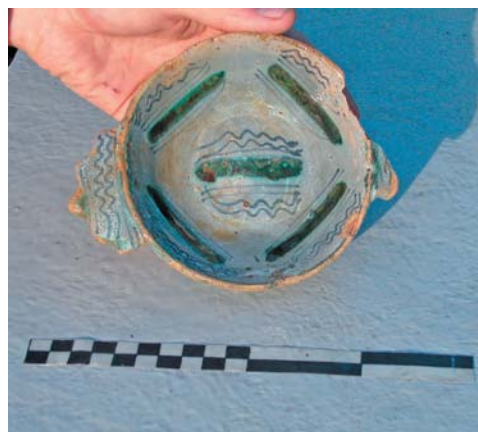


Fig. 2.14, 15: Frédéric's great find of 2008 - a porringer in 16/17 c. Spanish faience style. A nearly identical vessel was recovered at Red Bay.

Now that we have been in Quebec for a week, the daily routine has settled in. The biggest change has been the 1.5 hour time shift. Instead of rising about 6:00 AM the sun is rising about 4:30 AM causing us to lose a good part of the work day, since no one seems to want to get up at 5:30 AM. So we're up about 7. Diggers go ashore about 8:30 AM and the divers make their first dive from 10 AM to 11 AM, getting back aboard in time to charge tanks and prepare a hot lunch, which everyone, especially the divers, appreciate. A lot of calories get burned up in the cold water, especially by Vincent, who is diving in a wetsuit because he did not have time to get checked out officially in a dry-suit. He is able to stay in the water about 30 minutes before getting too cold. After lunch and often a short nap, the diggers head to shore again about 2 PM and work until 6-

6:30 PM. The divers make their second dive at 3-4 and return again to charge tanks and prepare dinner. At the site, the sun drops behind the cliff about 3:00 PM, and by 7:00 PM it is starting to get dark. Supper is around 7:30 PM usually, and is often made by the Erik or Perry, in between filling tanks, and by 9:00 PM people are starting to get sleepy and start moving to their bunks for a bit of reading before dropping off to sleep. Erik, Fred, Marilyn, and Christie are bunking in the foc's'le, Perry and Josh in the after stateroom, and Will and Vincent in the forward stateroom. I sleep on the pilothouse floor on my thermo-rest and get more than my share of mosquitoes, but I also have the best flow of fresh air. Sometimes however I am stepped on by troops heading for the head, or by Perry returning heading to his bunk after his carousing with the stars on the stern. The arrival of divers has greatly changed his day, which had been quite relaxed when it was just diggers ashore. Then he had an afternoon nap, usually made dinner, and then was up later than the rest of us at night. Josh had to change his usual routine of early rising and retiring, as there

was not much to do or place to do it until the rest of the boat waked up. Usually I would rise about 7 and make coffee and breakfast, but now Erik is often first up and raring to go.



Fig. 2.16: Erik with one of several glazed earthenware vessels recovered at the end of a Mécatina rainbow.

5 August – Hare Harbor to

Harrington This was Josh's last day out in the field, as he had to be on the water taxi by 7am on the 6th. The south wind that had blown up the Gulf yesterday was winding down, but surf could still be heard crashing on the outer coast of Mécatina, though little of the breeze found its way into our harbor. We got out by 8 AM and were deep into our pits when Wilson's boat pulled into the harbor and anchored. The family came over to the site for a visit, the girls still dressed in their night clothes. After checking out the site they went over to the Pits to see the divers and the bowl Fred had found, then headed on

to Mutton Bay for a few days with Christine's parents, Phil Vatcher and his wife. We continued our work through mid-afternoon, when we returned to the boat and discovered Erik had found the upper portion of a large wide-mouthed strap-handled in this trench. When he got to the surface he found several of the broken pieces in the mud that he had saved from the interior of the pot. We left for Harrington about 5pm to make sure Josh would be able to get to his plane the next morning. By now the wind had died and the sea was nearly flat, but there were large thunderheads over the mainland, and when we slowed down at the approach to the Harrington pier, several sharp thunderclaps announced our arrival. As the storm passed, a huge rainbow arched over Mécatina which we used as a corny backdrop for some video interviews and photo of Erik and Fred with the two pots. After filling our fresh water tanks we converted some of our saltwater holding tanks from salt water to fresh, beginning the long process of leaching the

saltwater out of the vessels. Should the salt remain it might cause the vessels to split and crack as crystals grew when the water evaporated. We arranged to store the pots temporarily in the old Grenfell Mission shed at the head of the pier.

As it was Sunday night and the town restaurant and bar was open, we decided to have supper there in honor of Josh's departure. The beer came quickly, but it took two hours for the four pizzas and a salad to appear. Meanwhile Josh and I had a long chat with Paul's brother, who runs the place and serves primarily as bar-tender. He had gone halibut-fishing last week and gave us the run-down of the voyage, which landed a great catch, more than 200 fish, most of them medium-to-large halibut, and only about a 10% by-catch, mostly cod. The law permits you to keep or sell up to 10% of the by-catch; but if it is more than that, you have to return it to the sea. Halibut is caught with trawls, which here means long trot-lines with circular hooks baited with by-catch. The open period was only 48 hours, barely enough to let you zero in on where the fish were to be found, so the outcome was quite variable, some fishermen being lucky in their first sets, leaving others to use precious time trying to locate the fish. Each fish has to be unhooked by hand, a job that can be dangerous with these circular hooks. Halibut do not bite, but the larger fish can 'play dead' and then whallop you with a flap that can break an arm or leg.

After dinner, which set us back \$200 (half of which was for the 29 beers) we showered and got our clothes washed at Christine's, who had graciously offered use of her house while they were away; her phone account also, since their plan allows unlimited calls and time for about \$40/month. Would we had such service in the States.

6 August – Harrington to Hare Harbor Josh left on the water taxi at 7 AM with a fine day to see the coast to the west on his flights to Sept Isles and Montreal. It was too bad he had to leave when we were really just getting into our work. However, he had a good taste of the project and met most of its principal players and our friends along the way from Newfoundland and got a good chance to see how the operation works, with better weather that we could possibly have hoped for. Everyone remarked how much fun they had getting to know him. And for me it was the biggest treat ever to be able to spend ten days together in this setting, more time than we have ever spent together at any time in our lives, even including grade school days.



Fig. 2.17: Josh Fitzhugh savors his first ever archaeological dig at the HH-1 blacksmith shop.

With a load of new supplies from CRM Sales, we got underway and were back at Hare Harbor by 9:30 AM and on the site by 10:00 AM. Christie went diving and I worked ashore with Will and Vincent, taking advantage of the sunny, dry weather to get our squares done before rain turned them into sump pits, as happened last year. Christie joined us in the afternoon, and she and Will finished their squares and I make good progress on mine. We are now thinking that this area, with its huge abundance



Fig. 2.18: Charred timbers at North wall at 18N 24E

of charcoal and charred logs interspersed with burnt rocks and sand and clumps of hard humified peat, may be the result of charcoal production. A smithy needs charcoal, and most of the charcoal we have found in the shop appears to be local spruce or coniferous wood, material that probably would not have been abundant in Basque Country but could have been produced easily on site. This would explain the layered levels in which burning wood were covered with peat, sod, sand or rocks, to cause carbonization without oxygen. But there is clearly also a burn level at the top of the humified peat, likely the result of original land clearing, as we have found charred needles and twigs, and also at the upper levels, suggesting that the entire structure and site was burned at the end of the occupation. Here as in many other questions we need archival data on this site and its uses, which we hope Vincent may run across. We also discovered that the sill along the north wall of the pavement, as also on the east and south and has been burned; that the log floor along the east wall is also present outside the north wall; and that beyond the log flooring on the east side is sterile peat bog interlaced with spruce roots in growth position. When occupation began the spruce forest covered more of the site than at present.

About 10 AM I heard Perry whistling and ran up the hill to where I could see him pointing across the mouth of the harbor to something floating that was being blown out the narrows. At first I thought it was a diver who had gone astray, but it looked more like a light fluffy clump. Since the dive was in mid-process and Perry was manning the pumps, Will and I ran for the zodiac and within a minute discovered Christie's down sleeping bag, floating so high that only the outer nylon skin was wet. Whoops! One of those upper deck laundry line items that got forgotten and blew overboard.

The divers had a pretty uneventful day. The western unit produced a small piece of hard thin ceramic that looks like stoneware, as well as many fish bones. The eastern unit produced fish bones and a worked wood peg with a diamond cross-section. The dredges are working very well, perhaps too well, and we talked of the need to cut back on the power somewhat so the dredges and the digging would be easier to control. But it's great to have that power when you need it. Supper was fried codfish and mashed potatoes and canned corn, and two excellent bottles of wine, one of which was contributed by Vincent from the monastery he studied for his master's degree on an island near Cannes. The other was from Christie's Eastern Canadian 'grand tour.' Evening was socially quiet, and with 'gen' pounding in the hold and mosquitoes leaking into the cabin only slowly I was finally able to get this journal up-to-date.

Special note: bake-apples are starting to ripen. Christie picked a handful near the site this afternoon, and we agreed not to tell Perry. It's getting serious now, and he is talking about getting up at 5:00 and picking, the only time available, now that he's on diving and tank charging detail most of the day. Yesterday a boat appeared and was anchored at the head of the cove the entire



Fig. 2.19: The Evan's family visits HH-1, some still in PJs! Josh, Christine, Wilson, Christie, Will, Sarah and Alexandra.

day – likely bringing a swat team of berry-pickers hunting between here and Cross Harbor. As we went to bed there was a mild display of the aurora glowing in the northern sky over the top of the cliff.

7 August – Hare Harbor The sky was overcast with a light breeze wind from the southwest this morning. We had a breakfast of bacon and egg omelet and prepared for a dive. Will and Vincent worked ashore, and Will opened a new square, 18N 16E, while Vincent worked toward the bottom of his square. Christie and I set a new point for the next dredge site just west of Stone Pile

8. This went without hitches and we spent the rest of the dive observing the final stage of Erik's B1 pit, arriving at the very moment he found the bottom part of the pot he recovered Sunday, and several small fitting pieces. He also recovered part of a barrel hoop with bark lashings still wrapped around it and a carved wood cylinder that may have been intended as a barrel bung or rod. Fred and Marilyn finished Test Pit Y, collecting fish bones and preparing the stratigraphy for drawing, and prepared to begin a new square at the northwest corner of SP-8.

8 August – Hare Harbor Another nice day. Not too much happened at the underwater site other than the dredges being moved to new locations, Erik's to the next 2x2 meter unit east of his first square, and Fred and Marilyn to west of the upper end of SP 8. The land site produced half of a yellow glazed dish at the junction between the lower charcoal horizon and the sterile peat along the north wall of 18N 22E, broken into many fragments. Although the paste was solid, the glaze was lifting off in many places. Wilson and his family arrived in late morning and anchored between us and the head of the harbor, setting two anchors.

9 August – Hare Harbor This was another bright sunny day – one day too many it might seem, in retrospect, considering what was in the works. I made some oatmeal for breakfast and waited for Wilson to suit up for a scenic underwater tour of the harbor while the others headed off to dive. Both dredges had been moved to their second pits and were beginning to produce results. I used Wilson's small boat as the tug and pulled him on a long line with him holding a small danforth anchor and a twenty pound 'junk' of lead to keep him down. Will and I pulled him from the anchorage to the site, then across the entrance, and up the south coast of the harbor before he ran out of air and – about the same time – warmth. During the transit he was able to see the bottom except for the deepest portion crossing the entrance. He recovered half of a yellow-banded coffee mug (which looked somewhat familiar) but other than a single timber, likely a recent log, he saw nothing of interest. With two of Wilson's 'fly-by' reconnaissances accomplished at the site, the next stage should be a detailed remote-sensing survey, perhaps next year.



Fig. 2.20: 16th century mustard-yellow glazed platter recovered along the 18N wall in the blacksmith shop.

end of one of last year's squares (16N 20E) I found three wood artifacts and a lead sinker for a sounding line at the junction of the charcoal and sterile peat level, therefore from the start of the occupation. This piece is quite interesting and may give us specific chronology as it has quite a few interesting features, in addition to the classic indented bottom, used with wax to collect a sample of bottom sediment for use in determining anchorage suitability and sometimes, in the old days, location when in fog or at night. In addition there is a small hollow iron cylinder attached to one side of the lead, flush with the bottom (probably another device to collect a sample of bottom sediment) and some attachment structures for the cylinder molded into the lead. Hopefully this weight will give us some diagnostics, and it is certainly one of the prize pieces recovered from the site to date, rivaling the little porringer bowl Fred found. The other important point is that important finds are coming to light from below the floor slabs, where we were not able to excavate last year due to wet conditions. A bonus of our dry spell was discovery of the base of another roof support post which had rotted off at the floor and had been obscured in the mud last year.

By the end of the day we finished excavating the northern tier of squares. Will's produced a large assemblage of rocks piled in the northwest corner, all heavily fire-cracked and associated with thick charcoal deposits. There is also a line of smaller rocks running east-west thru the south part of the square. The rest of the story here is hidden in the squares to the north and west. My square had a very thick charcoal level above

Fred and Marilyn found whalebones buried in situ in their new pit and will be able to identify the level(s) they come from; they already recovered one whale vertebra element from below the fishbone and above the wood level, giving it a very clear association with the Basque site.

While we were working Christine was paddling about the harbor in her small canoe, wearing her habitual straw bonnet. The girls were in the cabin playing cards. After the harbor recon Will and I worked at the site until lunch, and while cleaning up the north



Fig. 2.21: Young Evans-Vatchers canoeing in Hare Harbor.

the sterile greasy peat in the north throughout the square, but thickest in the northern part. A peculiar mound of fire-scorched brown sand paralleled the northern edge of the pavement along the southern edge of the square, apparently the result of heavy burning for the production of charcoal. Vincent's square (my old one, 18N 22E) was lower and filled with charcoal and had a few rocks in the north wall like those in the other northern squares, which extends up the hillside into larger boulder concentrations. At the southern edge of his square, as in mine to the west and the northern edge of Josh's, we found the charred remains of a ca. 20cm wide wood timber running east-west, slightly above the level of the pavement. This seems most likely to be a sill-beam, but for some reason it does not extend west along the 16N line to the west. 18N 20/22E also contained post holes, but only 18N 22E had a wood post preserved in situ. Several wood artifacts from 18N 20E found in the lower burn zone were completely carbonized.



Fig. 2.22: Brothers Bill and Josh Fitzhugh at Harrington Harbor.

For several days we have been considering the function of the squares north of the paved area of what still seems best interpreted as a blacksmith shop and have been able to reconstruct the sequence of activities based on a consistent pattern of stratigraphy. The upper level is about 5-10cm of humus and turf, below which is an upper charcoal level of a centimeter or two. This is followed by a black, charcoal-stained cultural level of variable thickness, generally 10-15cm thick. Most of the iron nails, pipe stems (6-7 so far found in these squares), infrequent

ceramics, etc., and other artifacts are found here. The lower levels of this deposit often contain grains of quartz, clumps of peat, thin slabs of burned and rotting schist rock and small granite pieces. This is underlain by a highly-concentrated and well-preserved charcoal level that contains oriented logs and sticks, some of which appear to be structural while most are randomly oriented. Often this level is overlain by sand or peat which seems to have been used to cover burned logs and brush in order to reduce it to charcoal. At the base of the charcoal level there is a one centimeter thick level of carbonized spruce needles and twigs resting on greasy highly humified peat, usually 1-5cm thick, resting in turn on sterile brown sand that is either a beach deposit or remains of decayed burnt rock derived from the cliff above.

These strata suggest an activity sequence in which the first arrivals at the site used fire to clear what was a more extensive growth of spruce and tuck-a-more than at present, as indicated by the remains of roots found in the bog and along the eastern margin of the shop area and the carbonized twigs and needles found in the first fire level. This was followed by construction of a paved floor, which required excavating into the hillside deposits and the laying down of a sill beam along the 16N line. The function of the upright poles is not clear, but the slender size of the supports (6-7 cm thick) would not have been sufficient to support a tiled roof, so these posts may have had other functions. A tile roof would also have required more tiles than found

in this structure and would have produced a lateral depositional pattern more like that of the cookhouse, which we do not have evidence for at the blacksmith shop. North of the pavement, clusters of large rocks seem to have been gathered on the slope; we need to excavate to ascertain their structure and function, but given the large amount of charcoal in the 16-18N squares, they are probably related to charcoal production from local spruce and other softwoods for use in the smithy. The mixed stratigraphy including peat clumps, slabs, and sand in our squares is probably the result of smothering successive charcoal fires to carbonize the wood. (This reconstruction, however, is based on evidence of only one floor, that of paving stone, as we had not yet discovered the evidence for the earlier plank and timber floor beneath the stone pavement.)

The end of the day was as nice as the beginning. During the later afternoon Will and I could see our crew diving for mussels at the head of the bay. We had planned a big supper aboard with the Evans/Vatchers, and had chicken stewing in our oven, and Christine was baking her legendary bake-apple crumble on their boat. By the time Will and I were aboard Perry was cleaning mussels and had a broth prepared; nuts and beers were out, and the wind, which had been still all day, had shifted into the northeast.

The dinner was a great feast of stewed chicken, with potatoes, broccoli, and rice; plenty of wine and beer, and of course the bake-apple cobbler, which Wilson confessed was the real reason he'd married Christine. Okay, for starters. Alexandra and Christine pored over Will's book draft and we in turn had our first look at the new book *The Forgotten Labrador: Kegaska to Blanc Sablon* by Cleophas Belvin, published last year by Queen's University Press (isbn 13:978-0-7735-3151-2). This looks like a very good piece of work and includes much archival documentation and some reference to our own work along the coast from field reports and our website. This is the first book in English to appear dealing with the history, cultures, and modern life of the LNS. The party wound up about 10:30, and after a marathon dish detail everyone was a-bed, but not rapidly asleep due to the increasing grinding of the anchor chain and slap of waves on the bow as the boat swung back and forth in the rising breeze, which was now blowing straight into the harbor. Wilson had heard a forecast that included a weather security notice for the Lower North Shore in the afternoon, calling for northerly winds of 40-60 knots. Given the somber cloud build-up and stillness of the afternoon, including the last-minute fury of mosquitoes, a storm did indeed seem to be brewing.



Fig. 2.23: The Evans-Vatcher sisters, Sarah and Alexandra, aboard the Pitsiulak.

Erik's diving tip-of-the-day: don't ever use vasoline on your face or anywhere else when diving as it is a petroleum-based product that can react explosively with oxygen and other rubber products.

9 August – Hare Harbor to Providence Harbor to Harrington The night turned out to be short – in terms of sleep – but long and memorable in other ways. At about midnight Erik wandered through the darkened boat wondering if the gear was safe with the wind building and boat rocking as she swung back and forth on the anchor. “Yes,” I mumbled, “and don't bother about the noise of the anchor chain; it's just scraping on the bow as we swing.” About 3 AM after sleeping fitfully for a couple hours and wondering more about how the diving gear was secured and what else might be loose topsides, or in the boats tethered astern, I got up to take a look with the flashlight. Lots of whitecaps to windward, but the gear on the cabin roof seemed stable. However, as I was looking out I saw Wilson's boat swung through the beam of light like a white ghost looming from the darkness, so large that we appeared to be swinging into his anchor lines. It was clear that our speedboat and zodiac were within a few meters from his lines. I whistled and called out: “Perry, get up! We're dragging into Wilson's boat!” Within a minute Perry had the engine going and jumped into the small boats to raise their motors so they would not tangle Wilson's lines as we tried to move upwind, first with the winch, and then with the engine. As we winched up, he called Wilson on the VHF to alert him of the problem and asked him to get his navigation lights on. Perry thought we probably had not dragged our anchor as we had not heard the chain groaning, as it sometimes does, and that perhaps we had only stretched out our chain after several days of light winds. Even so, we could not sit this close to Wilson on a shortened chain in the dark with the wind building. We winched the anchor up just below the bow and Perry brought the boat upwind along the northern shore of the harbor with the GPS nav chart, radar, and search-light, and we took a new anchoring position a couple hundred yards off the cliff in 13 fathoms. As it turned out we were more or less back in our regular mooring area, with Wilson a good distance astern, but we were too close to the cliff for comfort if the wind turned southerly, as was predicted. By 3:30 AM we secured from anchor detail and it seemed safe for the time-being to take a rest and wait for dawn.

About 5am, the light was sufficient to assess the situation and see that we were safe enough at present. We were pretty close to the cliff, and the wind was steady and about 25-30 knots from the northeast, but the waves in the harbor were not too high, with little sea swell from outside. Beyond the harbor the seas were much higher, but as the wind was northerly and not from the east or south, it was still largely off the land, and the Providence Islands gave some lee. Nevertheless, Wilson radioed about 5 saying he had heard the forecast for even stronger winds for Thursday and was pulling out to find a more secure harbor that would be safe if the wind shifted southerly. We decided to go also, and hoisted anchor and after clearing the cabin and pilothouse roofs of diving gear and ropes, proceeded out with Wilson close astern. Not being able to hoist the zodiac aboard, we had to tow both boats side-by-side. After adjusting them so the speedboat would not swamp the zodiac with its splashes, we found a comfortable position for them and slowly made our crossing into the lee of the Providence Islands. Over the VHF Wilson told us he had a seasick crew and a mess all over the cabin floor and had decided to go to the portage site at the north end of Mécatina, where he could find better shelter for recuperation. We'd keep in touch by radio throughout the day. After entering Providence Harbor, we decided it was too open and re-traced our course outside and north to a small hook-shaped bay where we

had anchored several years ago for surveys and a beach-side bonfire picnic. Here we found much more shelter and good holding ground. The wind was steady from the northeast, and the rain was falling hard from low, scudding clouds. After making sure of the anchor, we turned in for several hours sleep.

By noon everyone was beginning to stir again. We called Wilson and found VHF communication excellent. He planned to stay put for the rest of the day and evening, as did we, and to proceed to Harrington early in the morning.

By 2 PM the wind abated and Perry, who had been scanning the terrain for – of course – bake-apples, could not resist the opportunity to get ashore, now that we had a diving ‘holiday’, and with Christie and Erik, slipped off among the islands to the north. A couple hours later they returned with several full berry pots, believing, however, that the Providence people must have been there yesterday, as most of the berries were either hard or overripe. Bake-apple nirvana is rarely experienced in this world. Meanwhile the rest of the crew read, prepared notes and illustrations of underwater squares, or in my case, mended my pants, whose rear seam had split dramatically in one of the desperate moments of the morning. By 6 PM the wind had dropped to a light breeze and had shifted into the north. Wilson called to say he was leaving his family at the portage and would steam around Mécatina and meet them on the other side of the portage before nightfall. After a quick supper we also left for Harrington, encountering large swells off Mécatina, but otherwise the passage was uneventful. Wilson called about dusk to say he had his family aboard and was about a half-hour behind us. Even at the dock we found the sea surge kept us bumping the pier until well after midnight. By then we were all asleep and were not even aware of the arrival or departure of the coastal steamer, *Nordik*.

10 August – Harrington to Hare Harbor The morning was bright and clear, with a crisp northwest breeze that blew the barometer up and then subsided about the time we were ready to leave. In a couple hours we were able to re-stock food, take showers and wash some clothes, make a few phone calls, and have a ‘Christine’ breakfast of fruit, omelet, and muffins. She was leaving for Montreal this week, so this was a goodbye occasion, and for Christie, who was not sure Quebec would figure in her plans next year, it might be a long time. The run to Mécatina was swift, and we arrived in time for a quick lunch before the first dive. We were aware now that we only have at most eight dives before the Quebec team has to depart, and there is still much to do.

Vincent and I teamed up for the first time, and he gave me a good start by yanking my leg from below to help me sink. On bottom, we gathered fish bones and then sampled some of the rock piles for lithic types and scrounged for artifacts and bones in Erik’s dredge outwash. He was busy preparing a profile for his first pit. Fred and Marilyn were excavating the SP-8 pit, where they found a whale flipper with humerus and phalanges in anatomical position. Fred took excellent videos of the operation, revealing many fist-sized limestone (ballast?) chunks and other whale bones. It’s beginning to look like we have a major whaling operation as well as a fishing enterprise, and the whale bones in this square are bedded immediately on top of the wood chip level, putting it in the earliest period of the occupation. Almost all of the whale bones found have been sawn longitudinally, even the one with the phalanges attached. Why saw whale flippers in half? This is an interesting question. I can’t see any explanation other than for rendering oil. We need some serious research on a series of topics including how and where are

whales butchered, and for what purpose? Our bones are adjacent to the cliff south of the site, where the water is very deep and whales and ships could approach a whale fastened to shore by some means. We need to search above water for tie-ups and at the base of the cliff underwater for tools that might have been dropped or discarded. The new evidence for a larger whaling enterprise is a major surprise this summer, as last year's whale bone finds were few and seemed to represent a minor and perhaps a peripheral activity. We now have stratigraphic evidence for a considerable amount of whale processing early in the occupation sequence, followed by a fishing and game hunting phase.



Fig. 2.24: Christine Vatcher preparing one of her baked masterpieces.

Evidence for two chronologically distinct occupations also began to emerge from the blacksmith shop today. While cleaning up squares we excavated last year I found charred planks and timbers below the paving stones, all heavily burned and resting on the sterile peat, often just above the charred spruce needle level, which in turn lies on sterile peat. We sometimes also have a deeper level of charcoal several centimeters below the peat, as we found today in 18N 24E where Will was cleaning up his muddy rockpile square. We could not begin to take this square apart all over again, and so are left with some confusion about this lower level, which may result from the industrial activities on the slope. A similar stratigraphic mystery was found under the west side of the shop, where it can be checked out by trenching west from the floor of the shop. My current conjecture is that there was an early occupation that built a wood floor structure; that this in time burned and was covered by a stone floor. There is some historical documentation of an Inuit family living at Mécatina in the early 1700s that was murdered by Indians. Another more likely scenario is an early phase of Basque occupation that burned for one reason or another and was replaced by a stone-floored smithy. However, to date we have no clear artifact associations to support this idea.

By evening the wind dropped back completely, allowing us to enjoy a fine meal prepared by Vincent: a tomato-based soup and a fine home-made pizza, with an especially well-cooked crust. After dinner the group went star-gazing as the air was very warm and relatively bug-free. The biggest surprise of the day was the water temperature. From a bone-chilling 38° F. two days ago, the temp now is 52° F. I swam around the shore without gloves for half an hour without a twinge of chill. Where could this water have come from all of a sudden? And what did the storm have to do with it? Had it turned over most of the water in the Gulf? While in Harrington we heard of record temps in the Southeastern United States, above 110°, and tornados in Brooklyn. Our storm of yesterday was relatively mild here compared with further west in the Gulf and in Gaspé, where a swollen river washed a house off its foundation and killed two people when it got stuck under a bridge. Even here we are having one of the warmest nights I've ever experienced in this part of Quebec.



Fig. 2.25: View of NW corner of blacksmith shop on a muddy day.

11 August, Saturday – Hare Harbor It was calm again all night and bright in the morning, but very warm. A light westerly breeze puffed up and down for most of the day. We had some French toast and split forces. Will, Vincent and I went to the site where we opened two new squares on the western edge of the grid (14N and 16N/16E) and I moved the sod pile and back-dirt from the two squares between the bog excavation and the blacksmith shop that had not been excavated previously. In the process I had a mishap with a baby lemming. While moving the sod I saw a lemming scurry away from its base, and later, when finishing the clean-

up, I heard two high-pitched squeals and looked down to find I had stepped on a baby lemming, perhaps only a week old. I hoped it was just in shock, but it seemed not to be breathing. I put it in the alders nearby thinking the mother might find it. All morning it was topless digging weather, with only a few flies, mostly stouts.

The divers had a good morning, finishing stratigraphy and working on the whalebone square. Erik found a piece of Ramah chert [however, see below] at the bottom on his cultural level, in ‘correct’ stratigraphic position. If only it had been a diagnostic piece! Nevertheless, to find a piece of transparent Ramah in the water is quite a feat for an underwater diver, and Erik duly noted his unique powers of observation! Lunch was fried cod and corn on the cob – and the corn was much better than the last batch I had in D.C. from Eastern Market before I left home. Fruit also at Harrington is as good as any we get in our home markets. Perry went off for an hour to pick bake-apples from the south shore of the harbor.

The afternoon was better on both counts. The divers finished their squares and prepared profiles, and Erik’s square produced large fragments of two strap-handled pots, one with the typical double-fluted straps and one with a single flute, which we have not see here previously. There should be fitting fragments from the pit tomorrow. He also found some flakes of dark mottled and banded flint, with cortex, therefore of European origin. An earlier find this morning of a slightly lighter-colored flint was at first thought to be Ramah chert, but is too dark and fine-grained. Quite a bit of different sized rope

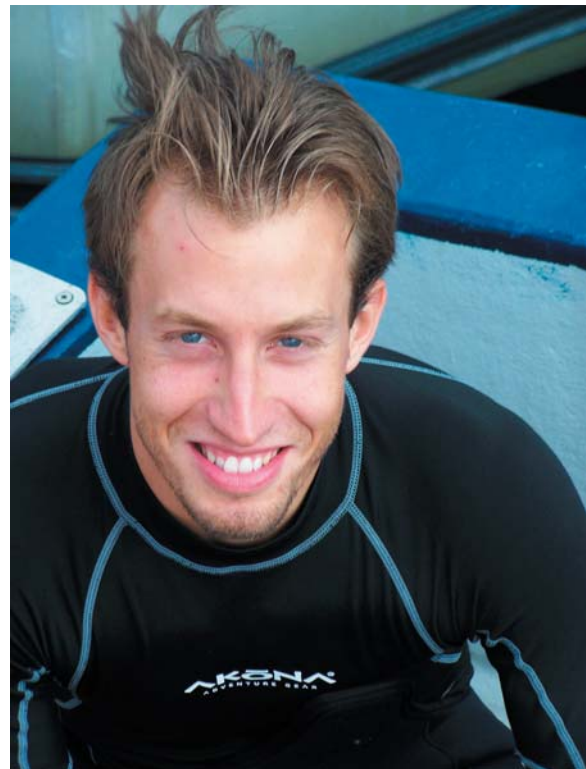


Fig. 2.26: Vincent Delmas and his joie-de-vivre smile and coiffeur.

and lots of bird bones also were recovered. At supper we wondered about the fine grey ‘clay’ that the fishbone levels are found in, and after considering geological sources like raised marine deposits, decided that it was probably slurry and offal from the fish processing operation. To get



Fig. 2.27: Lead sounding weight with remains of a small iron coring tube molded into its side.

a concentrated level of fish bones you probably start with a much deeper deposit of fish offal from gutting and cleaning, as anyone familiar with a Newfoundland or Labrador gutting and splitting operation would recognize. We’ll sample the ooze tomorrow and check its smell for starters!

Vincent and I surveyed the underwater side of the cliff above the whalebone deposits looking for lost butchering implements, but only found some 20th century cement (?) tiles and an anchor prong that at first looked like a sword or dagger. Our depth was between 40-55 ft, and the real bottom of the cliff is at 70 ft, so we need to go a bit deeper. There were quite a few tiers of boulders perched on ledges in the cliff, but we could not tell whether they are ballast stone or local rock. Onshore, Will and I joined Christie for the last half of the afternoon, which was cooler but still very pleasant. Christie took over square 12N 22 E and found a concentration of nails and metallurgical froth or slag in the upper

cultural level. This is the first feature of this sort we’ve seen and gives further evidence of the smithy function of this area. The materials were south of the pavement in a midden between the floor and the bog. To the east, I cleared and opened a half-square in the north end of 12N 24E, finding a heavy overburden of peat covering two cultural layers, an upper and much thicker layer contemporaneous with the paved floor of the smithy, and a thin early level that probably links with the burned wood floor of this feature. Will worked more on the stone features of 18N 18E, which seem to be an extension of his square to the northeast [but we later decided it may simply be stones that were ditched while preparing the smithy floor] and had few cultural materials other than a couple of tiles and nails. Vincent has uncovered a tile pavement that appears to have been a prepared walkway leading from the smithy to the lower site area. It looks like we will have opened and finished 30 square meters by the time we are finished.

Supper was a potpourri of leftovers: Will’s beans doctored up, salad, braised beef, and vegetables. By evening the wind had turned into the northeast again, and we’re rocking a bit. But the barometer is steady and we’re hoping it’s quieter than the last time the wind was in the east.



Fig. 2.28: Christie’s nail feature at the south side of the blacksmith shop.



Fig. 2.29: Crushed roof-tile walkway extending from the west side of the blacksmith shop toward the cook house.

of the blacksmith shop excavation, adding 30 square meters to what had been a 36 square meter excavation largely confined to the paved floor area. Christie finished working on Feature 1 in 12N 22E, where she found 20-25 nails, several pieces of ceramic, some slag-like concretions, a piece of sheet lead, and nearby a small iron gouge-like tool. This is the only major concentration of artifacts we have encountered anywhere in the site, so it was quite unusual. And it was found south of the pavement in what seems to have been a midden deposit at the edge of a bog. In my square to the east of Christie's I found charred parts of a spoon or ladle, and strong evidence for an intensive occupation in the upper levels and sporadic occupations with alternative midden and peat horizons in the lower third of the stratigraphy. There is little evidence of major fire levels, although a few burned timbers were at the base of the deposit. Otherwise the charred zone seems to end about 10-20 cm south of the north wall. Vincent found a major concentration of nails in the north-center of his square, marking a heyday for nails overall, and at the base of his deposit he found that the tile 'pavement' observed in the square to the east continues here. Will suggested this might be a paved pathway across the wet area between the two site areas. Will's square produced almost nothing but rocks, big ones, in no apparent planned order and without large amounts of charcoal or artifacts. Perhaps this is simply a rock dump created when they cleared rock-fall materials to make a level place for the blacksmith shop. The afternoon brought little more of interest here, and the divers spent most of their time making maps and stratigraphy drawings of their squares. Fred and Marilyn dredged some of the surface sediment off the area east of SP-8 and found more whale bones, further strengthening the whaling as a major site activity. At the end of the day we pulled the dredges and gear off the bottom and secured it aboard ship,

12 August, Sunday – Hare Harbor
 More fantastic warm weather, which began with a bright morning with a breeze from the north, blowing first one way and then the other as it found its way around the hill. Perry went bake-apple picking along the shore north of the site and noticed that the grass was dead inside the stone house foundation at Daniel Harbor. This is probably where the Mongé group had been digging for artifacts earlier this summer. Will, Christie, Vincent, and I worked at the land site during the morning and made lots of progress on the final squares of the season, which nearly doubles the size



Fig. 2.30: Will Richard working at 12E 16N in the blacksmith shop, view toward the east.

just in case the weather gets rough tomorrow. The reports are predicting southeast winds of 20-30 knots. We also got our spare (security) ship anchor back aboard, which is a relief, since you never know when you'll need it.

While I was rinsing dishes on the stern Erik spotted fireworks at Providence, something we've never seen before. They looked like roman candles and shot red, green and white balls of fire into the air. Dinner tonight was a cheese and lettuce salad, spaghetti and sauce (à la Marilyn), and a spectacular desert display of bake-apple tart and brownies. The crust for the tart comes from Vincent's sister's boyfriend, who is Italian. The food this summer has been out of this (new!) world and by far the best we've ever had, owing as much (it must be said) to the diving routine that has people on board for much of the day around the intensive diving intervals as to some really good cooks. It does not hurt that the produce in Harrington is excellent, as well.

The falcons were back today, two young ones swooping about the cliff, crying out and generally letting us know they were doing fine despite our antics. However, they seem to have moved their nest further west on the cliff, avoiding our intrusions. Two other wildlife notes. Yesterday we found a mother and a young dovekie paddling around the harbor, so we herded them around a bit while Will got some pictures. They were out again this morning and we harassed them a bit more. The young tyke is less puffy with down today and seems closer to being able to dive, but still has some days to go. It paddles madly to keep up with the mother, who only once dove and then surfaced, leading us away from her young. The other second-day visitor was a small red squirrel that had called stridently yesterday at 6 PM from the rock shelter above the site, his tail jerking at each call. Today he was back, chattering, at the same hour. I think he is trying to tell us to get home for supper so he can resume his dinner in the meadow around the site.

August 13, Monday – Hare Harbor to Harrington You could tell the weather was changing when we got up this morning, as you could hear surf on the south wind from the outer beach over the hill. But it stayed calm in the harbor, and we had a 'last dive' to pick up the remaining pieces of equipment and just to enjoy the site. For me this meant getting to look around without clouds of mud in the water, but for the others it was relief from the constant cycle of dredging and sifting for materials. The water was still quite warm, about 50° F. and clear. Christie and I swam to the end of the site beyond SP-1 and then back and collected bones and other interesting materials that had gone through the dredge, mostly fish and bird bones. We now have quite a large collection of bird bones, as well as fish. Also many more whale bones than we had anticipated, once the surface got cleaned east of SP-8. All of the large elements have been cut longitudinally. I came up after 35 minutes with a fair bit of air remaining, managing to hover successfully for my safety stops unassisted by the security rope. One thing that needs doing next year is to check the head of the cove for whale remains underwater, as Wilson had seen some there previously, and we still have not figured out where the rest of the whale carcasses, besides flippers, were discarded. The bones at the site have all been limb bones – no skulls, mandibles, or large vertebrae. Once out of the water we realized that the wind had built up and it was starting to rain. We loaded the boat and secured everything for what turned out to be a wild ride to Harrington, bucking a 25-30 knot southwest wind and sea that had been building throughout the day. By the time we got to Harrington everyone was soaked and shook up, but we had no casualties or seasickness, and all the gear was still in place. I was at the stern monitoring the speedboat, which at one point flew out of the water completely from the top of a large wave. The view from the pilothouse was also heroic, as the cabin was clubbed once by green seas against

the front windows; these windows need replacing with security glass and a windshield wiper that works. I am much happier with trips like this now that Parry has changed the engine room air scoop facing aft rather than forward, but our pilothouse doors are still wretched and leak during heavy weather, and need replacing with ones with rubber seals and dog latches.

In town we took the afternoon to have a leisurely lunch soup cooked up by Erik, get dry, and take showers. Vincent and I spent an hour visiting with Amy Evans, whom I had not yet seen this year. She was 'same as ever' and had an interesting guest named Paul Pichet, a fuel service engineer who was in town with a team re-building the town fuel tanks. He's been on the coast for thirty years and is jokingly called the guy who almost burned down the town, and did



Fig. 2.31: Frédéric sampling whale bones for DNA analysis.

succeed in burning down the Anglican church. When he first came to Harrington there were two churches in town, Anglican and Catholic, the latter for the French-speakers and the former for the Newfoundlanders. His first job was to fit the town fuel tanks out with larger supply lines, to hasten filling and dispensing. The next year, 1975, on Queen's Day (mostly a Newfie holiday) people were celebrating with bonfires around the shore at the same time the tanks were being filled from the supply ship. The tanks filled faster than the delivery people expected and overflowed, sending a river of diesel oil down into the harbor, where it was ignited by the 'queen's' bonfires and burned back up to the tanks. Fortunately

the later did not explode, but the Anglican church burned to the ground, becoming the only major loss in what could have been a catastrophic event. In addition to moving and re-building the church in its current location, they built a berm up around the tanks to contain any future spills. I am amazed they've allowed the fuel tanks to remain in the center of town.

Will and I cooked a 'goodbye' dinner of baked cod, beans, and turnips for the divers, and we celebrated, several days late, Will's birthday, with ice cream and toppings. He had failed to give us a hint, and we failed to remember. We also spent a couple hours visiting Wilson and Christine, who was still here, having not been able to get to her flight to visit her doctor, and her sister in Montreal, due to seas breaking across the bar at Chevery and fog and poor visibility grounding the chopper that is supposed to pick up passengers when the water taxi cannot make the run. Wilson mentioned he had seen a stone foundation on Plate Island, east of Gros Mécatina. This is the seaward light outside Tabatière and seems too far a-field for any early habitation. He and Christine had also noted some structures in the ground west of Mutton Bay which they thought we should have a look at next year. Perhaps we can spend a few days with them and Phil Vatcher

surveying here next year. Erik and Vincent bought Harrington sweatshirts at Ransom's store, which had just placed a 'for sale' sign in its window. The other big event in town was a growing controversy over the water prospecting operation, which had reached a fever pitch and will be aired at a special town meeting at 10 AM tomorrow at the community hall. The town is upset that the drillers are pulling out with only three of the planned six test well's dug, only one of which has found any trace of water. The contractors claim the money has been spent and no water has been found, while the town, who want a good, clean, and dependable source of water, claim that only half of the required tests have been drilled. We'll tune in later for the outcome, but the crowd that gathered just before we left town was substantial and acting feisty.



Fig. 2.32: Erik and another earthenware storage vessel from the underwater site.

14 August, Tuesday – Harrington to Hare Harbor Bryce

Anderson, the water taxi man, told Erik that he'd have to charter the taxi at 6 AM if he wanted to get to the plane in Chevery. Why this should be so is mysterious, as people with tickets on Air Labrador are supposed to get free passage as a result of a government subsidy to the airlines. He claims we were late in booking the ride and there were no more seats available. When he arrived at the dock he said some of the bags might have to be left, but they managed to get over that hurdle and after prolonged good-byes, shot out of the harbor. We hope

the seas breaking on the bar at Chevery have subsided enough for them to get across. Later in the morning we were surprised to find Christine still at home, now scheduled for a 1:30 PM plane, which may be what our divers also get away on. We paid up our accounts at CMR Sales (Paul's), more than twice last year's bill, at nearly \$2000 rather than \$900. Took on 1000 liters of fuel for about \$1000, said adieu, and left town just as the town hall meeting was starting. Earlier in the morning I had created a bit of a stir when I started looking around in a recently bull-dozed pile of sod between the fuel farm and the Anglican rector's house in which I had noticed some artifacts, including some curved tiles. Turns out the tiles are modern drain tiles, not Basque; but I made a small collection nevertheless. The fuel engineer's were joking about my scrounging in the rector's sewage drain field, and later the rector accosted me to make sure I know that's what it was, as he did not want me getting sick. All in a day's work for an archaeologist, I told him. It did not smell, and one of the finds was a beautiful small hand stone for sharpening knives. I left the collection with Alexandra to give to the Heritage Society, suggesting they do a project on the old church and make some collections from the bull-dozed area.

Just before we pulled out, a huge barge came into the bay, pulled by a tug captained by Wilson's brother Brian, formerly mayor of Tabatière. The barge held six pre-fab dwelling components that will be assembled into a high-school student residence in Chevery that needs to be available

for students in a couple weeks. Brian had towed it up from Nova Scotia through the windstorm yesterday, at one point making only one knot per hour. It will be off-loaded at Harrington and taken, one section at a time, on the small barge into Chevery. Everything is installed; only the pieces have to be bolted to their foundations and the electrical and communication systems hooked up. The six sections were hanging way out over the sides of the barge and did not appear to be cabled down. That's ok, said Perry, those roll-ons won't budge, and the barge is stable under anything the Gulf can deliver (one hopes).

Pitsiulak seemed awful empty as we chugged out the bay to the site, and more-so at lunch. Christie, Will and I finished up our squares, and I poked around under the floor slabs, discovering heavily-charred planking aligned north and south, resting on large heavy adze-cut timbers running east and west. This now seems to be a general pattern, confirming other observations. I decided not to try and trace this out now as I would not be able to make much progress, given lack of time and the wetness of the site from yesterday's rain. Next year we need to remove the paving stones and excavate fully below them. One large slab I lifted seemed to have two wood floor levels beneath it. Meanwhile Will discovered the tile pavement in his and Vincent's square forms a well-defined pathway leading from the blacksmith shop to the lower site, probably laid down to create a drier surface in this boggy area of the site.



Fig. 2.33: Baleen strip recovered in test pit B-1 underwater.

Christie reached the southern edge of the occupation area, finding a bit of red ocher paint and a small plug shaped from ceramic tile.

Dinner was a 'Perry roast' of pork chops, potatoes, carrots, peas, and gravy. The generator is now humming along fine since we put in a big head of fuel in the tanks, so Perry thinks our problem there is a weak fuel pump. Christie made chocolate chip cookies after dinner. The weather has turned colder now. Maybe this warm summer is over.

15 August, Wednesday – Hare Harbor to Mutton Bay Overcast this morning, though light winds. Not the best conditions to finish up work at the site, but at least it was not raining. Will made pancakes for breakfast and we got to the site by 8:30 AM and started right away making the profiles for the north wall, 18 North, and by lunchtime had done the 24 East profile and the small one between Will's and Vincent's square near the tile paved pathway. Christie finished her square, finding little more, and I got elevations on ground levels. The fog rolled in partway through the morning and a bit of rain fell, then the wind shifted from southeast to southwest, but conditions did not improve much and the wind began to increase by mid-afternoon. Perry fried some of our codfish for lunch and we returned quickly to take on the unpleasant task of backfilling and re-sodding everything but the paved floor area of the blacksmith shop. It was great to see the whole area uncovered and open, but the back-dirt piles were looking ominous, and I was afraid if we did not get some of the dirt back in place, it might never happen – and



Fig. 2.34: Blacksmith shop at the end of the 2007 excavation - view south.

we'd probably discover that we needed to move the piles to excavate under them. It was tough work, but at least the flies were not bad and the weather was fairly cool and breezy. Hopefully the sods will grow back and the soil will consolidate during the next couple of months before frost sets in. Before leaving we covered the pavement area and the two remaining back-dirt piles with tarps to keep them dry and unvegetated.

We got back to the boat at 5:30 and left immediately for Mutton Bay, a two-hour steam, hoping to make it by nightfall. The southwest breeze gradually built as we traveled, and by the time we reached Mutton Bay it was a fairly strong following sea and we had to hitch up the

speedboat close to the stern. We got to Mutton Bay at 8 PM just when the harbor navigational lights were turning on and with just enough light to get into the tight harbor and its dock. Christie prepared some beans, rice, and peppers for a Mexican meal, and eating was about all the energy we had left after a very strenuous day. It's amazing how much earth we managed to move out of the site during this past two weeks, and how much we were required to get back in place in three hours. By the time we'd eaten it was too late for a visit with Christine's parents, the Vatchers, so we'll drop by and see them in the morning. The pier is very quiet, only three small fishing boats tied up. Some say the town is drying up and will not last very long. However, it is such a beautiful cozy place with its church and houses perched on the bare glaciated granite around the harbor, it's hard to believe people will not want to keep living here. Well, another point, we've started our return voyage and have knocked off four hours between Harrington to Lushes Bight.

16 August, Thursday – Mutton Bay

to Tabatière A good storm blew up during the night, pelting us with rain and buffeting the boat a bit, causing the speedboat to knock the stern; but the Mutton Bay dock is so well tucked away, you have to wiggle into it, so we had no problem, except that I forgot to close the windows. Since we were no longer at anchor we lacked the customary lee, and I woke with rain in my face, and later realized my computer was also being rained upon. No serious problem apparently, as she fired up OK in the morning. After breakfast we paid a call on Phil Vatcher and his wife – Christine's



Fig. 2.35: Blacksmith shop back-filled and covered with tarps for the winter season.

parents. One of the topics was the Richardson seal operation at Tabatière, which is in its fourth (at least) generation. Phil had an early article by photographer Fred Bruemer called “The Seals of La Tabatière” which described the hunt and the family that has managed it for generations. We’ll visit the location and see what we can see of the old installations and perhaps locate some native sites when we get there. There was also a long conversation about the prospects for Mutton Bay, whose population is shrinking as more and more people leave to take jobs in western Canada, while many jobs that exist, such as the fish plant at Tabatière, are taken by Newfoundlanders working for the company that owns the fish plant. Phil is not sanguine about the future and thinks that the park proposal is also not a great plan for the future unless it is accompanied by a road.



Fig. 2.36: Mutton Bay village, view to the northeast.

Current plans are to complete small sections of the road, but whether funds will be allocated is always a crap-shoot. Quebec is not very happy with this coast and would love its people to disappear, so they could develop the hydro and mineral resources without having to deal with the local folks, who in this system never seem to get a major stake in the deals, thus losing out on the benefits that could come their way if they were more assertive of their fundamental rights.

Will, Christie, and I made a short survey of L’Anse Galion (also known as Cook’s Cove) before lunch. The cove is outside Mutton Bay at the northeast end of the peninsula jutting into the sea and used to have several summer homes, one of which was owned by Jos Hébert, who used to carry the mail along the coast by dog team between Havre St. Pierre and Blanc Sablon. The cabins were on the point at the southeast entrance of the cove. We did not survey here, but looked around the head of the cove and up the stream on both sides, and along the south side of the lake as far as a large boulder. Nothing of special interest was found, and there were no prominent terraces to concentrate settlement.

After a codfish chowder, we made a short run to Boulet Tickle, between Mécatina Island and Boulet Harbor, the location of a major seal fishery and trading operation run by the Boulet family during the late 1800s-early 1900s. I wanted to expand our survey work here to locate earlier components. Last year we investigated a stone foundation on the island across the tickle that had been reported by Phil Vatcher. We anchored in the tickle, which is reported to have good holding ground, in contrast with Boulet Harbor, which is open to the east and has poor anchoring in sand. We spent four hours ashore, mostly testing the main beach pass west of the cement foundation, and found in most pits flakes of multi-colored chert, and a few microblade-like pieces. It seems likely that there is a Groswater component here, but we were not able to locate truly diagnostic implements. Generally the deposits show a 19/20th c. upper level occupation, sometimes with a major harp seal component, and a lower component with small flakes of chert, resting on sterile sandy gravel. Sometimes this lower component was present in an old ground surface, but in others it was mixed in with later remains, indicating disturbance resulting from the later

occupation. We also tested several locations along the shore and found 19/20th c. materials and in one case, near the western end of the settlement area, a Basque level marked by an abundant roof tiles. This seems to be the area where one could investigate Basque activities at this site. We also found Basque tiles on a natural (?) mound near a small shallow pond at the west end of the site. We have yet to test the raised beach area running from the pond to Boulet Harbor. So we have made some advances in our understanding of this important seal hunting site area and



Fig. 2.37: Boulet Harbor site seen from the tickle.



Fig. 2.38: Pitsiulak anchored in Boulet Tickle.

could focus work here sometime in the future. We finished work at 5:30 PM and ran down to Tabatière and a dinner of roast chicken that Perry had prepared. On the wharf I chatted with David Anderson, who grew up in Harrington and worked construction all over the Eastern Arctic for 15 years. He's now working on the wharf renovation and has a house at the top of the hill in Tabatière where he found a large triangular arrow head. The weather today was a brisk southwest wind that covered the Gulf with whitecaps, reaching 25-30 knots. Fortunately we were in protected waters until it died during our run to Tabatière.

17 August, Friday – Tabatière all day

All night the stench from the fish plant wafted down the pier to our berth and into the pilothouse window screens, only to be partly drowned away by a heavy rainstorm that lasted for several hours. By morning the skies were grey but clearing, and we ventured out for our traditional bacon and egg breakfast at the fish plant staff meal hall. Our attention was soon riveted by the news that the *Nordik* had struck a rock entering Harrington Harbor during the night and would not be arriving at Tabatière at nine in the morning as scheduled. Through the day we pieced a

bit more information together and learned that she hit the high northern entry island and opened a huge gash in her stern below the waterline; that the captain had been asleep and the Third Mate was at the Conn. Apparently he lost it and was heading at the island, and the First Mate arrived on the bridge just in time to spin the wheel to avoid striking the rock bow-first, which could have sunk the ship, striking at the stern instead. All 142 passengers were off-loaded at the Harrington pier and were put up for the night wherever space could be found, and then were flown to their destinations by Air Labrador all through the day today. We heard many of those flights come through Tabatière. This is the only time anyone here on the coast can recall a navigational incident with the *Nordik*. The accident will have a huge effect on the coast: movement of people,

export of processed seafood, building and food supplies, and many others. The store in Tabatière was out of onions, and people will be hoarding, making runs on purchases to avoid the higher costs of airlifted food, etc.

After breakfast we explored the Spar Point area at the southern end of Tabatière where the harp seal fishery takes place in December and January. We landed on the western of the two ‘seal islands’ but found nothing in the gravelly soil; this island is used mostly as a boat graveyard now. At the tip of Spar Point we investigated a small clearing and found mostly late 19 and 20th c. material in a very thin deposit. TP3 was slightly deeper and had some thin stone slabs and charcoal that may be a hearth old nails and old-looking ceramics may indicate an early European structure here, as the ground appears to be a habitation depression. Other TPs were not very interesting, except that no seal bones were found, and instead we found shotgun shell casings, so at least it’s a good duck or goose hunting site. The shore running northwest is occupied by a string of houses whose yards go to the water’s edge, all grassy, and probably cover early settlements. The Robertsons, who have managed the Spar Point seal hunt for generations and were written up in a photo essay by Fred Bruemer, live along the northern side of the cove. We did not have time to look at these shores, as this project would take some negotiation with land-owners and working from land rather than by boat. So many of the good locations here have been radically altered by house construction and land grading that many sites are probably destroyed, and many others have been found and looted after being discovered during house construction.

The wind grew very strong during the day, from the west, so strong that we decided to remain in Tabatière, having showers, cleaning up, and writing notes. I took a walk around the town for a couple hours, climbing to the airport and then around to the west and up to the high communications center on the highest hill around, and then back thru the southern part of town. So I finally have a pretty good idea of the layout of the villages (population 542 supposedly, except in summer



Fig. 2.39: View south over Tabatière.

many of the men are away working elsewhere). I felt a bit exposed on the runway, thinking a plane would land on me unexpectedly, or that I’d be arrested as a terrorist! In the process of the hike I discovered Tabatière has three restaurants and lots of interesting community art, which appears on road-side billboards throughout town – some produced by school children – as well as lists of notable dates in town history mounted on sequential signs like the ‘Burma Shave’ ads. Ponds are as common as knobby hills and one had a great swimming float that was being put to use by youngsters. I finally psyched out where the high sand ridge must be near the center of town but did not have time to check it out, as we were trying to leave; but when I got back to the boat the wind was still too high for us to make our next anchorage by nightfall, so we decided to remain for the night and get an early start after the seas calmed down.

We have been watching the fish plant wharf construction, which is a very elaborate affair and employs 15 or 20 people with several large cranes and big power equipment. They are building out from the old wood wharf by adding a heavy-duty steel façade of reinforced corrugated steel plates penetrating deep into the mud, backed by crushed rock and topped by steel rails, all welded together, including the underwater portions. The guy doing the welding works from a donkey float, and after they knocked off, he came by to ask what we were diving for, as he'd noticed our compression and dredges. Turns out he has almost 2000 hours of underwater diving experience which includes both his welding work and his recreational diving, which he has also been doing in off hours here. He mentioned that he had not seen a single scallop this summer – something we also noted a Hare Harbor, so it must be a regional die-off. He is French Canadian, named Bruno Djon, from Matane, Gaspé, and he came into his profession through his father's work as an underwater welder. Along with him was the guy I met last night, David Anderson, originally from Harrington but now living here in Tabatière. He again repeated his arrowhead story, and when I asked if he could draw a picture of the piece, he made a neat isosceles triangle. Most likely this is the early Archaic point type found by McGhee and Tuck in the L'Anse Amour mound and by Levesque at Blanc Sablon. Unfortunately he had given the piece away, but he showed great interest in knowing if it was valuable and that he might find others in the same area, at the edge of his property where the vegetation was bull-dozed. He took me up for a look at the location, but it was nearly dark and I could not see enough to assess the potential for more finds. It seems unlikely it's just a stray find, especially as so many other people have collected large numbers of points from this high sandy raised beach. A neighbor named Yves is supposed to have made many finds. I urged David to restrain himself and wait until I can come and check things out next summer, when I hope to see these new collections also. It is strange that there is so much sand in high locations here, and its presence is certainly the reason so many archaeological sites have been found. David's wife Donna is a local elementary school teacher and has been to the Smithsonian web site, but has not yet seen the Arctic Studies site. David also has a fine collection of soapstone art purchased from Cape Dorset carvers. He is also pushing real estate, as he has inherited a house on the island west of the Harrington Harbor entry channel, a large green one, fully furnished, with a well and shower, which he wants to rent next summer. It would be great summer retreat for a writer or artist – or an anthropologist!

18 August, Saturday – Tabatière to Blanc Sablon We rose at 4:30 AM and got underway in very calm weather, with the sun rising in our faces. Soon we were steaming down through the Grand Rigoulette whose rocky shores were being nearly perfectly mirrored in the still, silvery water, while the sun gleamed like searchlights off wet rocks on shore. By 6 AM a few people were starting to stir about on shore and we could smell the smoke from their wood stoves and see the occasional outboard buzz off for fish or the few remaining bake-apples. Saturday morning. And when we got to the St. Augustine run some people were heading out from town to their island cabins for the weekend. We passed the St. Augustine sea buoy whose bell was clanging loudly and went on out to sea for four hours. When we were abreast of Baies des Belles Amours we turned in to visit an Inuit winter sod house site reported on the western shore of Belles Amour Point by Pierre Dumais and J. Poirrier, who located the site during a survey project, dug a few small test pits, and prepared a map of the structures (Dumais and Poirrier 1994). I have to submit a final version of a paper I gave last fall in Copenhagen on southern Inuit and wanted to confirm the Inuit identification and house types at this site, which is currently the western- and southern-most Inuit-style sod winter village known.

The western site of this broad peninsula is fronted by boulder flats and its water is quite shallow. We anchored off a small sandy cove south of the peninsula where the site was located, and went ashore. A low granite hill overlooks the peninsula, and on its west side I found an Inuit stone grave whose cover slabs had been opened and adjacent to it, a small cache box, also open. A brief inspection did not reveal tools or human remains, and the grave was probably opened long ago, though it was still in relatively intact state. This in itself was good evidence of Inuit presence and would help confirm the sod houses as Inuit, if they were ambiguous in form. As it happens, they were not, and when Christie called out that she had found the houses, my first glance confirmed Dumais and Poirrier's identification. The two houses were in the middle of the peninsula near several huge boulders, one house (House 2) smaller and to the north of the



Fig. 2.40: Near glassy conditions early in the morning at the La Grande Rigoulette.

first (House 1), and both being of classic early Labrador Inuit style, with rectangular main rooms and long entrance passages, excavated interiors, rear sleeping platforms, kitchen areas, and mounded-up sod walls. House 1 was the largest and had an additional room attached to the east wall of the main structure, separated by a low sod wall and entryway. The lamp-stand area appears to be in the southwest corner of the main room in each house, and there were a number of rocks seen in the floors and main entry between the entrance tunnel and the main room. The

main rooms of the two houses were about 6x8 meters and had 6-7m long entrance passages with central expansions for dogs or equipment. Floors were sand without slab pavements, and there no evidence of raised lintel doorways or extensive middens. However, each of the structures has an external cache pit. One could not have a more explicit statement of Inuit occupation, and while the nature of the vegetation and lack of middens suggests a relatively brief occupation, the site attests a traditional Inuit presence in a new geographic region and a different – and dangerous – social and cultural milieu, probably dating to the mid-late 18th century.

While the houses are totally Inuit in style, their material culture shows adaptation to the European presence in the Straits region. Dumais and Poirrier recovered a piece of a soapstone pot in one of their test pits – sure indication of Inuit residents and of an Inuit family settlement – and our limited tests also revealed interesting finds, not only of the expected iron nails and crockery, but of broken clay pipe stems, whose breaks had been nicked around their circumference by knife cuts to ensure that they broke exactly where intended, ensuring they did not waste more of the precious pipe than the nicotine tar-clogged end. I have not seen this technique used by Europeans, possibly because they had better access to replacement pipes than the Inuit, who took extra trouble to maximize use of their pipes, which were probably far more prestigious in their society than in European culture. Another feature of the houses was the large quantity of bones found on the floor of House 2. Perhaps this is also a function of a sand floor vs. a paved stone floor, which can more easily be cleaned. A third observation was the lack of extensive external



Fig. 2.41: 17th/18th c. Inuit stone cairn grave at Baie des Belles Amours site.

midden outside these houses. Apparently they were occupied for a relatively brief period, long enough however, to have to bury one of its members.

After a couple hours we needed to return to the boat as the weather was building into a serious storm. Predictions were for near gale-force winds, and our previous experience anchoring in Baies des Belles Amours in a wind storm showed that while there was good protection from the seas, the bottom was too soft and muddy for good holding with our grapnel. Most of the afternoon the air had been muggy and still, and the sky was turning black to

the south, engulfing Newfoundland. By 7 PM we were tied up at the Blanc Sablon wharf, having to take the end berth on the inside of the 'L', which left about 6 feet of our bow exposed beyond the end of the pier. We had hardly tied up before it started to rain and blow from the northeast, and we got soaked trying to get a meal from the Korner Café at the head of the wharf road on 138, which had closed early. However, begging a ride back to the boat on a passing truck had a dividend in that he called the Pelletier dealer, who rents cars, and within an hour we had a truck available for two days – a necessity here where everything is out of walking distance.

Home cooking was in order, and after a quick chili dinner we turned in, after doubling up our ropes and checking the speedboat lines. About 12:30 AM I woke as a wave hammered the bow like a sledge, and I immediately got transported into a world of rolling, heaving chaos as the boat lunged against its lines. The wind and seas continued to build rapidly, and the rigging was singing, dock lines were squeaking, and bumpers were groaning under the strain of huge seas coming directly off the Straits. The worst onslaughts came in twos and threes as waves crested and flung breaking water horizontally at the bow, hammering the side inches from Christie's bunk, and lashing the windows and stove pipe like shotgun blasts. You could not sleep; yet getting up seemed useless also, so we all lay in our bunks wondering when the lines would chafe through sending the speedboat or the Pits careening into the breakwater. As the situation grew worse with the rising tide, we heard voices on the pier as others drove from their homes to put more lines on their boats. At this point Perry got up to check things out and help the other boats. He was pretty sure our doubled lines would not stand the chafing and strain, so we put another set



Fig. 2.42: Belles Amours Inuit winter houses - view north.

on the bow and then dragged out the big hawser we store for the emergency ship's anchor and doubled that up on the bow as well. The speedboat was banging our side but seemed in no danger of swamping or being cast off, as it was in our lee. Our concentration on sounds was so intense that in the midst of the fury I heard the clothespin bag break open on the cabin roof, and all the pins rattled down and skittered about the deck. More disconcerting was the continual hammering of waves on the starboard bow. With nothing more to be done, we lay down again and waited. Providentially the storm peaked by 4 AM and started to subside. We were able then to get to sleep and by 8 AM rose to assess the damage, which was remarkably slight. The speedboat had a foot of its plastic gunwale broken off and had chafed into the Pits' rubbing rail, and some of our mooring lines were chafed and would have to be cut and spliced. What a relief to have that awful night over; it was the worst experience at a dock I've ever had and rivaled the worst underway and anchoring traumas I've experienced.

19 August, Sunday – Blanc Sablon After a bit of psychological recovery therapy on board, we used our rental wheels to go for breakfast at the Korner Café, which was now open and had some old salts swapping stories with their Sunday morning mug-up. When a familiar looking fellow sitting at the next table winked at Christie we realized it was the old fisherman we had met with his wife and daughter in Belles Amours yesterday (Harrington people say 'Bellzamoor'). We had had then a nice chat, led by the daughter, Jennifer, who showed such interest in what we were doing that I invited her to come ashore and work with us. She was with her mother, Gladys, and father, Marcel LaVallee, and had been out berry-picking, but they were on their way home.



Fig. 2.43: Testing H2 at Belles Amours - view up entrance passages to the north.

Perhaps she might like to come today, I thought, now that we had found the site. After breakfast Marcel took us over to her place, but she was busy for the day, so Marcel volunteered to come along. We also paid a call on Clifford and Florence Hart, to say hi and see if they could come. I had not seen them for two years, as last summer we passed Blanc Sablon without stopping, so I'm glad that we found them well, though with some changes. Florence was on medical leave from the hospital after an operation to relieve pressure on her spinal cord in her neck, and Clifford was starting to have trouble with his memory. But both were full of jokes and even had new archaeological finds to show us, which Will duly recorded. Cliff could not resist playing a few tunes on his accordion and harmonica, and for a while it was like being back in the middle of a good ol' Newfie step dance.

During the afternoon we caravanned in two vehicles down the highway to Belles Amours, cruising through beautiful granite hills, past the great waterfall cascade west of the Brador River, a salmon stream, and swooping down the dramatic figure S turn to Belles Amour. Following a

gravel track across the peninsula, we arrived near the site and hiked in, soon discovering that Cliff and Florence were in street shoes and found the rain-sodden moss slippery and the marshes full. We showed them around the site and then proceeded to make a map and excavate a few test pits, two in House 2 and one outside the entrance passage of House 1. The results, partly reported



Fig. 2.44: Test pit at H1, Belles Amours Inuit winter site, trowel pointing north.

above, confirmed the Inuit origin of the houses and showed that they had been occupied briefly, had access to clay pipes and tobacco, and used many European materials, but lived an Inuit life in terms of subsistence and settlement. We were careful not to disturb the sites visually and restored our pits so they would not attract attention or encourage looting, as there has been a tradition to despoiling sites in the area. After a long hard night, the day was a great success and we returned to the wharf restaurant for supper, discovering that it had been down-graded to a snackbar. This evening was a quiet one at the pier.

20 August, Monday – Blanc Sablon After some discussion about the day's activities, we settled on a plan for Will and Perry to drive to Red Bay so Will could see and photograph the museum and look for comparative materials for our new finds this summer, and Christie and I would spend the day with the Hart's at their 'chalet' testing its archaeological potential, which had been only briefly explored by René Levesque years ago. We also wanted to sample more of one of the midden areas of the Belles Amours site. The Harts drove us to their place and after a tour of recollections about where things had been found, excavated several test pits, to the gleeful buzz of local black flies. We spent the better part of the day dodging rain squalls and flies, and at the end came up with results that put us in good stead toward designing a more extensive program in the future. Some of this will depend on how much René Levesque wrote up in his final report on this area before he died last February. Our work was largely confined to the north yard area where we excavated four test pits, and the east yard, where we dug two. No effort was given to work on prehistoric materials as I had a good outline of those site locations from my visit here three years ago. Now we were more interested in European and early historic native issues. The dominant find, though, was the extensive amount of bone food refuse materials found in the upper culture level throughout the sampled area. The largest proportion is of harp seals, but other seals are present, as well as a considerable amount of caribou and possibly moose, as well as dog or wolf, and a small but well-preserved amount of fish bone. Whalebone is also present. Most of the faunal remains occurred with flakes of Basque roof tile, leading one to believe this deposit is post-Basque and to some degree an adaptation to salvaging the Basque occupation. Rene had found large amounts of Basque tile, in some cases arranged as structures or drains, in the site, along with whalebone. Christie's TP contained some cobbles that may be part of a drain or sluiceway, and a large fragment of a stoneware vessel. My pit contained worked caribou antler and other faunal remains and an iron point, a whalebone sled runner, a cylindrical perforated ground stone bead, the base of an ivory fish or bird point and nails and tile fragments. Together these finds suggest a possible Inuit occupation and use of Basque materials – at least that is the

hypothesis I would like to consider, as it augments the Belles Amours data on Inuit presence. All this was done under fly duress with constant discourse with Florence and Clifford, who kept wandering off into the brush in his quest for René's tiles and other storied discoveries.

Back at the boat, we found Perry and Will had returned from Red Bay where they had landed in the middle of a Parks Canada program honoring Selma Huxley Barkham for her discovery of the Spanish Basque records on Basque whaling in Labrador in the 16th century. They had a nice visit with her and tried to entice me to drive up to see her this evening, but with the Labrador time change and driving time it would have been too late by the time I got there. The ceremony installed in the museum a portrait of Selma sitting with Saddle Island in the background. According to Perry's and Will's report she is as feisty and engaging as ever.

21 August, Tuesday – Blanc Sablon to St. Anthony Four o'clock came around quickly and brought a continuation of the glassy smooth sea condition we've had since the storm, as though it had sucked all the energy out of the atmosphere after it had blown through. We left immediately and crossed to the Newfoundland coast and ran northeast along the shore, watching huge demonic clouds form in our wake over Labrador coast. The world was entirely silver for hours – an oily silvery sea without even the disturbance of a ripple, and a huge sky with dark silver clouds – streaky ones down low and big thunderheads above. My camera focus hunted around forever, unable to find something to focus on, outfoxed without a defining shore or even a horizon. When a porpoise or whale surfaced or a fishing boat passed, it seemed to float by in mid-space apart from the laws of nature. Our wake, the engine rumble, and the thin low limestone strip of Newfoundland shore were the only points of reality in this strange formless world.

In time the Cape Norman light slid past and we turned east across the tip of Newfoundland, passed L'Anse aux Meadows, and tied up at the Quirpon dock, where the only other boat was the lighter for the high-end \$300 per night B&B. A couple of young people were waiting for the ride, run by Boyce's brother. After we'd showered and got our clothes into the washer in the dock-house, he loaned us his car and we ran over to see Boyce, and Jamie and baby Nicholas, whom we had missed on our earlier visit. Boyce was preparing for another winter work stint in northern Alberta with his brother, driving water trucks used to make ice roads for the heavy trucks that service the logging and gas ventures. Turns out the weather around Quirpon has been poor all summer, mostly fog and rain (the latter at least kept the dock-house water cistern full), and the fishing had not been all that good. Mackerel price was low, cod not plentiful, and only the shrimp fishing has been good, though at low price. After a couple of phone calls and web-



Fig. 2.45: Clifford and Florence Hart and Christie Leece at the Inuit/Basque Hart Chalet site.



Fig. 2.46: Test pit with Inuit sled runner, iron point, stone tubular bead and other materials at Hart Chalet.

had brought. More wine disappeared around our galley table this summer than ever before, what with Will's contribution and the wine-crazed Quebec crowd. Still, beer remained the beverage of quantity, far ahead both cost-wise and gallon-wise in the summer sweepstakes. The change to Newfoundland from Quebec time gobbled up an hour and a half of our day: eight hours from Blanc Sablon to Quirpon and another three to St. Anthony. The smell and sounds of shrimp boat arrivals and the sick smell of shrimp processing were not far from our awareness throughout the night.

22 August, Wednesday – St. Anthony to Englee to Lushes Bight We got up at first light and found the day grey and foggy, with a northeast breeze, and upon leaving the harbor the only thing we could see was the strip of coastline. There would be no visit to the huge iceberg, which Christie especially had hoped to see close-up. It was about ten miles south of its evening position, having traveled about one mile per hour. When we first spotted it we thought it was four or five miles off, but when we turned on the radar we found it almost twelve miles away, and during the half hour as we approach St. Anthony, it hardly seemed to be getting any closer or larger. Lacking any kind of scale, it is impossible to judge the size of icebergs at sea; this certainly was true in this case. It did not make sense to try and visit it in the fog, as there would be ice scattered around it for miles and there would always be the danger of a collapse with ice shooting out in all directions while we were near.



Fig. 2.47: One of the strait's icebergs - tantalizing and dangerous.

The breeze freshened as we proceeded south and we decided to pull into Englee and have lunch and see what the weather had in store. We could not comfortably cross to Cape St. John's in a 20-25 knot NE wind as that would put us directly in the trough. Englee was quiet, and there

was little activity at the dock except for a few men mending mackerel seines. Thing looks fairly prosperous though, as the dock was new and there were three fish vacuums on the wharf and two large fishing vessels. A couple years ago we had heard this town was closing its fishing program, but it certainly seems in business now. But it's probably the only east coast peninsula town other than St. Anthony that has a real economy. The crossing through the Horse Islands to the Cape was uneventful. The fog grew thicker as we approached the Cape but the wind died and by the time we crossed Green Bay and reached Lushes Bight it was fair to dead calm and the fog had dissipated, so we could see the lights of all the small towns and the fishing boats that had their lights on full to attract mackerel. Two boats work together, one serving as a beacon to attract fish and the second runs the seine around the first to capture the fish. The price is low – 7 cents a pound – but there are lots of mackerel, so people do well if they get good catches.

The last stage of the trip from Cape St. John's to Lushes Bight always seems slow and full of nostalgia for the interesting times that have transpired; and in this case, with the sunset shining through the fading fog, it was doubly so because it was Christie's last trip. Everywhere along the return voyage she has been saying goodbyes, picking her last bake-apple, enjoying learning some more of Perry's boating or cooking tricks. She has been a cheerful, diligent, and creative assistant to me and the Arctic Studies Center for five years. But we're not saying 'sayonara' just yet, and we hope she can return in the future, with us or by finding some other way to come with us again, or at least make her own way back to this part of the world.



Fig. 2.48: Storm brewing over the Strait of Belle Isles.

We had hardly tied up when Perry's daughter Jill and her boyfriend Matthew discovered us and phoned Louise to announce our arrival. Actually we are only one day earlier than last year, when we arrived on the 23rd. I'd love to have had a few more days to work around Blanc Sablon, but at this time of year the weather is fickle and you take chances lingering far from home when the weather is fine for traveling. Other years when we pushed our luck, we got wind-bound for days. It was so quiet as we stood there on the pier you could hear the squids slurping in the swallow water across the cove. Christie couldn't resist and went off squidding with Jill and Matt. Soon cackling cries of amazement drifted across the water as Christie grabbed one of these strange creatures and they all got squirted with squid ink. Soon they had a baby and an adult in their pail, and in a moment true squid nature was revealed as the adult ate half of the little one. With that we retired for a cool, quiet night on board, without mosquitoes or other distractions.

August 23, Thursday – Lushes Bight Today was a perfect day for clean-up. Christie spent most of the day going through the collections to be sure they were properly labeled, packaged, and inventoried and made record photographs so that Anja could process them accurately in

Quebec. After calling Air Canada I discovered that to advance my departure from Deer Lake to Montreal will cost more than \$600, so I've decided to drive south with Christie. We will leave in company with Will and take the Port aux Basque ferry to North Sydney early Saturday morning. Will discovered a huge amount of rainwater had leaked into his Volvo while it was parked in Perry's yard, threatening to short out the electronics that runs the cars nowadays. Five shop-evac loads of water later, the interior was still soaked but the car seemed to be working – but you never know with finicky suped-up Volvos! I reached Kelly and Robert Linfield at Diver Masters in Gander and arranged to return the compressor and tanks during the afternoon and left on the 1 PM ferry, making a quick trip, returning on the 7 PM ferry, for which there was a huge line-up that kept Dennis and his team running back and forth continuously until 10 PM. Everyone was returning to the island to celebrate Long Island Day on Sunday, and with growing families and many people having moved off the island, the returning crowd would probably double the island's population. I'd missed a big dinner at Perry's but they had a whopper of a plate waiting on the sideboard for me when I returned.

Before eating, I helped Christie and Will finish up cleaning bones, and when she passed me a particularly scroungy-looking looking piece I felt a jolt of recognition that nearly knocked me off my feet. I was holding a hefty piece of walrus ivory, broken at both ends. The middle section was beautifully carved in the bulbous shape of a Thule or early historic Labrador Inuit woman's needlecase. Although the ends were broken off and the surface was spalled, the form was unmistakable. This was an extremely important find, and to have it emerge from a bag of dirty bones in the last hours of the project was incredible, because it confirmed my suspicion from the stone bead, leister base, iron point, and sled runner that the upper level of the Hart chalet site was a Labrador Inuit occupation. That these materials should be mixed with pieces of Basque tile and early European ceramic vessels suggested that the Inuit camped here were either scavenging a pre-existing Basque site or had some kind of a relationship with the Basques themselves – perhaps serving as custodians or affiliates as we have surmised from the Inuit soapstone remains we've found at the Hare Harbor site. Whatever the case, this was a surprise that bodes well for expanded research at the Hart Chalet next year to assess the extent of Inuit occupation and define its relation to the Basque settlement, which also needs further definition at this location. These were rather pleasant thoughts to consider as we dropped off to sleep – sans mosquitoes, wind, and noise and with a few more chapters of Robert Bartlett's *Karluk* tale under my belt – for my last night on the vessel.

August 26, Friday – Lushes Bight to Deer Lake This morning began like yesterday – warm and clear, with a light breeze from the southwest. It was good we had arrived yesterday, avoiding what would certainly be a stiff breeze later today. As Will and I left the boat to drive up to Perry's Jim Saunders (?) appeared, asking if we had heard the news. “There was a boating accident around midnight last night over on the other side of the island. A speedboat crashed into the rocks. Four people survived, badly banged up, but 22-year old Cruise, the son of Goldie [now married to Steve Colbourne] and her former husband, Don, died. It looks like they ran up on the shore rocks at the entrance of the cove. Everyone in the cove heard the crash and cries and ran to help, but they couldn't find Cruise and thought he'd drowned. But later, when they went to get the boat Perry found him smashed up under the cutty in the bow.” Silence. Our breaths felt like they'd been sucked out of us. We hurried up to Perry's and found him still asleep, after getting in about 4 AM following the departure of the police and other authorities who rushed to the scene from Springdale by helicopter and vehicles. Dennis ran the ferry non-stop until dawn, getting the

injured and the immediate family members to the mainland, to the hospital and to the authorities. We found everyone in shock, and Nan, Perry's mother and the doyenne of the Colbourne clan, distraught beyond belief. Many off-island Colbournes had arrived for the festival during the past couple days, and all were shuttling back and forth between the houses, providing comfort and relief. The tragedy was heightened by the large size and closeness of the family, and the imminence of what was to have been a grand reunion for the entire island, now postponed until next weekend.

We decided it would be best for us to depart as soon as possible, to give everyone plenty of space for their grief. Christie cooked a lunch for the family and we said goodbyes and piled into Will's rehabilitated and overloaded Volvo and took the 2pm ferry. After a brief stop in Springdale, we drove on to Deer Lake, where Will stayed at Greg Wood's place and Christie and I at Ivy Nault's B&B. Everyone had heard about the accident on the radio and TV, where several other boating accidents in Newfoundland were being reported. Tragedies were also being reported at the national level: a hot air balloon had exploded and a driver had mowed down most of a wedding party marching along the side of the road. It was a bad couple of days for Canadians, with several soldiers killed in Afghanistan as well.



Fig. 2.49 : Early Thule-style Labrador Inuit needlecase of walrus ivory from the Hart Chalet site.

26 August, Saturday – Deer Lake to Vermont In the morning we were up and on the Trans Canada Highway at 5 in heavy rain and south winds – not a pleasant way to see the last of Newfoundland and at the same time keep an eye peeled for roadside moose. As we were buffeted about along the high hills of the west coast I recalled my only other transit of this part of Newfoundland, by car, back in 1963, when I drove north with Elmer Harp's archaeological team, from Hanover, New Hampshire to Port aux Choix, for my first experience on an archaeological excavation. Memories of the road at that time, only a dusty gravel strip, were recently refreshed by photos and descriptions in a book, Lives and Landscapes: A Photographic Memoir of Outport Newfoundland (2003, McGill-Queen's University Press). Elmer published a few years ago on his early work in Newfoundland and southern Labrador. Thoughts about that trip and what it meant for my career were bouncing around in my head as a grey form took shape out of the mist and rain. Yikes!!! "Christie!!! Watch out! MOOSE!!!" She'd seen it about when I did and braked sharply and honked. Fortunately this moose, a young one about two or three years old, startled and headed for the bush rather than across the road. There's nothing like a moose to wake you out of a reverie on the highway. By now it was getting light, and we were almost past the moose witching hour. As we sped along daylight flooded in, grey, cutting multiple chiaroscuro ridgeline shades in the Codroy hills. It was going to be a rocking ride on the ferry, with this wind, and a memorable departure from the island, retracing a piece of my past.

René Levesque

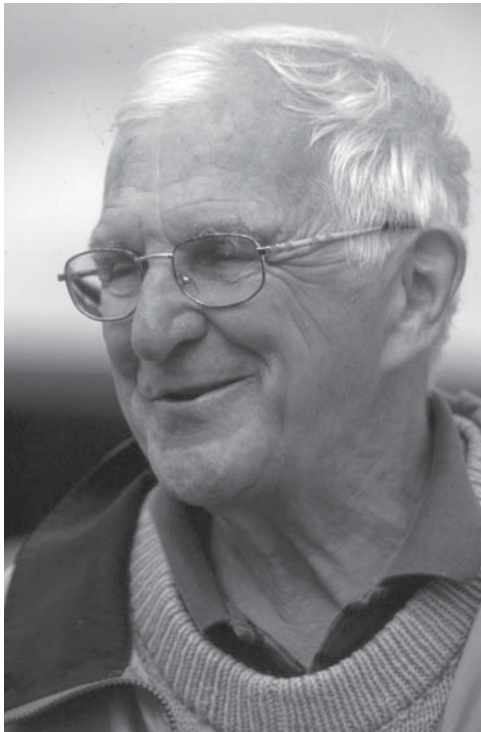


Fig. 2.50: René Levesque, 2001.

The 2007 St. Lawrence Gateways Project is dedicated to the memory of René Levesque who died this past winter on 14 February 2007. René was a long-time friend and colleague who was instrumental in my decision to initiate the Gateways project and for years had urged me to extend Smithsonian archaeological studies in Labrador into ‘the other Labrador’¹ along Quebec’s Lower North Shore. I did so in 2001 and had the pleasure for René’s company on board *Pitsiulak* for several days during our initial exploration of the region. For many years in the 1960s-70s René conducted pioneering archaeological surveys and explorations along this coast, with special attention to the Mingan Islands, where he had formerly served as a Jesuit priest among the Mingan Indian (Innu) tribe, and the Blanc Sablon region. During his final years I coaxed and coached René’s preparation of a monograph describing the result of these investigations, and a few months before he died he sent me the final manuscript, which I intend to shepherd into publication in some form over the next few years. A truly unique personality as well as a perceptive anthropologist and historian with an

indescribable personal style and linguistic flair, René trained many first generation Quebecois archaeologists, but the discipline rapidly passed him by and left him custodian of a large body of archaeological evidence that he found difficult to systematize and present professionally. Fairly criticized for his aggressive and often destructive field methods and for his failure to publish many of his projects, René nevertheless deserves more credit than he has received for his pioneering contributions to the training of an early generation of Quebec archaeologists, the creation of a Quebec archaeological perspective, and in particular for focus on archaeology and ethnohistory research on the Upper and Lower North Shore. I hope that in time history will be as kind to him as he was dedicated to it.

As René was wont to say, “Thanks and Farewell, my friend!”

¹ *The Forgotten Labrador: Kegashka to Blanc Sablon*: a short history of the LNS authored by Cleophas Belvin, published in 2006 by Queens University Press.

3 - Research Area 2001-2007

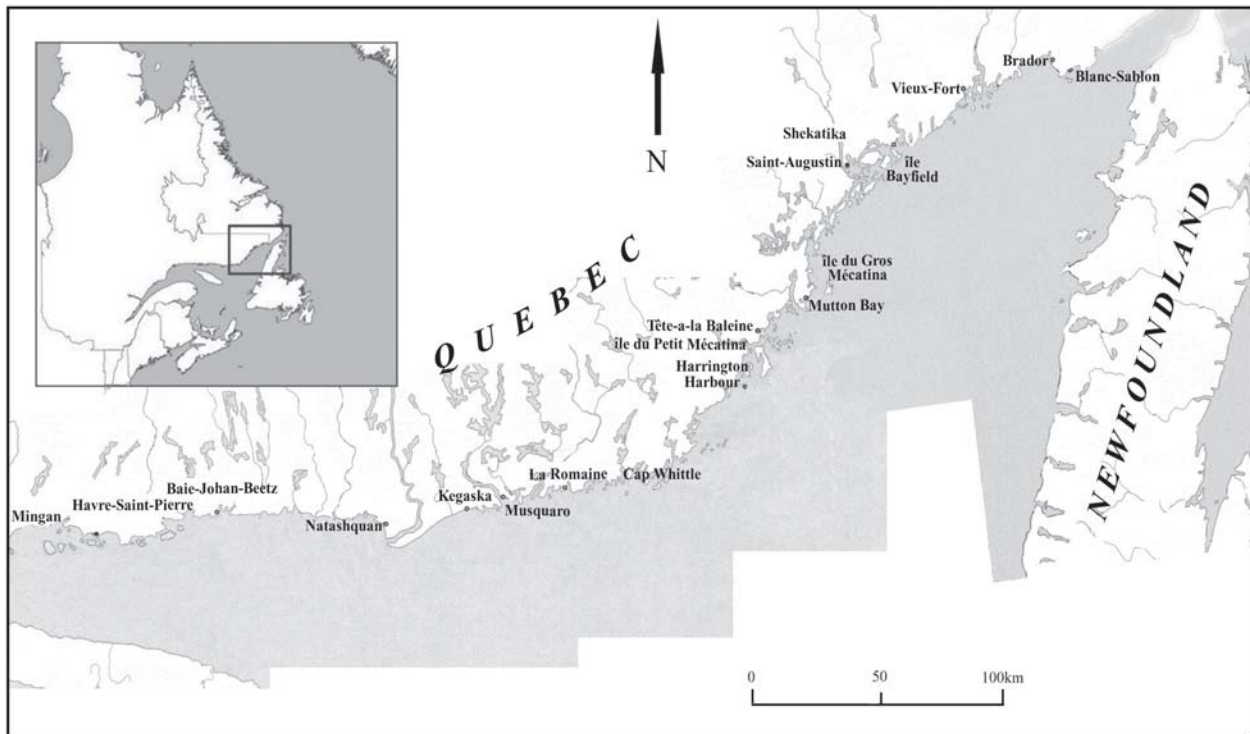


Fig. 3.1: Area of research 2001-2007

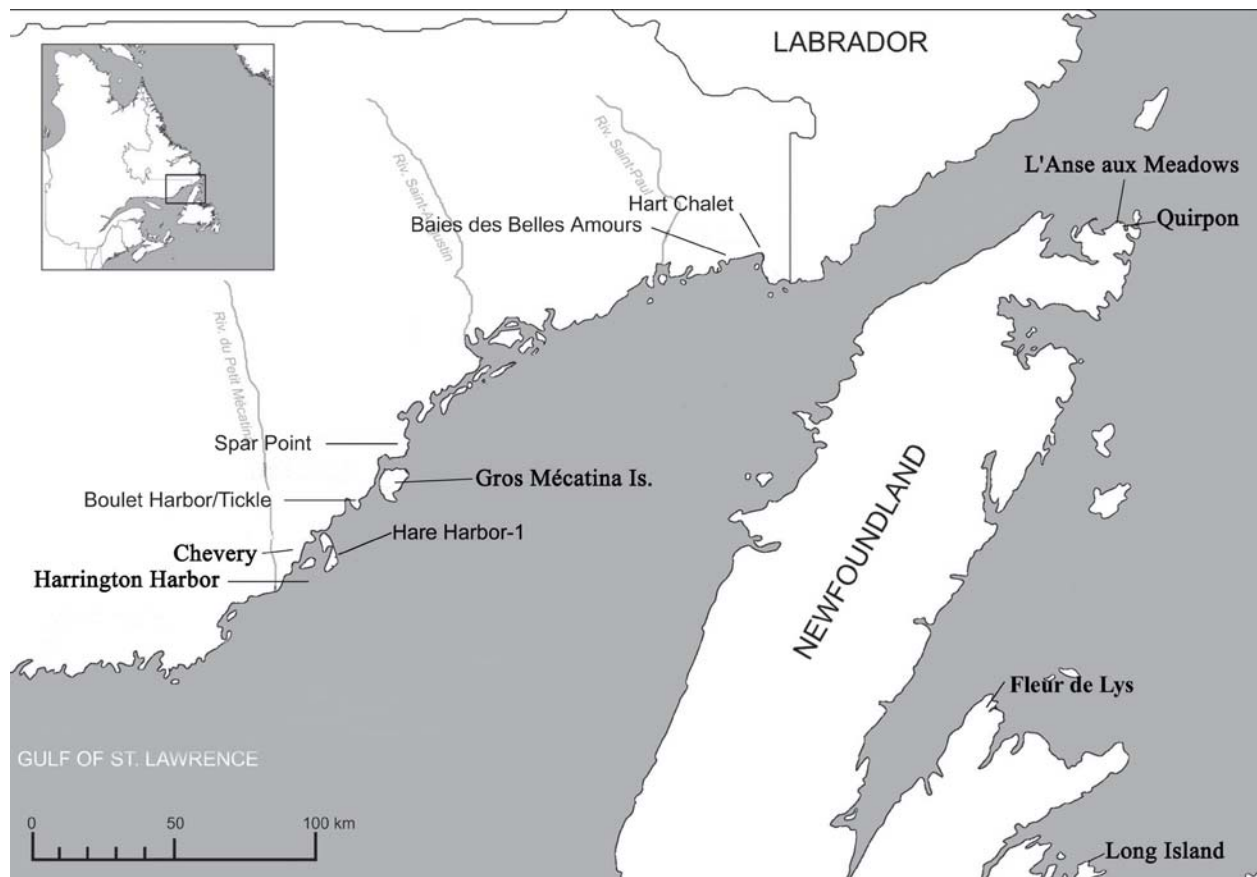


Fig. 3.2: Map of 2007 voyage area, including 2007 survey sites

4 - Hare Harbor-1



Fig. 4.1: Map of Petit Mécatina Hare Harbor-1 site. Section of map 12 J/11

Borden Number: Ed Bt-3

Height ASL: ca. 9.14 meters

Military Grid Ref.: 50° 33.73' N 59° 18.12' W

Culture(s): Groswater, Dorset, Basque (primary deposit)

Tentative Dating: ca. 1700

Areal Extent of Site: The entire area from the stone outcrop shelter to the southern ledge to the shore contains cultural materials. The along the shore also contains cultural materials-the extent of this area has yet to be determined.

Nature of Soils/Sediments/ Vegetation Cover:

Grassy, alders, and some juniper under the dry areas of the shelter. There is drainage through Area 2 from the boggy area (A3) down to the shore. Spruce clusters cover the boggy area in the eastern part of the site.

Collection Procedure: Controlled excavation-piece-plotted except for small pieces of tile, test pits of underwater deposit. Samples taken are now at Government Archaeological Laboratory, Quebec for

analysis, preservation, and cataloging by Anja Herzog.

Excavated By:

William Fitzhugh and 2007 Pitsiulak crew.

Dates Excavated:

August 1-15, 2007

During the 2007 summer season we spent three weeks in the field doing archaeological research in the Hare Harbor/Petit Mécatina area. Most of the fieldwork was directed to the Hare Harbor-1 site on Petit Mécatina Island, which has been investigated yearly since 2002. Attention was split between the land site and underwater site. No survey work was done this summer except at Belles Amours and the Hart Chalet site in Brador. Our crew included Perry Col-

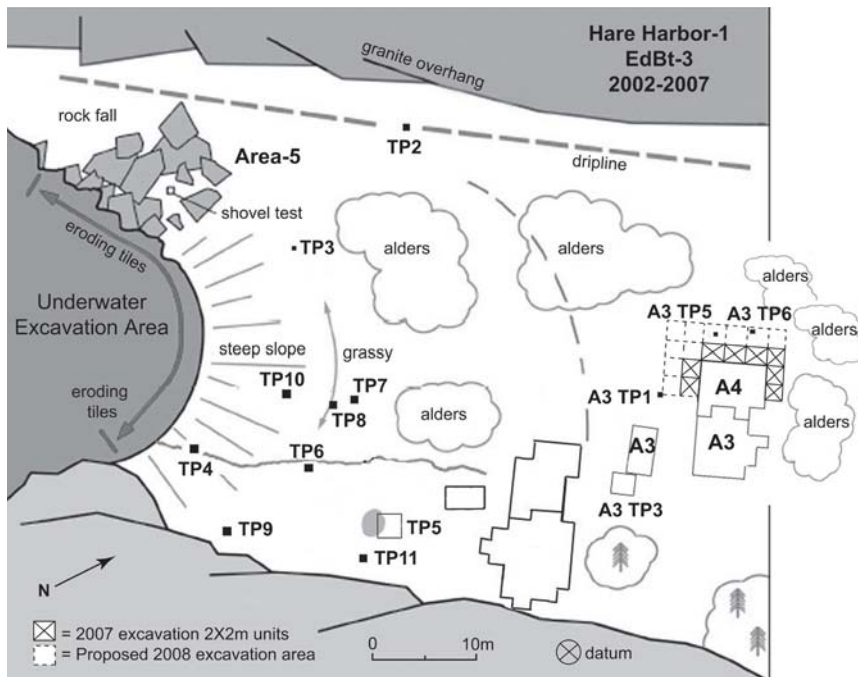


Fig. 4.2: HH-1 areas of excavation 2002-2007 and proposed 2008 units.

bourne (Pitsiulak skipper), William Fitzhugh, Christie Leece, photographer Will Richard, volunteer Josh Fitzhugh, and diver-archaeologists Erik Phaneuf, Frédéric Simard, Marilyn Girard-Rheault, and Vincent Delmas, who all represented the University of Montreal, which has become an institutional partner for our underwater work. The principal goals of the 2007 season were to enlarge the excavation of a possible 'blacksmith' structure located in 2005 and to expand excavations begun in 2006 in the central areas of the submerged deposits.

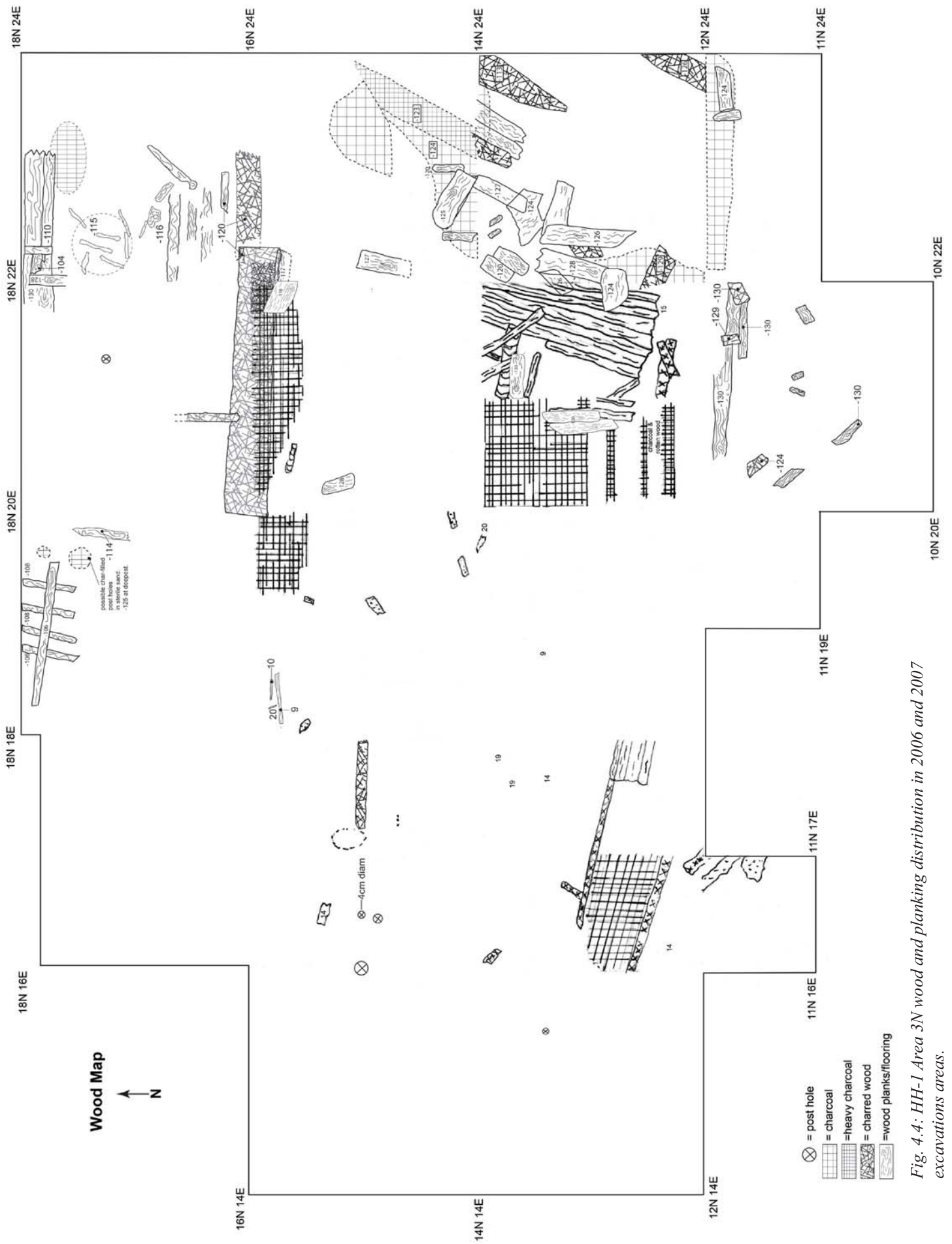


Fig. 4.4: HH-1 Area 3N wood and planking distribution in 2006 and 2007 excavations areas.

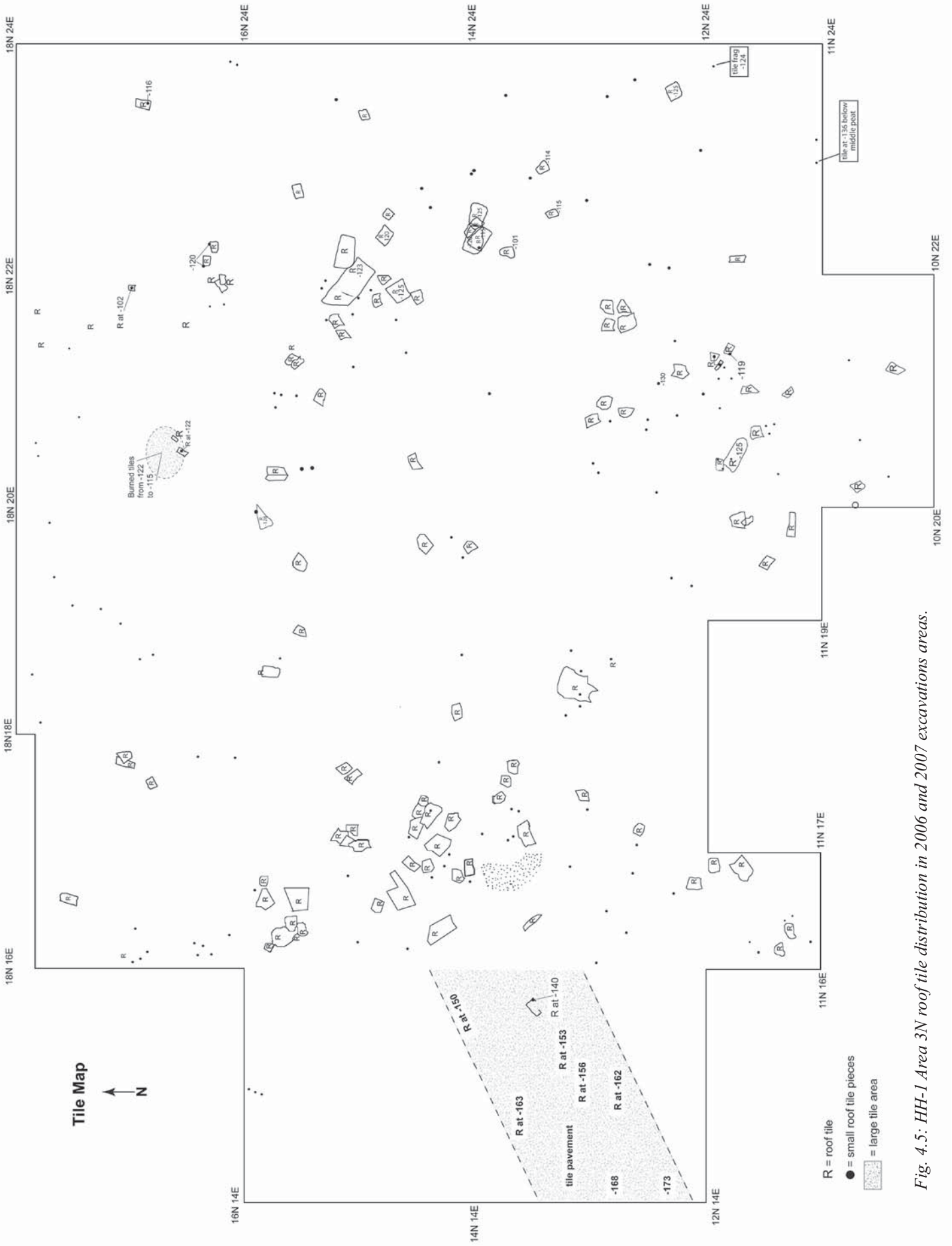


Fig. 4.5: HH-1 Area 3N roof tile distribution in 2006 and 2007 excavations areas.

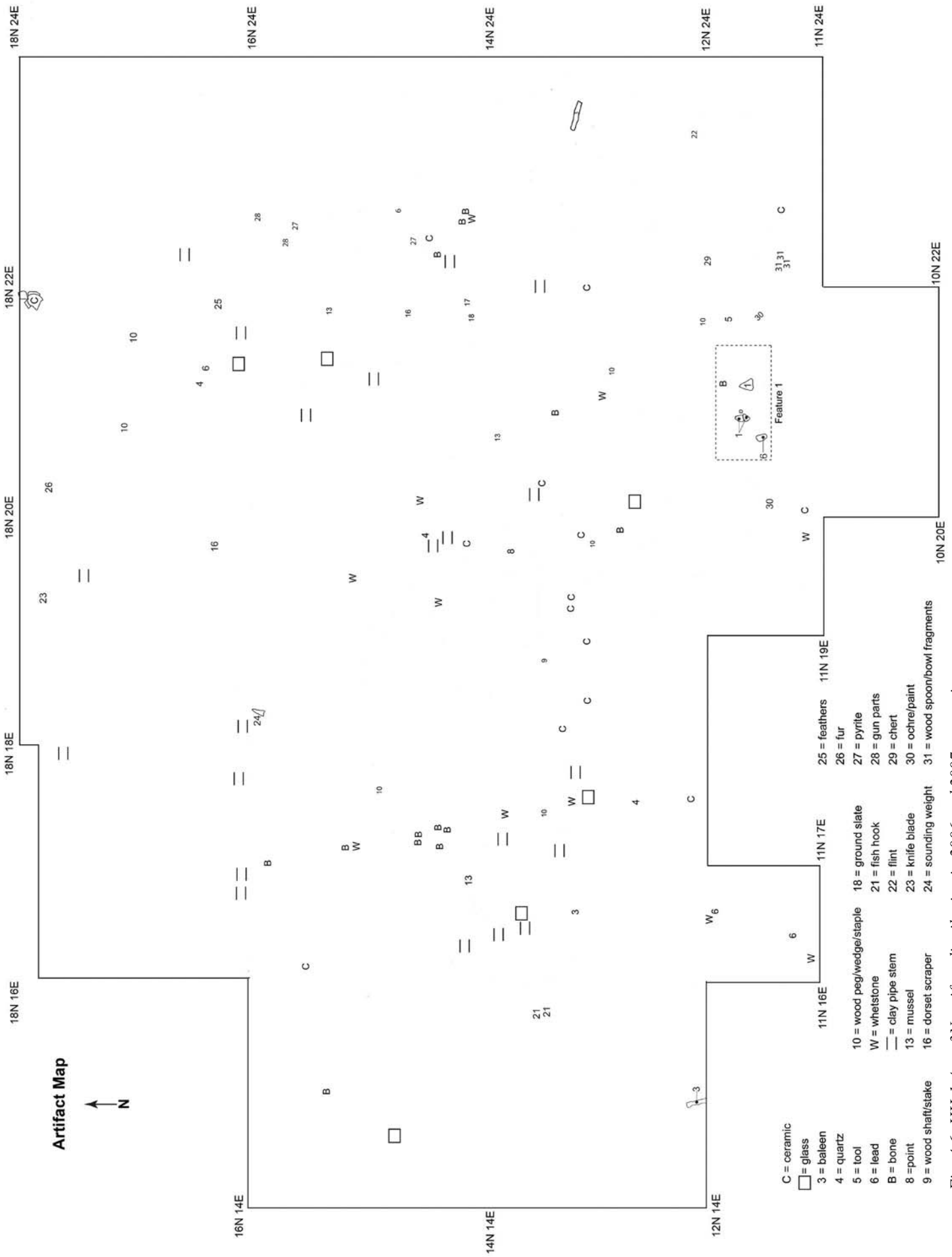


Fig. 4.6: HH-1 Area 3N artifact distribution in 2006 and 2007 excavations areas.

Fig. 4.13

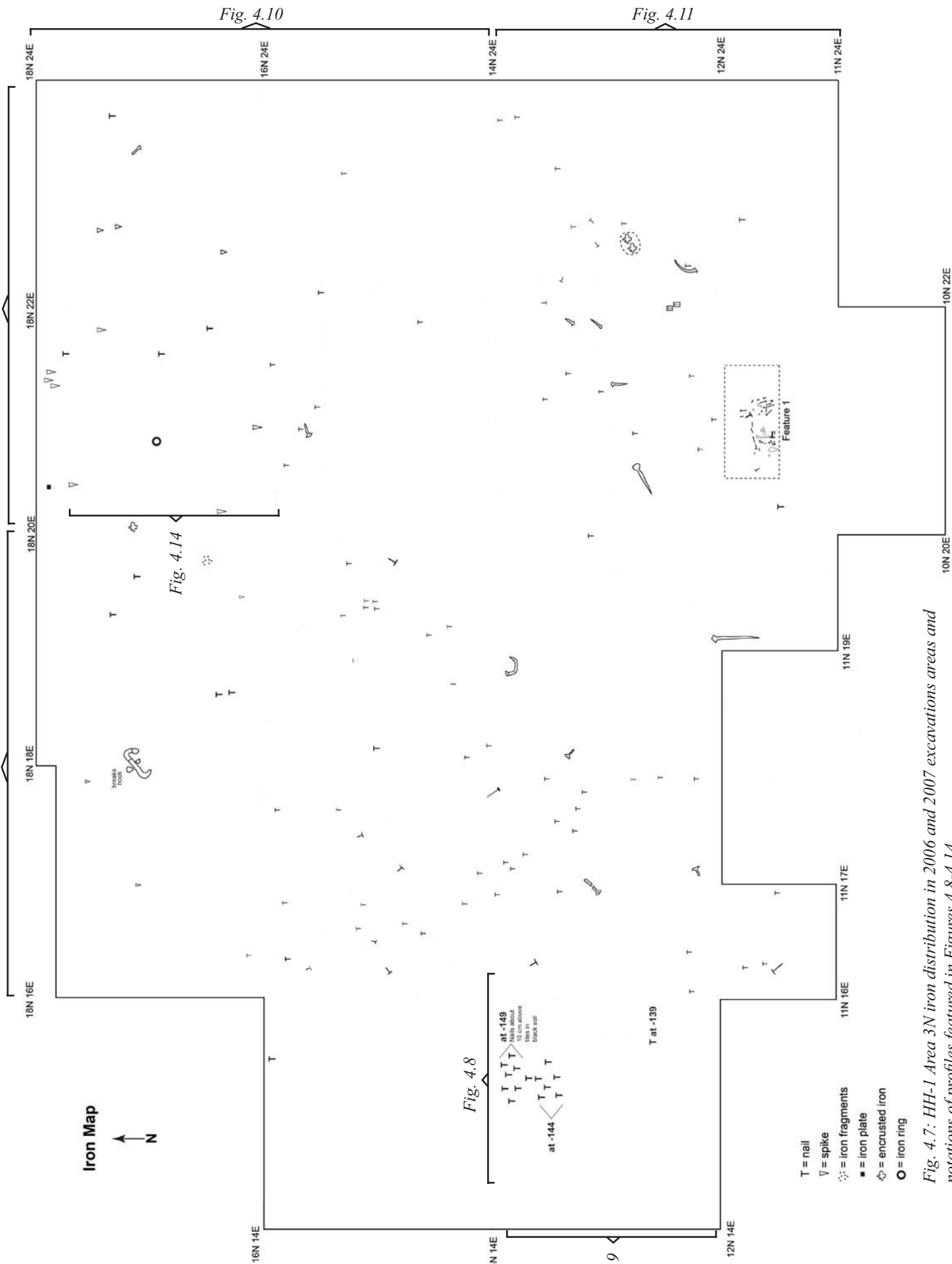


Fig. 4.12

Fig. 4.10

Fig. 4.11

Fig. 4.14

Fig. 4.8

Fig. 4.9

- T = nail
- ∇ = spike
- ⊙ = iron fragments
- = iron plate
- ⊕ = encrusted iron
- = iron ring

Fig. 4.7: HH-1 Area 3N iron distribution in 2006 and 2007 excavations areas and notations of profiles featured in Figures 4.8-4.14

Hare Harbor-1 Profiles

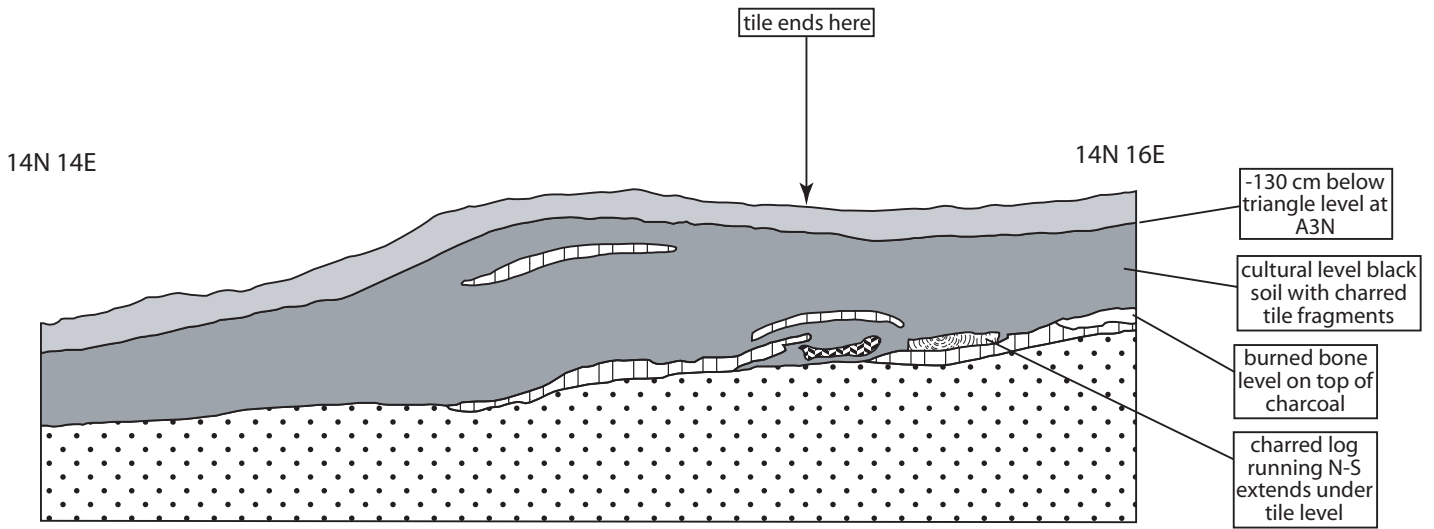
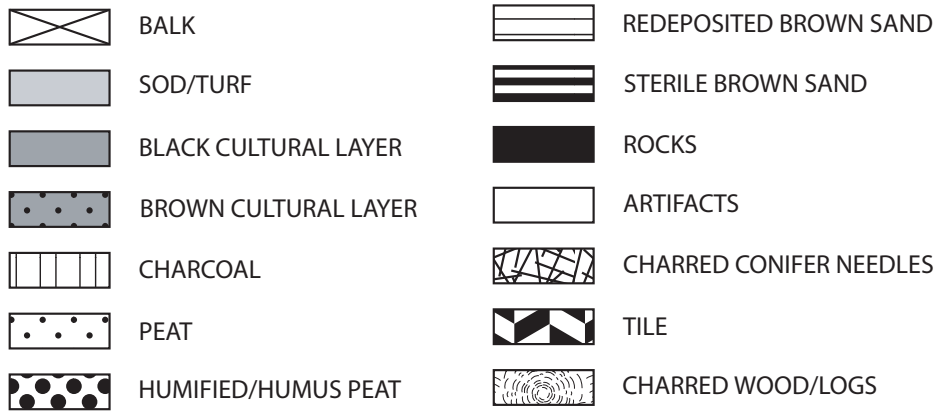


Fig. 4.8: Profile of balk running from 14N 14E to 14N 16E in HH-1 A3, facing north

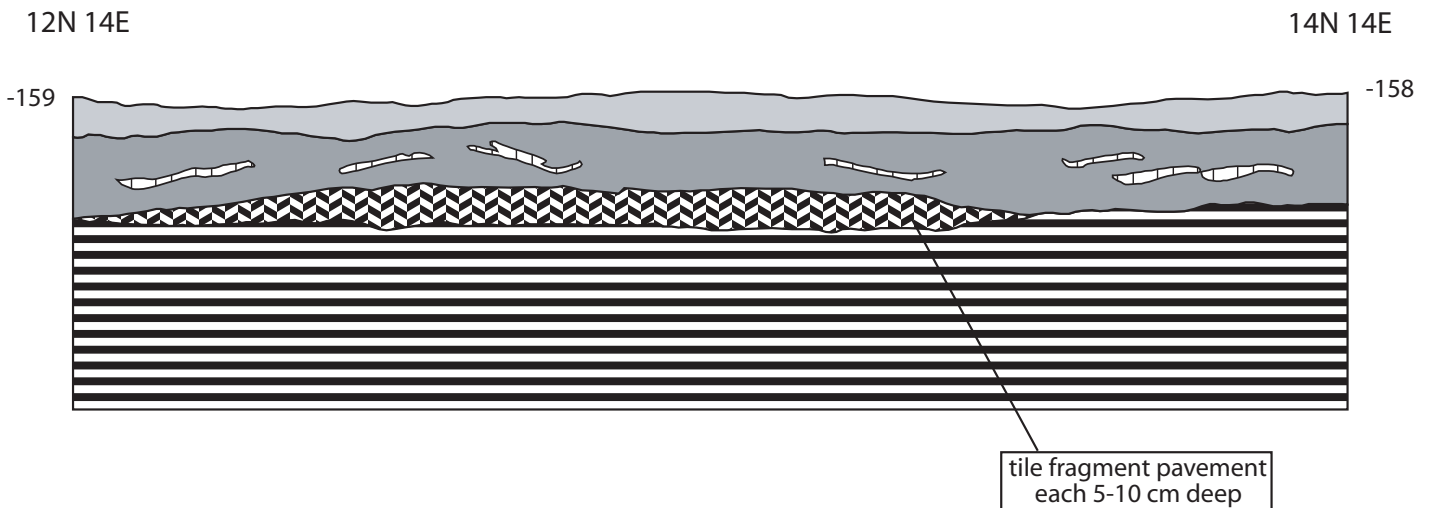


Fig. 4.9: Profile of half of the west wall for 2007 excavation area of HH-1 A3

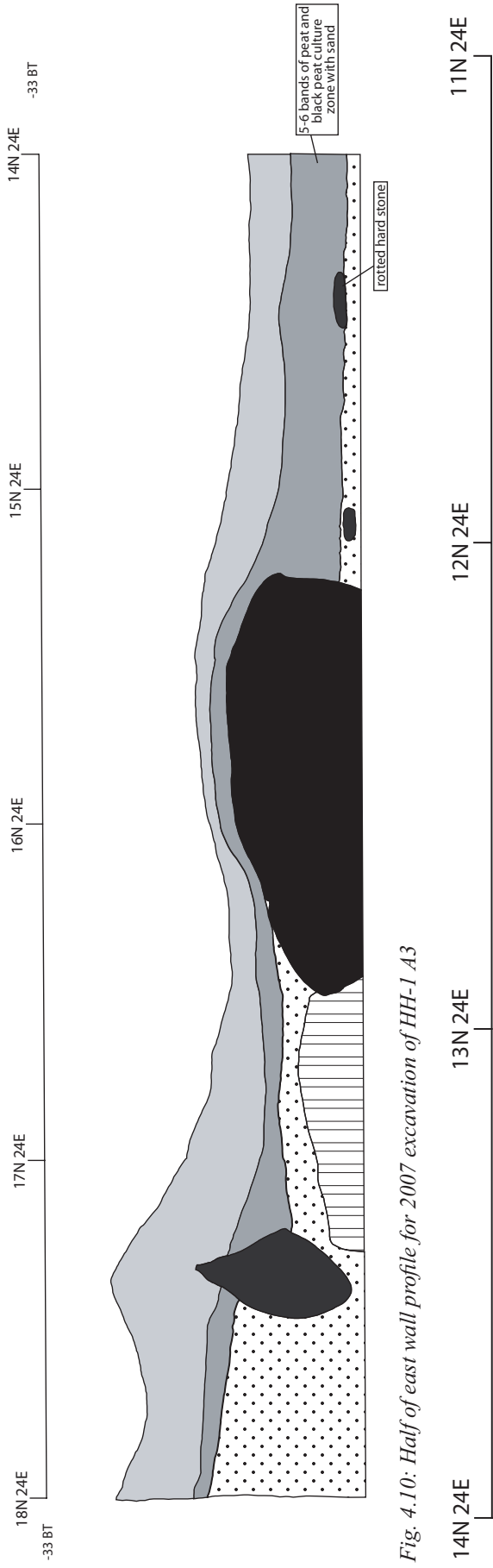


Fig. 4.10: Half of east wall profile for 2007 excavation of HH-1 A3

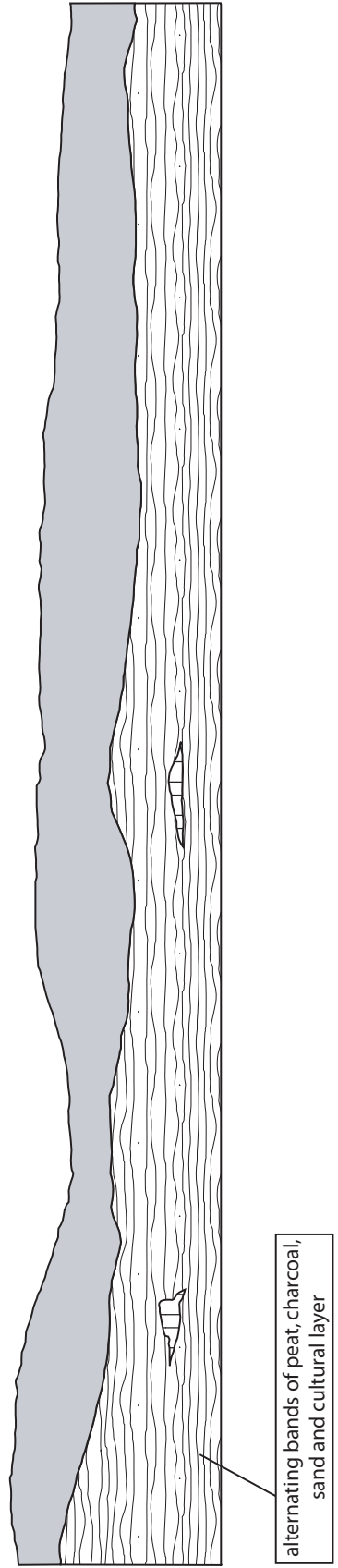


Fig. 4.11: Half of east wall profile for 2007 excavation of HH-1 A3

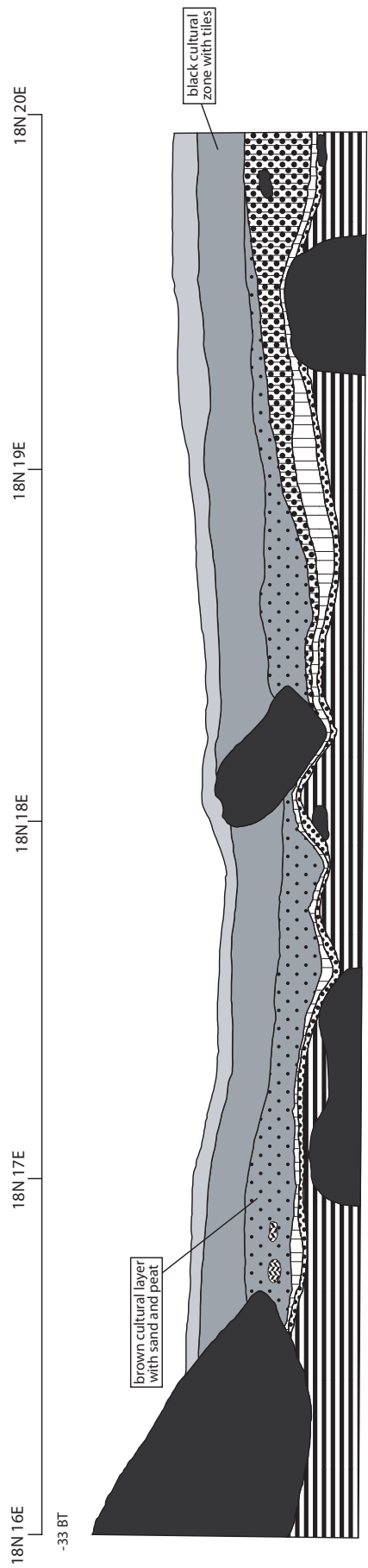
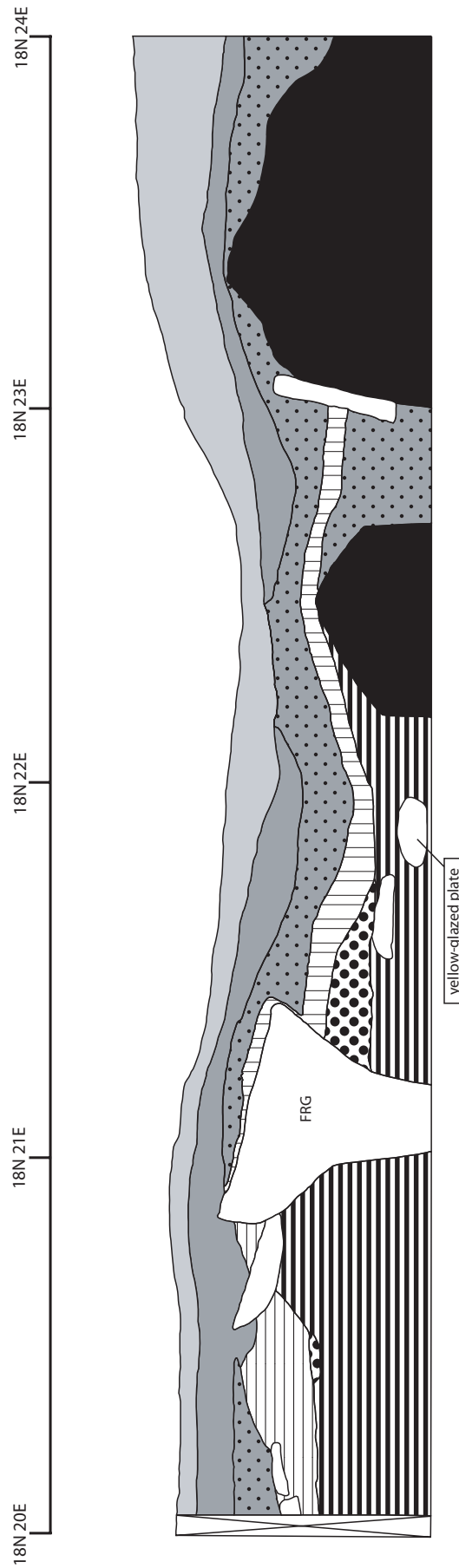


Fig. 4.12: Half of north wall profile for 2007 excavation of HH-1 A3



brown layer has layers of peat within it - indicating multiple years of occupation
brown cultural layer has some tile, but less charcoal & more peat than upper black cultural layer

Fig. 4.13: Half of north wall profile for 2007 excavation of HH-1 A3

level line is -33 cm b.t.

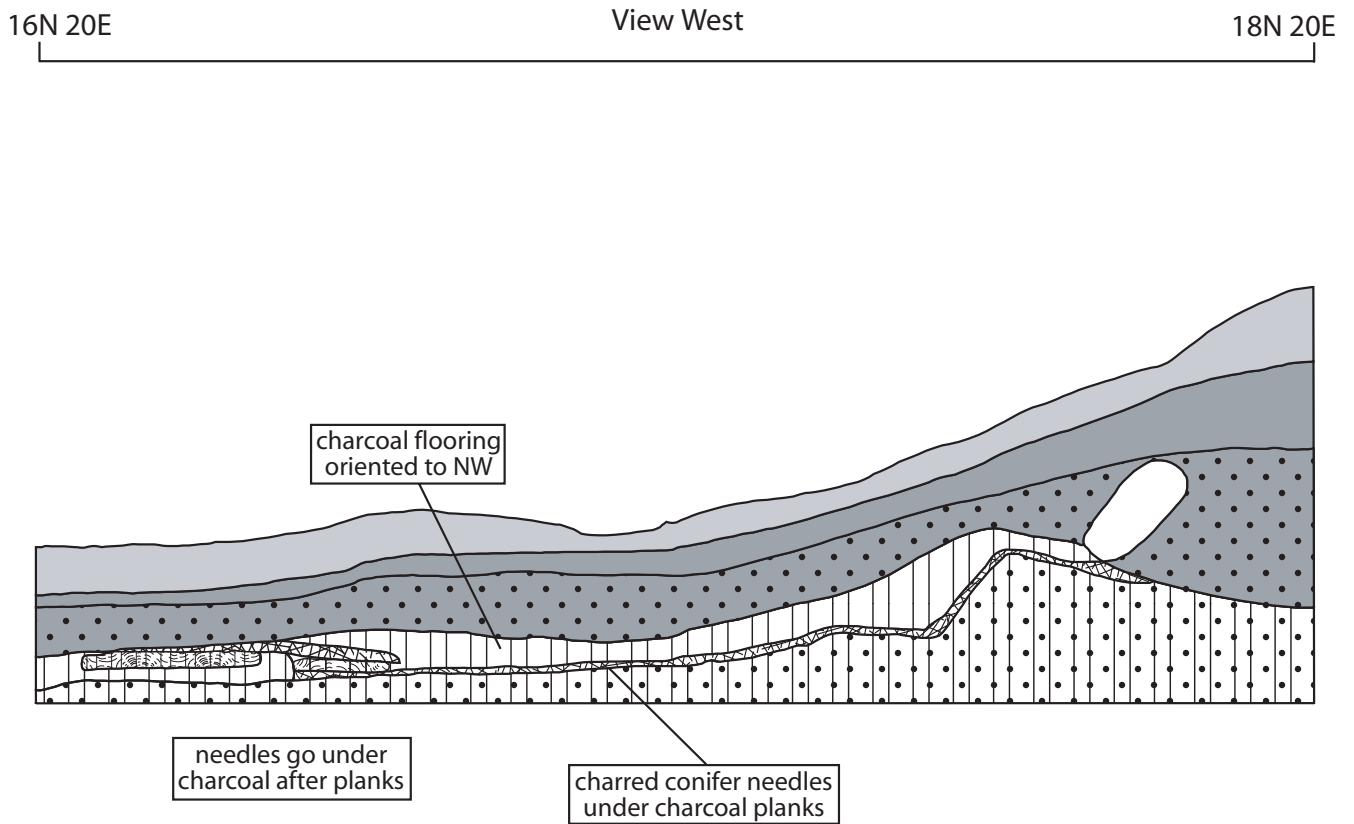


Fig. 4.14: Profile of 2007 excavation balk running from 16N 20 E to 18N 20E

Hare Harbor-1 Artifact Photos - Land Site



Fig. 4.15: SW corner of blacksmith shop (HH-1 Area 3N)



Fig. 4.16: 16th c. yellow glazed platter from blacksmith shop 18N 22E (north wall)



Fig. 4.17: Northern squares showing charred footing timbers and charred deposits (view west)



Fig. 4.18: Hearth feature in north wall of 18 N 20 E



Fig. 4.19: Detritus rock pile in NW corner of the blacksmith shop (18N 18E)



Fig. 4.20: 18E line at 18N, view north



Fig. 4.21: 18N 22E with hearth, view north



Fig. 4.22: 18N 24E at completion; the NE corner of the blacksmith shop



Fig. 4.23: Charred wood spoon or vessel fragment from 12N 24E



Fig. 4.24: Glazed faience fragment with glaze spalling from 12N 24E



Fig. 4.25: Charred N-S floor board and unburned E-W timber from NE corner (16N 22E)



Fig. 4.26: Charred planks in blacksmith shop



Fig. 4.27: Barrel stave with bung hole from base of 18N 24E

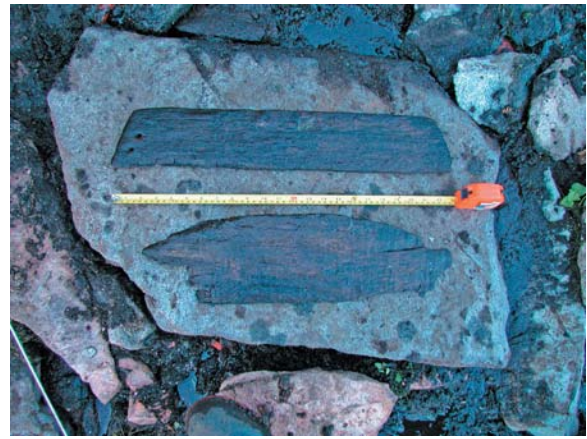


Fig. 4.28: Barrel top and tub bottom pieces from 14-16N 24E



Fig. 4.29: Burned and unburned tile fragments from blacksmith shop



Fig. 4.30: Western side of blacksmith shop at the end of the 2007 season



Fig. 4.31: Eastern side of blacksmith shop at the end of 2007 season.



Fig. 4.32: Artifacts from from 14N 16E



Fig. 4.33: Artifacts from 14N 24E



Fig. 4.34: Artifacts from Feature 1 in 12N 22E



Fig. 4.35: Artifacts from 12N 22E



Fig. 4.36: Artifacts from 16N 16E



Fig. 4.37: Artifacts from 18N 22E



Fig. 4.38: Artifacts from 18N 20E



Fig. 4.39: Artifacts from 18N 18E



Fig. 4.40: Pipestems from 18N 18E



Fig. 4.41: Gun parts and flints from 16N 24E



Fig. 4.42: Artifacts excavated from the HH-1 A3 shop excavation balks



Fig. 4.43: Artifacts from 12N 24E

HH-1 Artifact Drawings - Land Site

1. White glaze fragments -110
2. Iron nail with flat edge -105
3. Iron nail -105
4. Square iron nail -110
5. Iron nail -105
6. Nail?
7. Undecorated pipe stem -115
8. Nail fragment -115
9. Iron -116
10. Iron nail
11. Iron
13. Iron
14. Iron
15. Iron
16. Iron
17. Large piece of chert -120
18. English style gun flint -113
19. ??????????

Hare Harbor-1
 14N 24E
 31 July 2007
 C. Leece

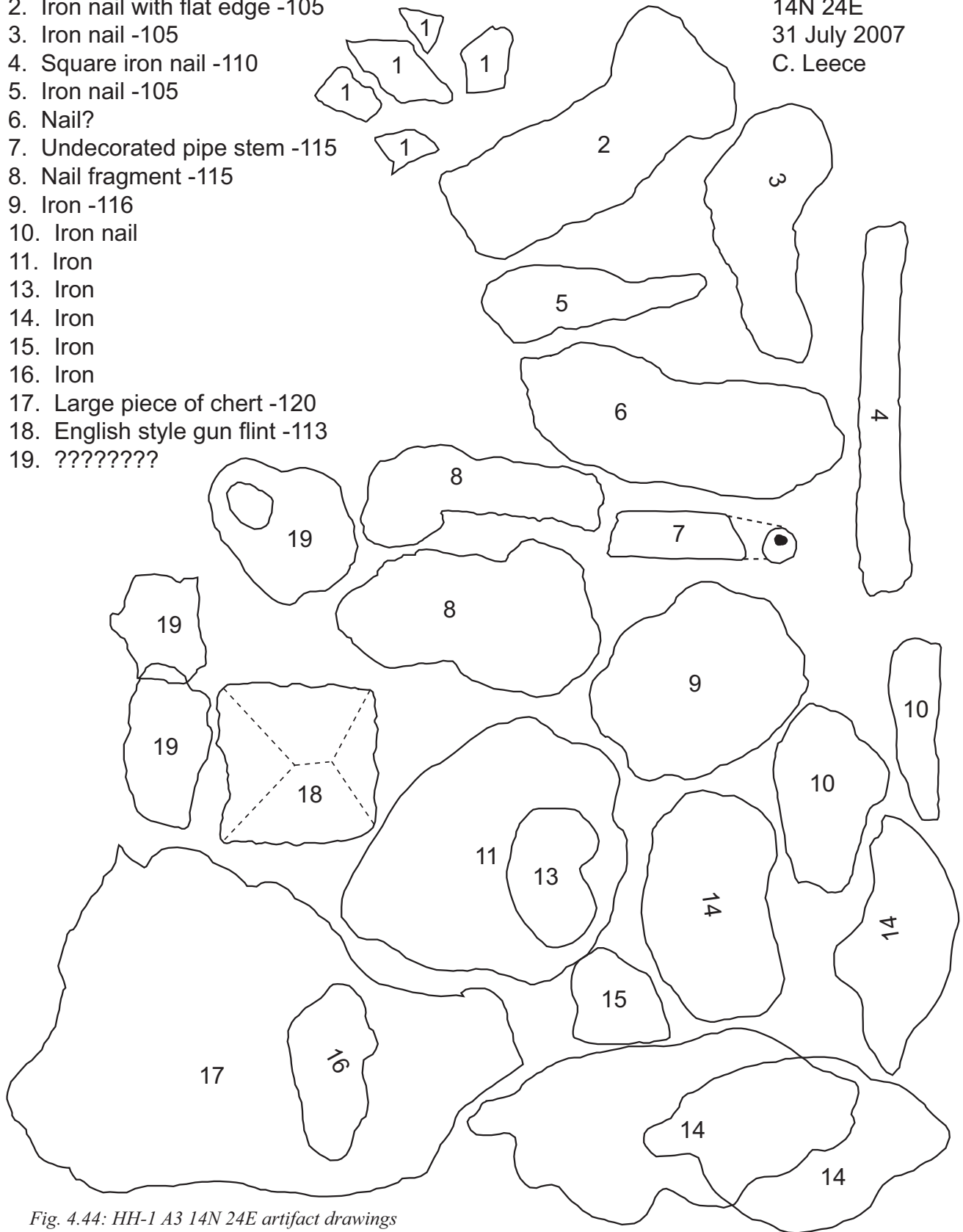


Fig. 4.44: HH-1 A3 14N 24E artifact drawings

Hare Harbor-1
14N 24E
31 July 2007
C. Leece

20. Baleen -123

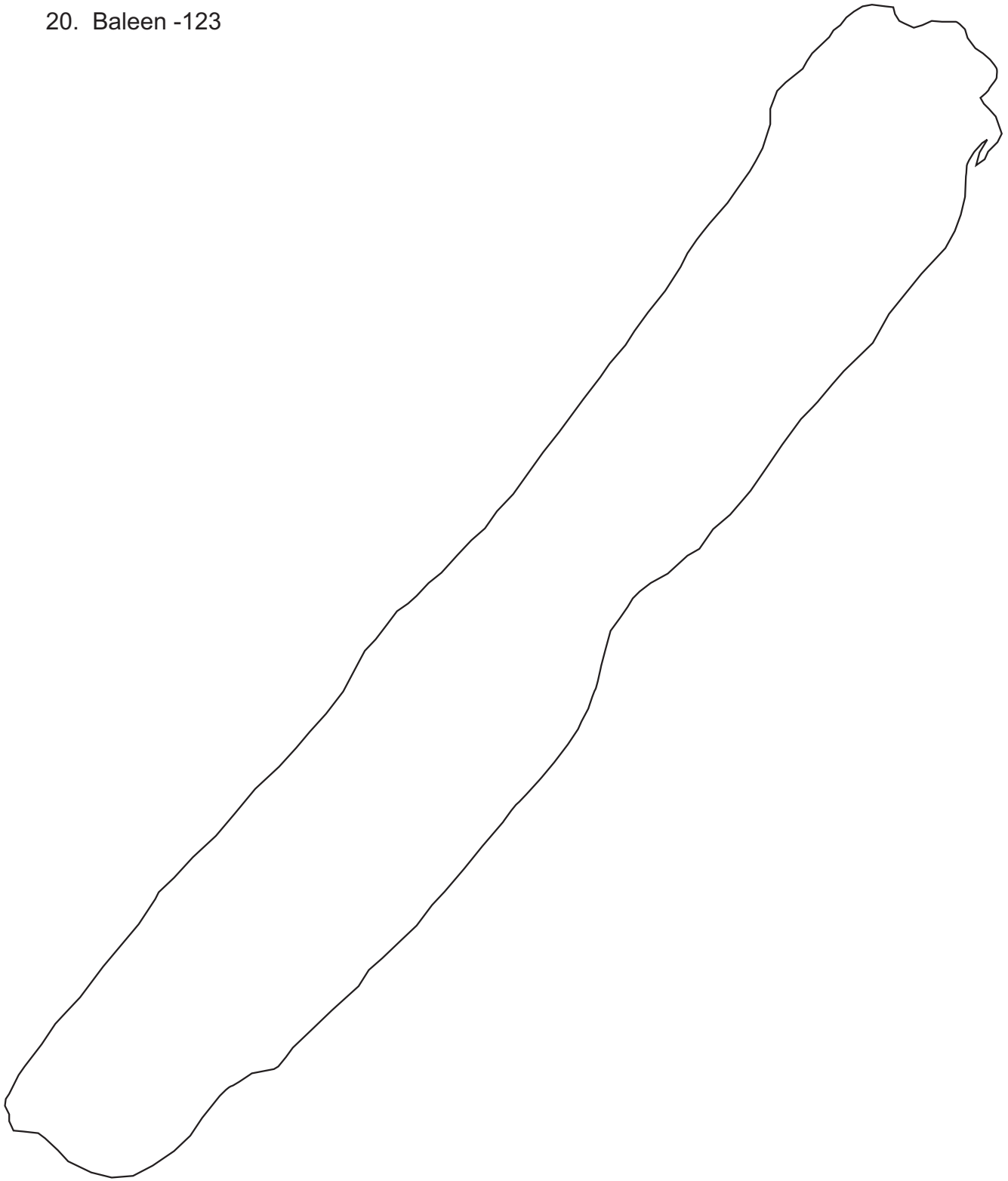


Fig. 4.45: HH-1 A3 14N 24E artifact drawings

Hare Harbor-1
16N 24E
1 Aug. 2007
Josh Fitzhugh

1. Iron nail (3 pieces) -82
2. Whetstone fragment -107
3. Pyrites nodule strike-a-light -108
4. Pipe stem -116
5. Mica flake -1
6. Mica flake -104
7. White glazed earthenware badly spalled glaze -144
8. 3 lead shot fragments and white corrosion stains around it -109
9. 5 chalky pieces -121
10. Same as above? Probably calcined bone
11. French gun spall -104
12. Flintlock gun hammer -105
13. Round pyrites nodule with facets -124

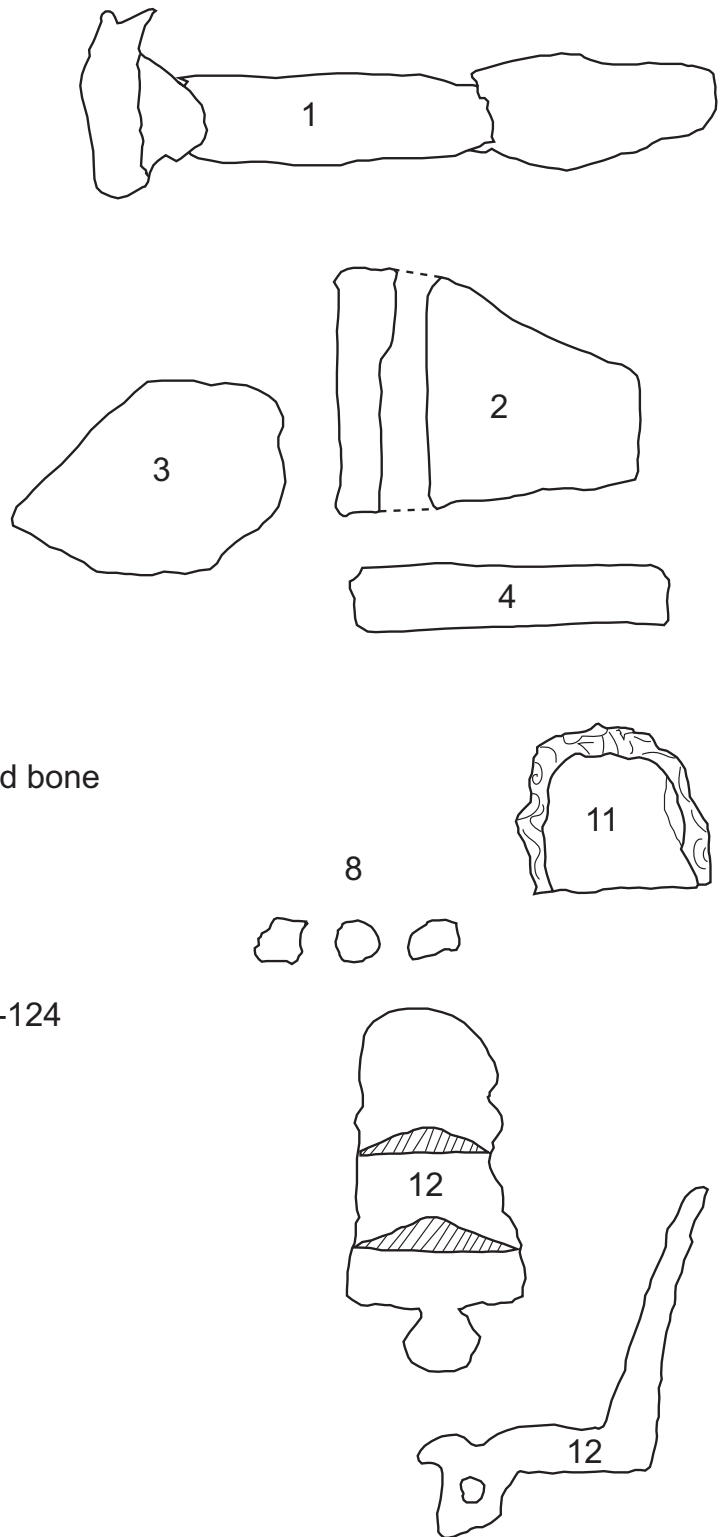
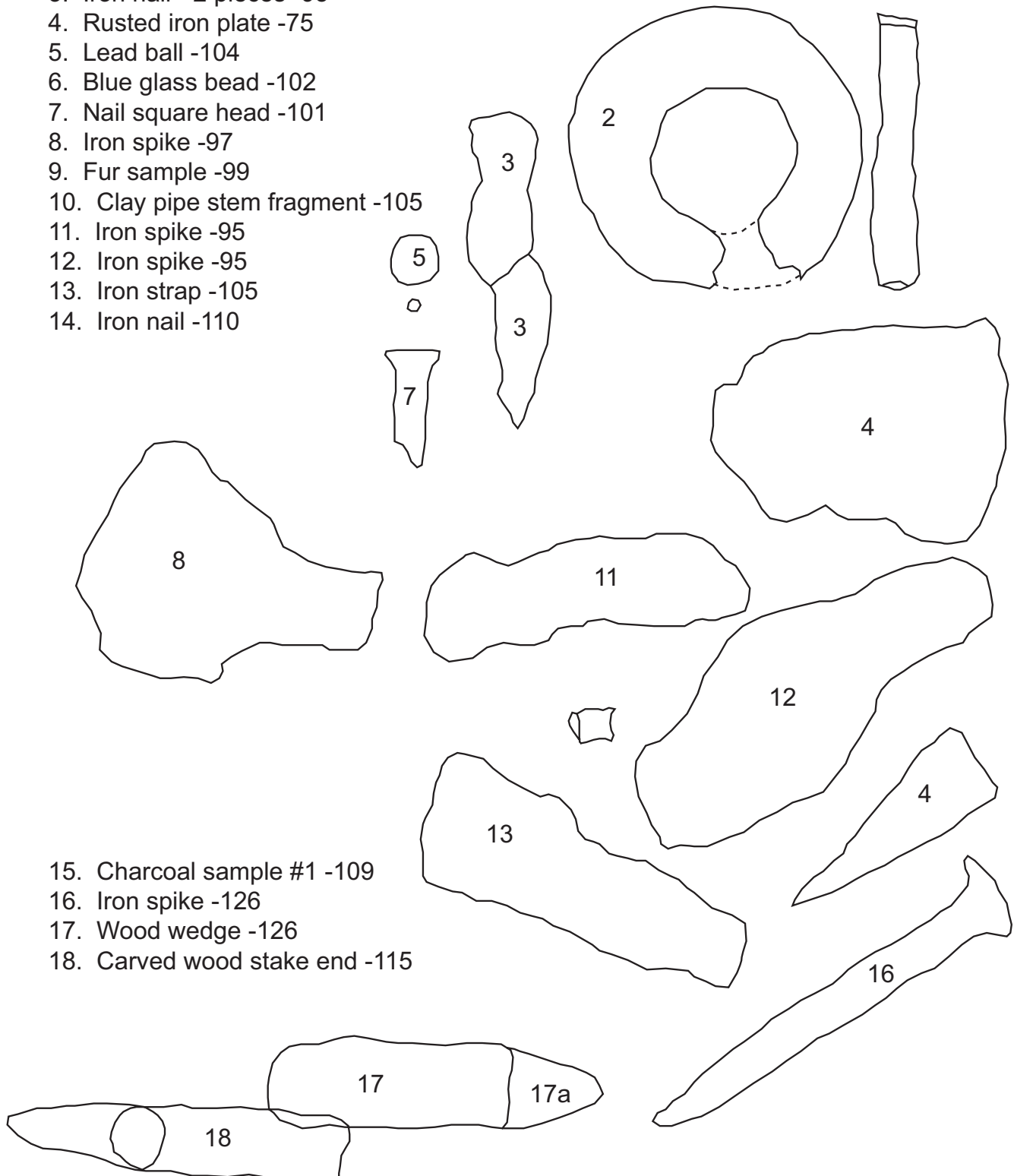


Fig. 4.46: HH-1 A3 16N 24E artifact drawings

Hare Harbor-1
 18N 22E
 1 Aug. 2007
 W. Fitzhugh

1. Goose feathers in trash pile -104
2. Iron washer or ring -105
3. Iron nail - 2 pieces -95
4. Rusted iron plate -75
5. Lead ball -104
6. Blue glass bead -102
7. Nail square head -101
8. Iron spike -97
9. Fur sample -99
10. Clay pipe stem fragment -105
11. Iron spike -95
12. Iron spike -95
13. Iron strap -105
14. Iron nail -110

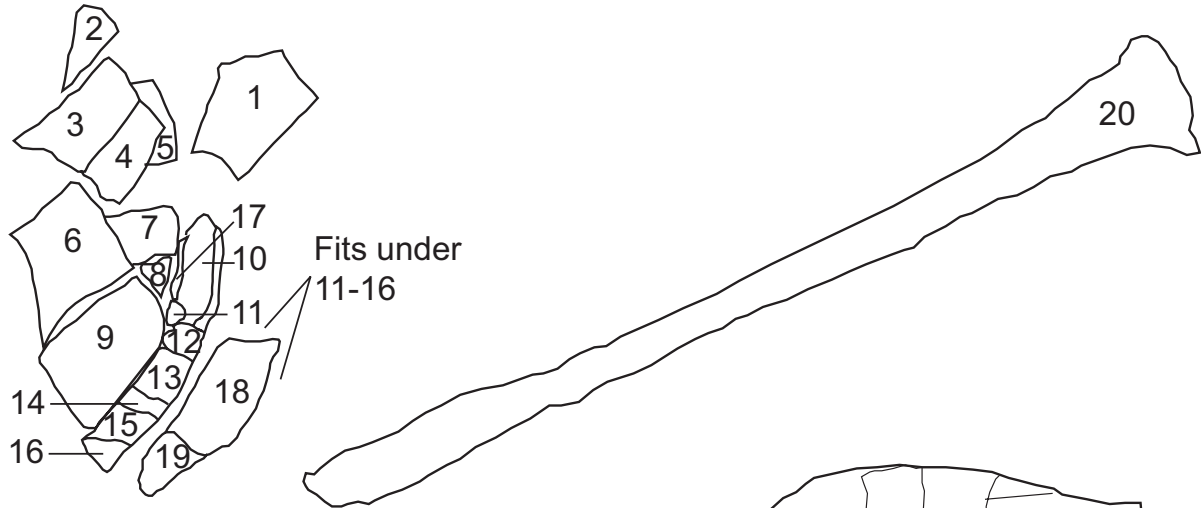


15. Charcoal sample #1 -109
16. Iron spike -126
17. Wood wedge -126
18. Carved wood stake end -115

Fig. 4.47: HH-1 A3 18N 22E artifact drawings

Hare Harbor-1
18N 22E
7 Aug. 2007

19. Yellow glazed dish broken in many pieces (see image in artifact photos) at -113 below twig/needles and on top of sterile hard peat. Glaze is actively spalling off.



20. Iron spike -110
21. Carbonized bevelled wood (cross section) -120
22. Slag-like material in basal charcoal level just above sterile peat -121

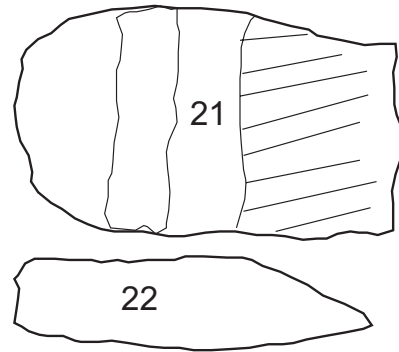
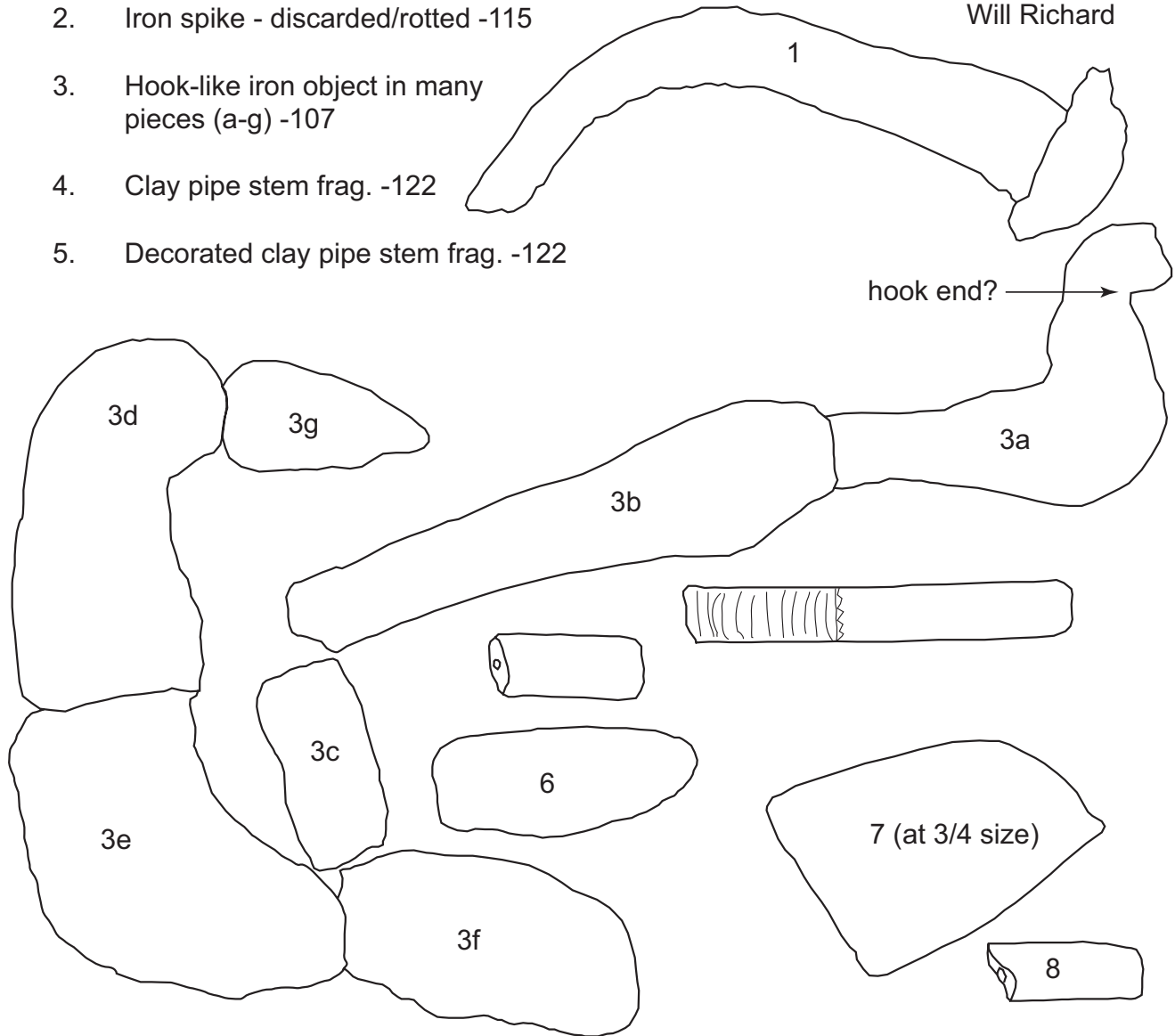


Fig. 4.48: HH-1 A3 18N 22E artifact drawings

Hare Harbor-1
18N 18E
7 Aug. 2007
Will Richard

1. Iron spike -104 upper black soil
2. Iron spike - discarded/rotted -115
3. Hook-like iron object in many pieces (a-g) -107
4. Clay pipe stem frag. -122
5. Decorated clay pipe stem frag. -122



6. Iron nail -122
7. Mica sheet -125
8. Clay pipe stem (burned) -128
9. Decorated Clay pipe stem -113
10. 3 pieces of iron spike (a-c)

Fig. 4.49: HH-1 A3 18N 18E artifact drawings

Hare Harbor-1
 18N 20E
 3 Aug. 2007

1. Iron spike -106 top of black soil
2. Iron knife blade - found with remnant wood handle which was too rotted to save -90 in upper charcoal-stained soil
3. Dorset (?) carved soapstone mini-dish or amulet fragment -111 at base of black charcoal stained soil 5cm below upper charcoal layer on top of 2 cm of peat layer which was on top of sterile sand, so it may be pre-Basque level.
4. Sheet iron fragments -102 (8-10 pieces)
5. Small iron nail -112 in charcoal stained sandy soil
6. Iron nail -108 - not collected, broke apart
7. Iron nail -106
8. Iron nail -117 chaircoal stained soil rust above brown sand
9. Clay pipe stem fragment -102 at base of charcoal level on sterile brown sand
10. In 16N 20E: wood shaft of split birch? alder? with bark attached in one place 32 cm long -138
11. In 16N 20E: Coniferous peg 9 cm long -138
12. In 16N 20E: Stick of possibly bamboo wood? 15cm -138

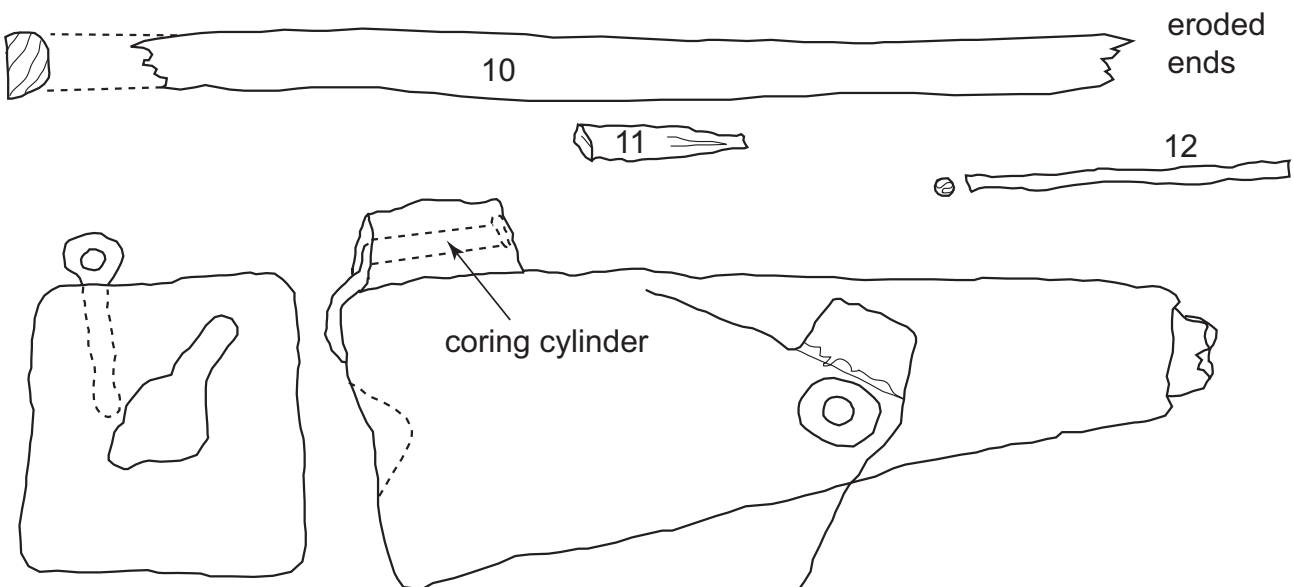
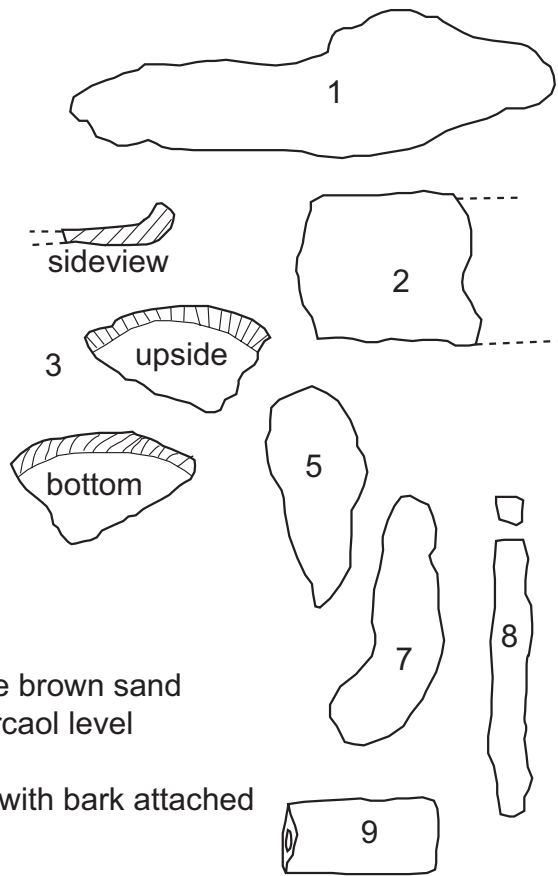


Fig. 4.50: HH-1 A3 18N 20E artifact drawings

Hare Harbor-1
18N 24E
Will Richard

1. Iron nail in charcoal deposit -105
2. Iron spike -95
3. Iron spike -89
4. Iron spike -117
5. Iron spike -108
6. Pipe stem -103

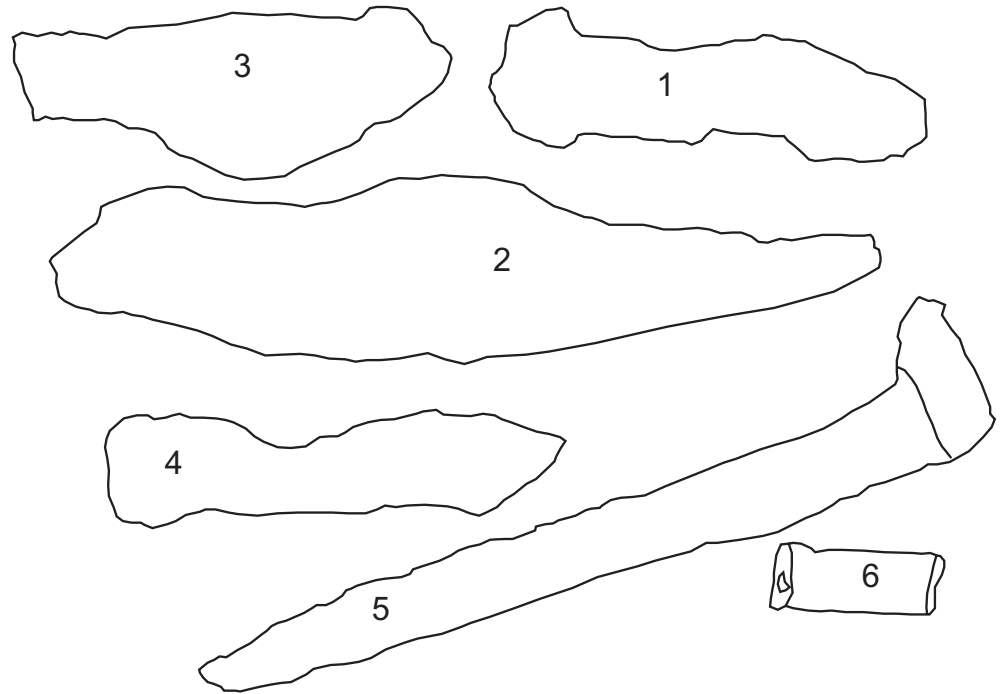


Fig. 4.51: HH-1 A3 18N 24E artifact drawings

Hare Harbor-1
16N 16E
11 Aug. 2007
Will Richard

1. Iron nail -122
2. Green/blue glass bottle fragment -188

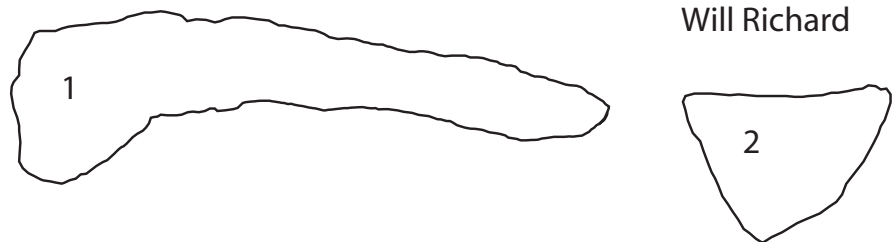


Fig. 4.52: HH-1 A3 16N 16E artifact drawings

Hare Harbor-1
14N 16E
11 Aug. 2007
Vincent Delmas

1. Iron nails -139
2. Iron fishhook -139
3. Iron fishhook -141
4. 10 iron nails -144
5. Large spike head
6. Nail fragments -144
7. Large spike head -144
8. Nail fragment (might fit #7) -144
9. Nail fragment
10. Nail head -144
11. Iron nails - 149
12. Iron nails - 149
13. Iron nails - 149
14. Iron nails - 149
15. Iron nails - 149
16. Iron nails - 149
17. Iron nails - 149
18. Iron nails - 139

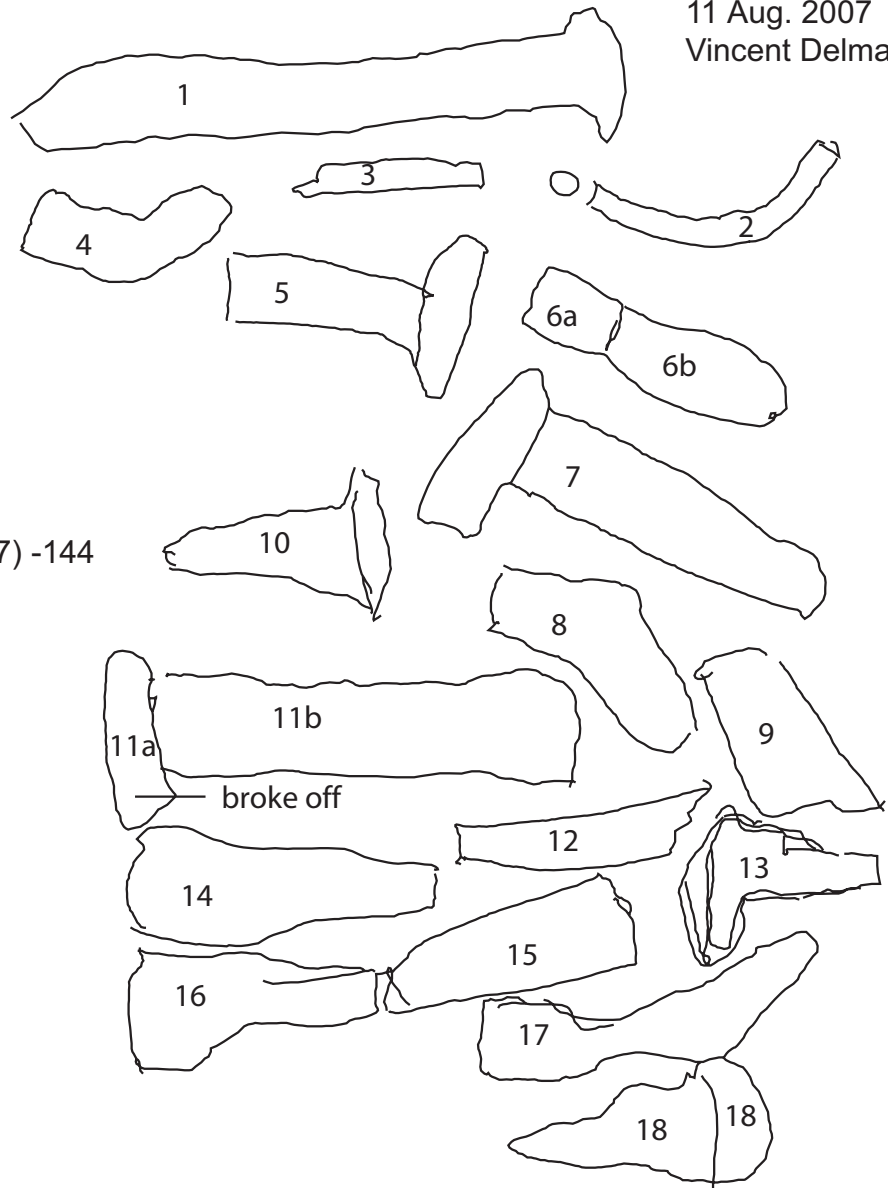


Fig. 4.53: HH-1 A3 14N 16E artifact drawings

Hare Harbor-1
12N 22E
12 Aug. 2007
C. Leece

1. Iron spike -120 upper cult deposit
2. Tan ceramic sherd of sand-tempered tan paste -128
3. Iron nail in upper cultural deposit -120
4. Whale bone -122
5. Iron nail -126
6. See attached sheet illustrating finds from 12N 22 E Feature 1
7. Iron wedge/chisel -128
8. Plug? of roof tile -132

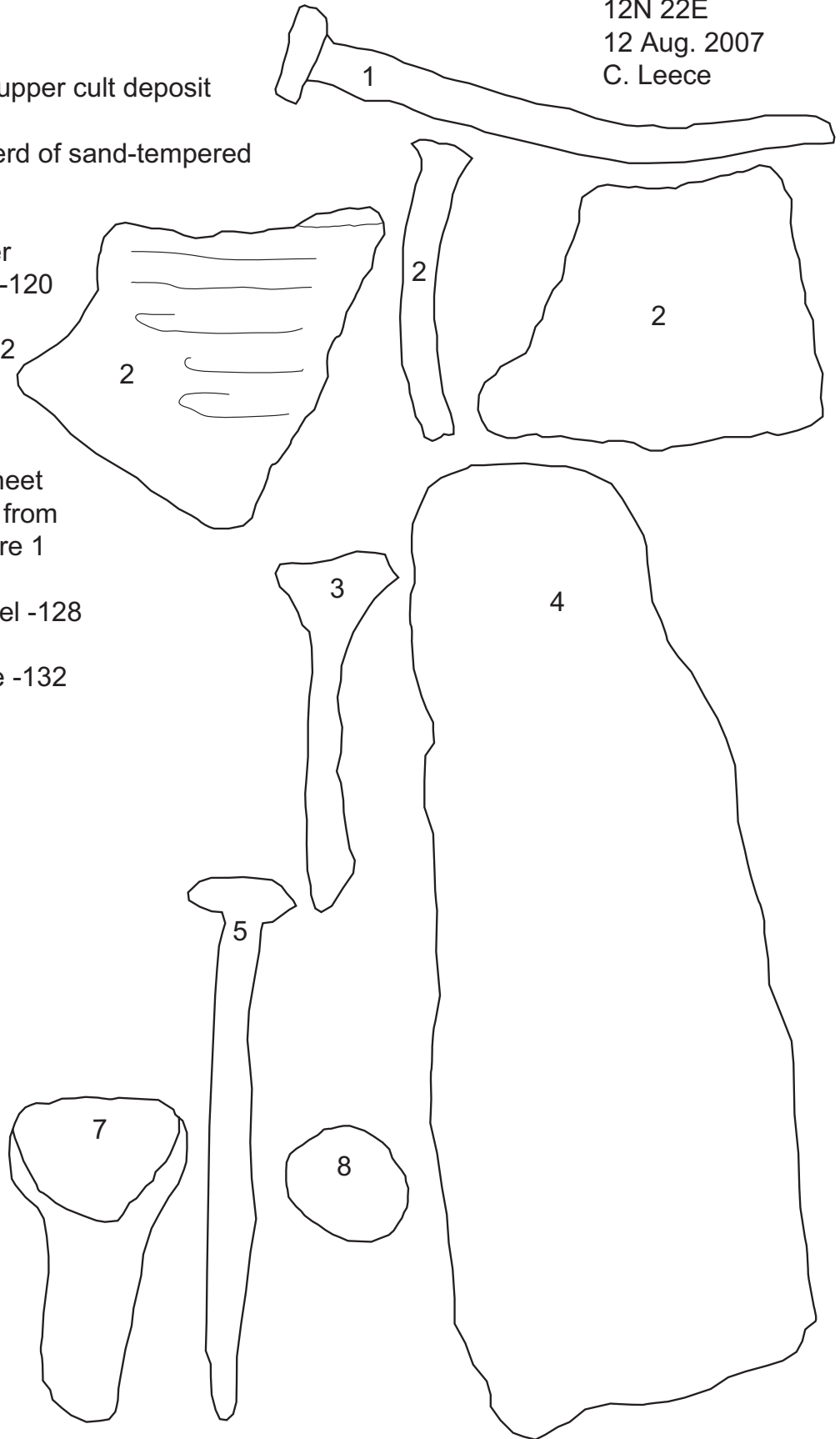


Fig. 4.54: HH-1 A3 12N 22E artifact drawings

Hare Harbor-1
12N 22E - Feature 1
12 Aug. 2007
C. Leece

Feature 1 is noted as artifacts 6A - 6G, mostly a cluster of nails and ceramics.

- 6A. Not noted - rusted iron?
- 6B. Lead with iron in the middle?
- 6C. Thin sheet of rust/charcoal?
- 6D. Iron nails rusted together or held together with another substance.
- 6E. Thin-walled earthenware
- 6F. Thin-walled earthenware pot shards
- 6G. Many iron nails and nail fragments

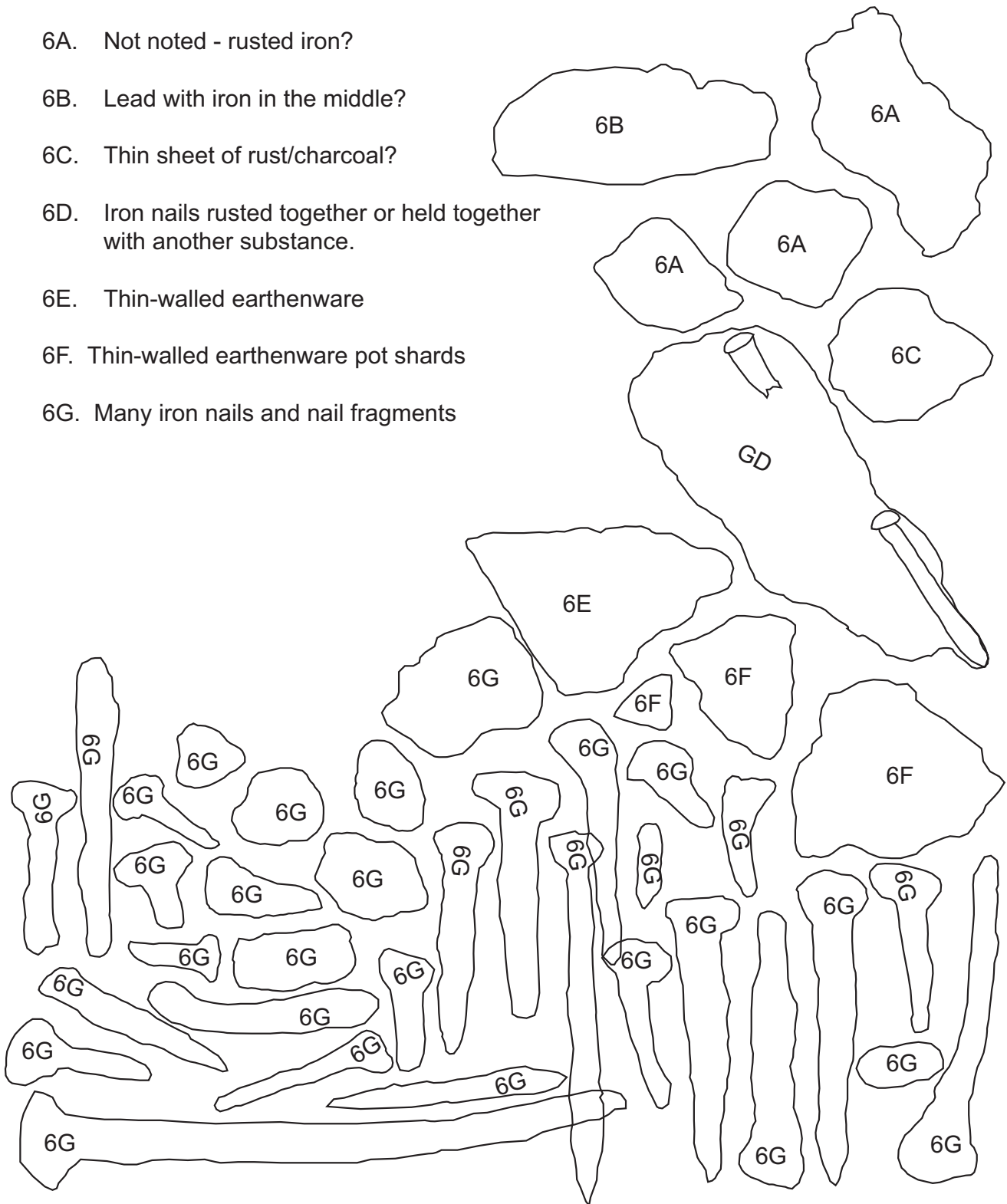


Fig. 4.55: HH-1 A3 12N 22E artifact drawings

Hare Harbor-1
12N 24E
Northern 1/2 of square
11 Aug. 2007
W. Fitzhugh

1. Iron Nail at -121
2. Wood spoon or bowl fragment -127
3. Faience fragment (blue) -128
4. Worked wood (part of 2?) -127
5. Worked wood (part of 2?) -127

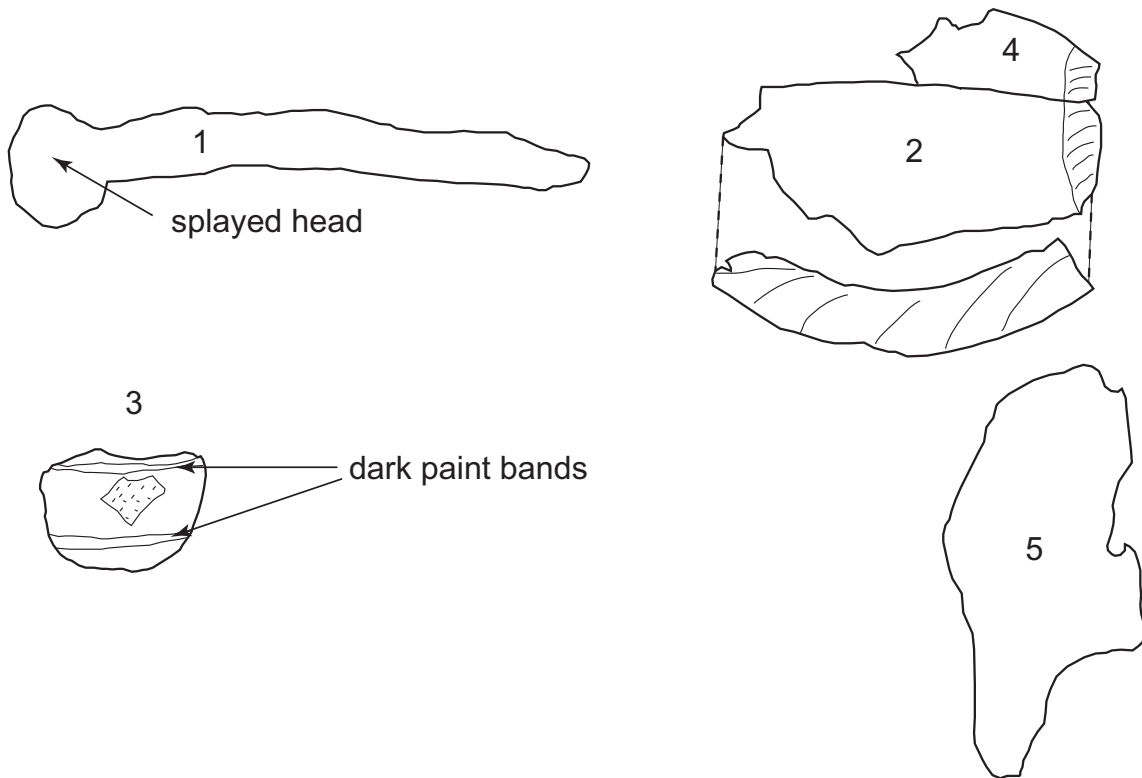


Fig. 4.56: HH-1 A3 12N 24E artifact drawings

- 1. Charred bone - not drawn
- 2. Staple
- 3. ????????
- 4. Quartz

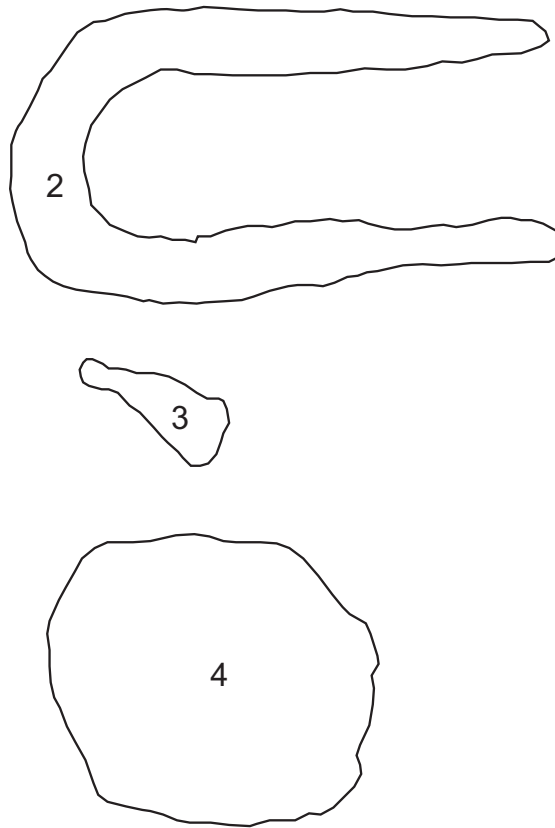


Fig. 4.57: HH-1 A3 2006 balks artifact drawings

Hare Harbor 1 Underwater Site 2007 Preliminary Report

By Erik Phaneuf

Background

The 2007 underwater archaeology project in Hare Harbor marked the third expedition to the bottom of the bay; directly beneath where Basque vessels moored in front of the land site known as EdBt-3. Before we dive into this year's results, let's quickly review the knowledge gathered during the previous expeditions. Mapping the numerous ballast mounds from the 2005 expedition enlightened our understanding of the underwater site, allowing us to tentatively propose the presence of as many as eight vessels moored on the site at one time. The size and the quantity of the stone in the ballast mounds also seem to indicate numerous unloadings, therefore suggesting multiple seasonal occupations. Our first brief investigation in 2005 only gave us enough insight to prepare for a more thorough inspection of the site during the 2006 expedition.

In 2006, we doubled our underwater team when Christina Leece and William Fitzhugh of the Smithsonian Institute added their fins to the fray and helped extend the site baseline and site grid to cover the entire underwater area of the site and refined the underwater site plan. Frédéric Simard from the University of Montreal, returning for another season, continued his underwater filming as well as mapping and excavating. We all participated in the excavation of seven small test pits about one square meter in size, aligned on a north-south axis that gave us a limited glimpse of what lies under the sandy bottom, more or less transecting the centre on the site. Using a homemade underwater dredge loaned by Wilson Evans of Harrington Harbor, the excavated test-pits revealed not only a visible and changing stratigraphy from the 3-meter to the 16-meter depth line, unusual for an underwater site, but also provided an artifact collection different from and complementary to the one collected on the land site.

The stratigraphy observed in TP-1 excavated in 16 meters of water, inside the roof tile fragment concentration area, showed little accumulation of sediment over the cultural layers. At this point, some wood chips were present but were not yet perceived as a visible layer; it became so in TP-3. In TP-4, in about 11 meters of water, we observed the most complex and complete stratigraphy of the site. We excavated over a meter deep, finding 25 centimeters of surface sand, then a layer of fish bones, and finally a wood chip stratum and a basal peaty deposit, all resting on a continuous stratum of natural, sterile sand. Throughout the multiple test-pits we uncovered numerous barrel hoops and wedges, a few fragments of plain earthenware ceramics, bird and mammal bones, as well as some nutshell fragments. Added to this collection, the discovery of a well-preserved half wooden plate in TP-4 gave insight to the site's potential richness.

While searching Basque underwater sites, that could be compared to Hare Harbor, Labrador's Red Bay was the obvious choice. During this multi-year project, Parks Canada archaeologists excavated a trench 14 meters long from Saddle Island down to the wreck site of the *San Juan*. This trench provided a direct connection between the underwater stratigraphy and the terrestrial site on Saddle Island and revealed the presence of stratified underwater deposits. The similarities between our stratigraphy at Hare Harbor and that observed in Red Bay is astonishing. Parks Canada observed a tripartite stratigraphy identical to that we found at Hare Harbor. The natural accumulation of sand found in the deepest part of the stratigraphy was interpreted as a pre-

Basque period. The Basque period refers to all the culturally significant layers associated with the occupation of the site. The build-up of organic materials, wood chips, peat as well as cod and whalebones is strikingly similar in both sites. Finally, the post-Basque period refers to the abandonment of the site. From what we know so far we can affirm that the Basques of Petit Mécatina island came to this site to exploit the fisheries of the Gulf of St. Lawrence, as did the Basques at Red Bay about one hundred years earlier. Also, in Hare Harbor, from only a few test-pits, the archaeological record is rich enough to provide valuable information to refine our understanding of onshore activities. These findings convinced us to return in 2007 with dredging equipment and more students from the University of Montreal. As expected, the always-too-short expedition once again provided a rich array of significant archaeological data enhancing our understanding of Basque activities in Hare Harbor.

The 2007 underwater excavation

Methodology and first dives

August 3, 2007, marked the beginning of a new expedition to the bottom of the bay as well as continued land research. For the next ten days, the team composed of Frédéric Simard, returning for his third season, accompanied by Marilyn Girard-Rheault and Vincent Delmas, newly-joined colleagues from the University of Montreal, Christina Leece and William Fitzhugh from the Smithsonian Institution, and Eric Phaneuf, completed 85 dives for a total of 72 hours of bottom time. We mustn't forget to thank Captain Perry Colbourne who left his daily duties on the *Pitsiulak* to pilot the diving skiff, manage the dredges, and provide a reassuring presence on the surface, rain or shine.

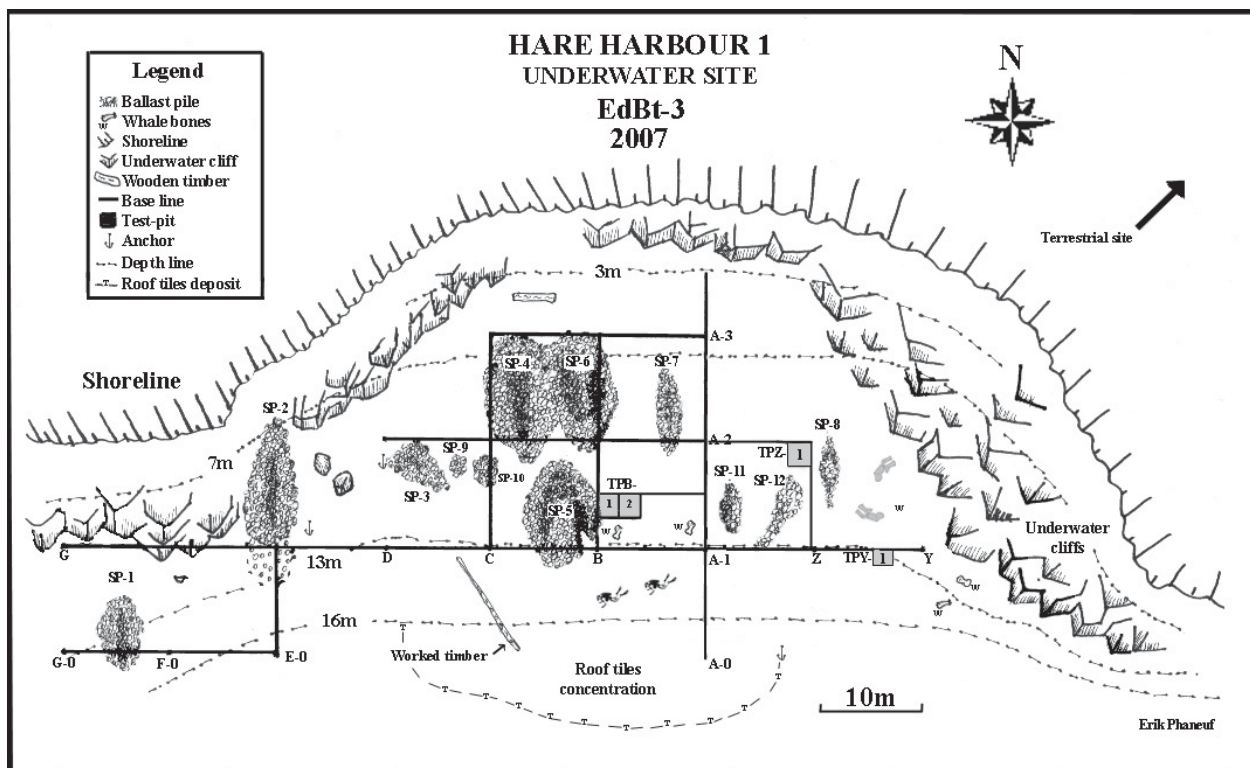


Fig. 4.58: Site plan with 2007 excavation units

This year's project had the goal of extending our knowledge of the cultural deposits in different areas of the site. Excavations were carried out east of the north-south test-pit line where whale bones appeared to be more abundant and alongside Stone Pile SP-5 at a depth where the cultural deposit contained the most complex stratigraphy in 2006.

After using a useful but amateur dredging apparatus in the summer of 2006, the excavation needed better equipment for the 2007 season. To do so, the University of Montreal provided two Honda GX 160 WB30X, 5.5 horsepower water pumps along with 40 metres of 3-inch diameter hose with enough plastic tubing to build two powerful dredges with an opening diameter of 6 inches. Even at a depth of 16 meters, these pumps provided more than sufficient vacuum capacity. In fact, at around 10 meters depth, the motors had to be throttled back to in order to maintain better control of the sucking action on the bottom.

Now well-equipped, the team excavated 4 test pits situated in the eastern half of the site as can be seen on the plan in Figure 1. Except TPY-1, which was a bit smaller, each square test-pit measured 2 meters across. The first square TPY-1 was excavated alongside the base-line between the Y and Z point at a depth of 13 meters. This area was less than 10 meters from the underwater cliff and was thought to be an area rich in whale bones. The second test-pit TPZ-1 was excavated at the northeast corner of the Z grid square near the 10-meter depth line. Finally, the last two test-pits were excavated south of the middle line of the B1 grid square next to the western limit, directly against Stone Pile 5. TPB-1 and TPB-2 were excavated at the depth known to possess the best stratigraphic remains as well as being directly associated with a ballast mound. All four test-pits revealed important information, but not always quite as expected.

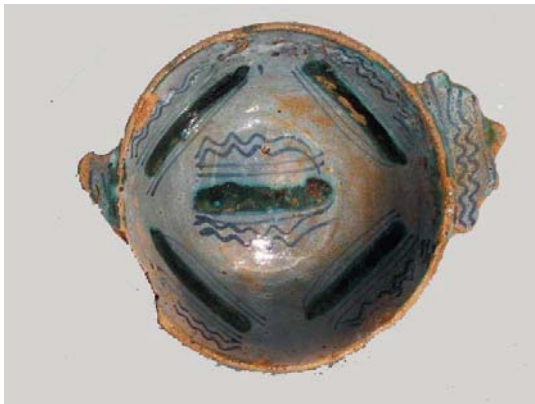


Fig. 4.59: Top view of the porringer.

The first dive of the season had the objective of verifying the state of our grid lines and establishing square limits with masonry line tied to iron re-bar stakes. The initial observation made it clear that little current and/or disturbance affected the site. Aside from occasional anchoring by lobstermen and floating algae covering up the lines, the bottom had remained quite undisturbed. The 2006 test pits were still visible and appeared as they had been left a year earlier. Most of the identifying labels, cut from butter and yoghurt containers and inscribed with indelible markers, were still in place; the same was true for the Stone Pile tags. So calm is the bottom that even

a broken pen, left at the bottom after a fit of diver's lead-breaking rage, was still lying next to the pit where it was discarded. Most of the wood chips and shavings from the excavated test pits still littered the bottom where the dredge had blown them away the year before. This stillness would explain why the site presents such well-defined stratigraphy and why, at the bottom of the steep inclination of the site, at the 16-metre depth, the cultural layer has almost no sediment covering at all.

This stillness also explains why so many roof tiles were found lying directly on the bottom and why, during inspection of the westerly end of the base line, Frédéric found lying directly at the bottom an almost complete porringer made of beautifully decorated faïence ceramic (Fig. 4.61).

The porringer was found bottom-up and slightly buried under sediments in between Stone Piles 1 and 2, at approximately 13 meters depth. With only one handle broken off, it seems unusual to discard such a nice piece that could have been easily repaired or transformed into a one-handle porringer. The decorations visible on the inside and on the handle consisted of wavy and singular blue lines done on either side of a thick green line. The same decoration was applied five times at the bottom and surrounding the inside of the bowl. The top part of the handle showed the same wavy blue line with only green dots at the extremities of the stylized handle. The backside of the handle showed no decoration but was grooved to create the leaf-shaped handle. Basque archaeologist Ana-Maria Benito has indicated to us that the porringer comes from Catalonia.



Fig. 4.60: Back view of the porringer handle

After the first inspection dive, the average day of underwater excavation consisted of one dive in the morning and one in the afternoon, each about one hour long. The average dive time was greatly influenced by the depth and the water temperature that varied from 4 to 15 Celsius during the two-week period. Two teams of two to three divers worked at the same time. Frederic excavated as well as produced the underwater filming.

The recording of stratigraphic data of each square was drawn the same way as in land archaeology, using lead mechanical pencils and *Mylar* paper on a plastic clipboard while using a base line made with a carpenter's level and masonry line. After each dive some of the observations and the drawings written underwater would be transferred to a field notebook and onto graph paper.

Squares TPB-1 and TPB-2

These two 2x2 meter units were excavated side-by-side, the first square unit being excavated directly against the east side of ballast mound SP-5 about mid-way along its length. TPB-2 was excavated due east of TPB-1. The northern limit of the two test pits was established by dividing the B-1 square in half and installing a line on an east-west axis 5 meters north of the baseline.

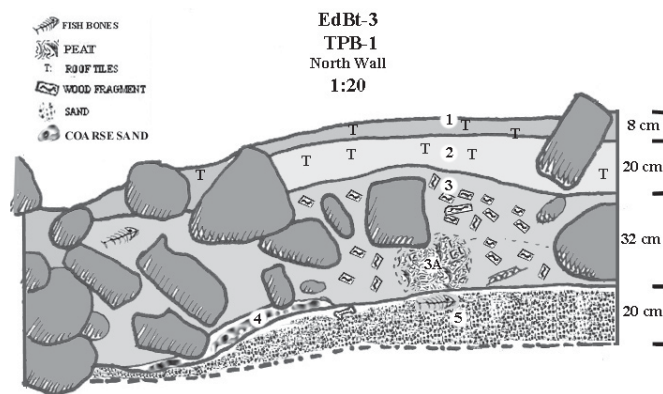


Fig. 4.61: Stratigraphy of north wall of TPB-1

This location allowed us to examine the relationship between the stone pile and the site stratigraphy, as well as gain a better perspective on the cultural deposit beside the ballast mound in a central position of the underwater site.

Layer 1: The first layer covering the extent of the two units was composed of a relatively loose and coarse yellowish sandy deposit, rich in dead and living shell and occasionally disturbed by a visiting plaice fish or flounder looking

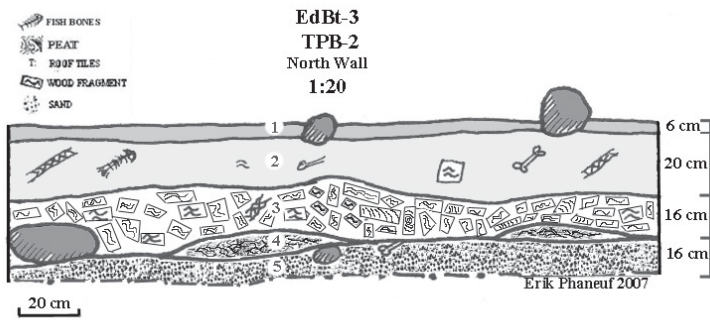


Fig. 4.62: Stratigraphy of north wall of TPB-2

10 fragments by square meter, far less numerous than the high concentration of tile fragments observed below the 16-metre depth line. Aside from the tile fragments, no artifacts were found.

Layer 2: The second stratum had a loose matrix of grey clayish and silt deposit mixture, sticky to the touch, with rare inclusions of small rounded pebbles. Some of the pebbles were of red schist. This second layer was observed within the ballast stones at the limit of the mound. In fact, the intersection between the mound and the stratigraphy was mostly composed of this layer, which formed the western limit of the stratigraphy as observed on the northern wall of the TPB-1 square. With a thickness reaching more than 50 centimetres next to the ballast mound, its thickness diminished further away from the mound, reaching an average of 10 to 15 centimetres in TPB-2. This layer also contained occasional limestone and granite ballast stones around 30 centimeters in diameter.

This layer revealed many artifacts and ecofacts. The ever-present roof tiles were observed in both units but were rarer in occurrence and were mostly found at the layer's lower interface; being heavier, they possibly sank through this loose layer. This observation is also valid for most of the ceramic and the glass artifacts uncovered from this layer. We noticed the presence of fish bones in small concentrations. These small agglomerations of bones were principally observed in close proximity to SP-5. Further away from the ballast mound, fewer fish bones seem to be present. Some of the fish bones excavated were not from cod fish, and it is possible that the fish



Fig. 4.63: Ceramic pot fragments

for a free meal. Inclusions of gravel and some stones less than 10 centimeters in diameter were also noted in the matrix. This layer had an average thickness of about 5 centimeters but sometimes was as thick as 8 centimeters. Some roof tiles were present in fragments ranging in size from a few centimeters to pieces about half the size of a tile. The number and concentration was less than

assemblage from this part of the site is more closely associated with daily living and life aboard ship than to the economic production of the fisheries. The presence of many bird bones, some nutshell fragments, and halves of eggshells with some storage ceramics seems to corroborate the interpretation of an assemblage related to daily life. Also we must keep in mind that we are probably directly under one of the vessels and knowing that the current is almost nil, everything thrown overboard would sink pretty much straight down under the hull of the boat. In this layer we also found numerous rope fragments, barrel hoop parts, complete wedges as well as one gun flint.

This «clayey» deposit filled the inside of all pots found in this layer. The decorated pot found in the southeast corner of TPB-1 and the southwest corner of



TPB-2 was resting directly on top of layer 3. More of the same pot fragments were found within the sediments observed inside the two halves. It exhibited a stamp seal imprinted on the top of each of the two strap handles, as well as three longitudinal ceramic stamps applied to the body and decorated with diagonal cross-hatching.

Fig. 4.64: Decoration and stamp found on one ceramic pot



The rim of another glazed pot was found inside the north wall of TPB-2 while a third rim of coarse ceramic was found between the two test pits. While the decorated pot is almost complete, fragments of rim, lip, and double-grooved handles were present on the other pots. They all seem to be of the same storage type, but all had different paste and fabric quality. The rest of this ceramic deposit is probably buried further north of the two squares. Also found in TPB-2 were two fragments of a small drinking glass.

Fig. 4.65: Two glass fragments



The two squares also contained many rope fragments found within the matrix and sometimes resting directly over Layer 4 when Layer 3 was not observed. The ropes were found in sections sometimes more than one metre long. Three different diameters of rope sections were found and one fragment had a simple knot still present. While excavating Layer 2 it was observed that at many places Layer 3 was not present and that Layer 2 rested directly upon Layer 4. Some bird and fish bones were also found resting directly over Layer 4 and sometimes slightly buried within the matrix. This

Fig. 4.66: Different rope sections

disturbance in the stratigraphy may have resulted from scraping and gouging action of modern anchors observed here and there over the area of the dig.

It is tantalising to speculate about the formation processes of the clayish matrix of this layer. If we consider an exploitation of cod fish and whale fat, could this layer represent the remnants of organic materials like fish entrails left over from years of processing?

Layer 3: Present almost everywhere in the two squares, the third layer is a matrix of organic material composed of wood chips, splinters and shavings most probably associated with adze-working since most of the wood fragments had visible tool marks. Some pieces were more than 30 centimeters long, other were simple shavings a few centimeters in diameter and varying in width and thickness from a few millimeters to more than 50 centimeters. The majority of the wood residue was from the external part of coniferous trees with some of the bark still present. It seems plausible to associate this layer with a timber squaring operation, probably related to building shore facilities. The matrix also contained cut branches as well as sprigs and twigs. We also observed peat lumps sparsely distributed within the whole area. One bark fragment was cut into an elongated oval shape resembling the inside lining of a shoe.



Fig. 4.67: Barrel hoop wedges

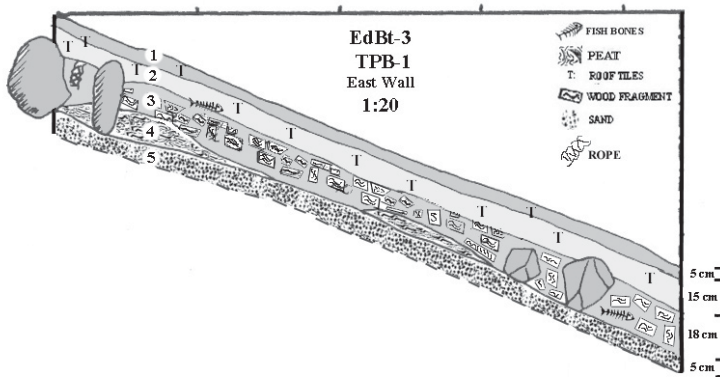


Fig. 4.68: Stratigraphy of the east wall of TPB-1

The wood chips and fragments seem to be from different coniferous species; some black spruce cones were found within this organic deposit. This third layer was found covering almost the entire surface of the square but was not extant directly against the ballast mound. Also, its thickness varied greatly within the square area from nothing at places up to 40 centimeters in others. It was, in some places, made solely of loose fine organic deposit, often found mixed with Layer 2. Some concentrations of more loose material like sawdust, leaves, small branches and roots were observed here and there within the overall operation. While excavating this layer, it was difficult to understand how these concentrations had formed; it could again be from the disturbing action of anchor gouging.

One interesting artefact was an oak plank with many circular cuts. This plank seems to be a core blank used to make a wooden stopper or some other circular wood object, but its use will

probably never be known with certainty. Artifacts from this layer mostly originated from barrel hoop fragments and some hoop wedges. The hoops presented two styles of manufacture. Some were simply spliced in two and others, also spliced in two, had chamfered edges on the barrel side of the hoop. Some hoop pieces were notched to hook their ends together, similar to a fragment found still attached in 2006. As was the case with the organic layer excavated in 2006, we found some walnut and hazelnut shell fragments as well as marine bird and mammal bones. Sadly, no wooden bowl was found this year!

Layer 4: From the north wall of the TPB-1, this layer has a matrix composed of coarse sand and small gravel. This particular stratum may offer a testimony of anchor disturbance in the stratigraphy. The TPB-2 layer 4 represents mostly peat lumps present throughout the surface of the square.

Layer 5: This layer represents the pre-occupation layer, the sterile bottom and non-cultural layer composed of compact coarse blue-grey sand with no visible inclusions. This layer is present in every test-pit from 2006 and 2007. We do find some artifacts in its upper level, probably mixed from the effect of anchor gouging in the 19th century when seal hunters regularly visited the site, as lobstermen continue to do today. As already mentioned, in some places Layer 2 rested directly on Layer 4, thus explaining the presence of rope fragments found sandwiched directly between the sandy Layer 4 and a ballast stone.

Also found in the first centimeters of Layer 5 were some fish and bird bones and a fragment of a drinking glass. Finally, some limestone ballast also rested directly on this layer.



Fig. 4.69: Wooden stopper blank

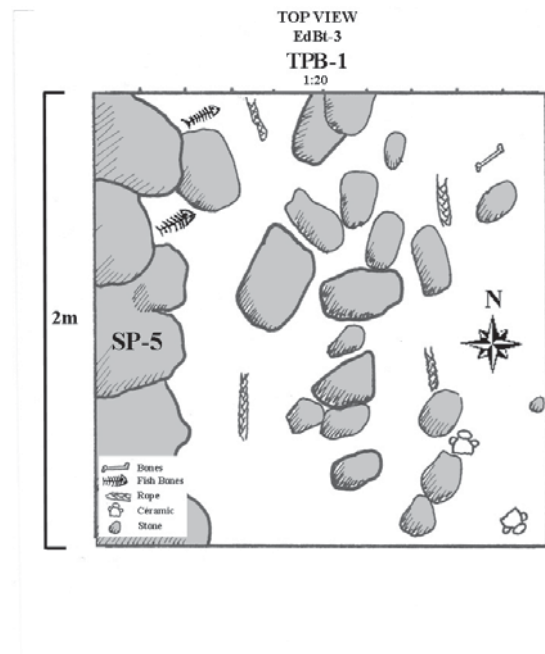


Fig. 4.70: Top plan view of TPB-1

Ballast stones

Ballast stones were present in every layer of the stratigraphy. Mostly made of limestone and mostly less than 1 meter in diameter, the ballast stones were predominantly present in Layer 2, often resting directly on Layer 3. Some white quartzites were observed, along with rounded and decomposing limestone. Calcium-eating mussels had pitted the surface. Obviously more numerous next to Ballast Mound SP-5, the distribution of the presumed ballast stone seems to be fairly regular in the two squares. Samples of the limestone are being studied to gain information about its geographical origin. Since the majority of the ballast stone piles are comprised of the same stones, the provenance

would give us vital information to their European port of origin and help determine a French or Spanish origin for the voyages.

Square TPZ-1

This 2x2-meter unit was excavated on the northeastern corner of Z square, 10 meters north of the baseline. Its position gave us an overview of the easterly part of the site at the 10-meter depth, at what seems to be the central alignment of the ballast piles. It was situated close to SP-8 but not directly against it, and many ballast stones were present throughout the test-pit. The main feature of this test-pit was the presence of whalebones representing an almost complete front limb, along with some tail vertebrae. The principal bones of the flipper were found resting in anatomical position, with the ulna and the radius side-by-side in front on the humerus. Some phalanges

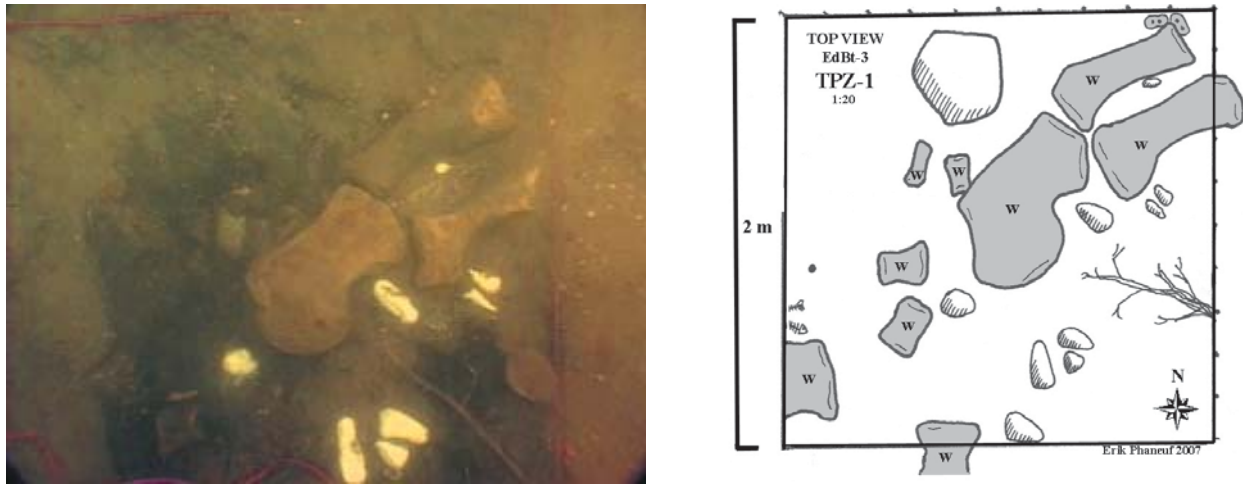


Fig. 4.71: Top plan view of TPZ-1 during excavation and when mapped.

and metacarpals, as well as caudal vertebrae, were found dispersed within the excavated area. The fact that the three main flipper bones were found in anatomical position suggests that they were still attached together when discarded. Butchering marks suggest that the sawing was done lengthwise, slicing over and under the bones of the flipper. This is true for the majority of the whale front limb bones found on site so far.

Not expecting to find such complete whale bones in this part of the site, Frédéric poked around the pit with his knife and discovered many clusters of bones all representing front limbs. In a quick survey, he found what seemed to be at least three flippers situated on the easterly part of the site. Next year's expedition should extend the grid to the north and the east in order to better survey and plot more whale bones than previously expected.

The stratigraphy of the north wall of this unit resembled that observed in test-pits TPB-1 and TPB-2.

Layer 1: This first layer, light brown in color, was made of coarse loose sand and silt. No artifacts were found, aside from the ever-present roof tiles. Found over the entire surface of the square, the first layer's thickness varied between 2 to 5 centimeters.

Layer 2: Described as a greyish clay and silt deposit, Layer 2 was more compact than the first layer. Some ceramic fragments were found, but mostly originated from roof tiles, one almost

**EdBt-3
TPZ-1
west wall**

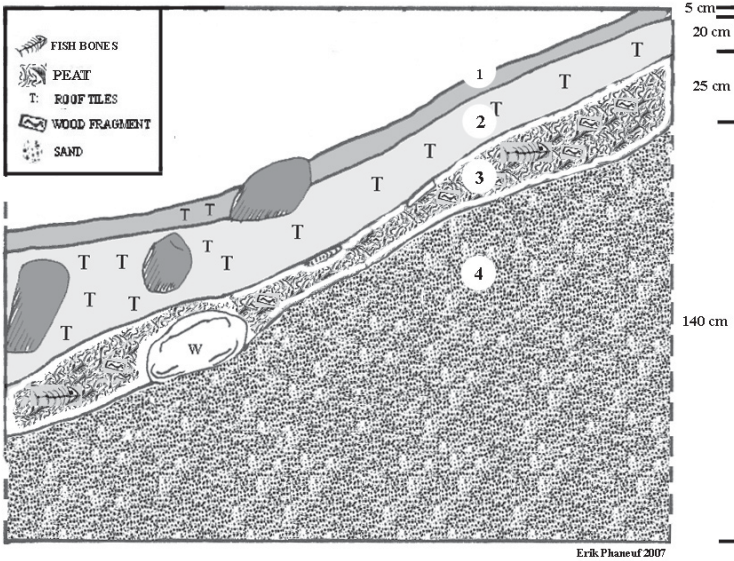


Fig. 4.72: Stratigraphy of the west wall of unit TPZ-1

found on Layer 4 usually rested on a thin organic layer. A wooden stopper, fish bones and charred fragments were found in the first centimeters of this 8-17 centimeter thick organic stratum.

Layer 4: This was the natural sandy bottom upon which rested the Basque occupation deposits.

Square TPY-1

This first unit was excavated at the most easterly point of the site along the baseline, at about 15 meters in depth. This part of the site was thought to contain, buried under the sediment, whale bones not elsewhere observed in the quantities considered to correspond with the exploitation of this resource. However, Layer 3 of the stratigraphy revealed the exploitation of cod, as previously observed in the 2006 test-pits. This reaffirmed the exploitation of cod as possibly the primary economic reason for the Mecatina site.

Layer 1: This surface deposit was made of loose sandy silt light brown in color and was excavated over the entire surface of the square with a thickness rarely exceeding 5 centimeters. Some possible ballast stones 15 to 30 centimeters in diameter were found throughout this layer as well as in Layer 2.

Layer 2: This layer is described as a natural deposit of clayish silt, greyish in color and more compact than the first layer. Inclusions of dead shells and ballast stones were observed. The average thickness of this layer varied from 8 to 10 centimeters.

complete. Many shell fragments and some gravel were observed within this clayish matrix. The whale bones and most of the ballast stones were found in this layer but were observed resting directly over a compressed Layer 3. The average thickness of this layer varied from 6 to more than 20 centimeters.

Layer 3: This layer was composed of a mixture of wood chips and peat clumps, fairly compact, dark brown in color and present over most of the surface of the square. Most of the whale bones, as well as most of the ballast stone, rested directly on the top of this layer. The whale bones



Fig. 4.73: Wooden stopper

Layer 3: This layer had a homogeneous matrix composed of fish bones found over the entire surface of the square, in thickness averaging from 10 to 15 centimeters. It created a compact layer caused by the interlacing of the many bones present. The assemblage contained mostly skull bones, large ribs and some backbones. As established by Sophia Perdikaris from the sample of fish bone collected in 2006 from Layer 2 of TP-4, this layer represents the remnants of an important exploitation of medium-sized cod. Perdikaris came to this conclusion by determining that the majority of the cod bones came from average-sized individuals and because the butchering patterns showed similarities to Icelandic material studied from known exploitation sites. Also, the presence of the urohyal bone, a bone associated with the tongue, a known delicacy usually removed in small exploitation processing, was still present in our collection, thus presumably indicating a large-scale commercial operation.

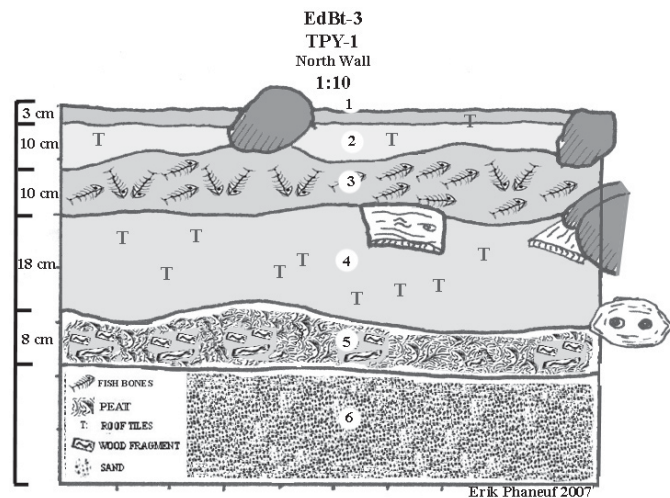


Fig. 4.74: Stratigraphy of north wall of TPY-1

Layer 4: This slightly compact silt deposit had very few inclusions beside a few tile fragments with one almost complete, many wild shell fragments and the rare presence of wood chips. The lower part of this 5-10 centimeter thick layer concealed a few caudal vertebrae of a small whale.

Layer 5: This layer of wood chip fragments mixed with peat lumps was present with an average of 10 centimeters over the entire surface of the square. The bulk of the matrix seems to have originated from sawdust.

Layer 6: This was the natural sandy bottom upon which rested the Basque occupation deposits.

Whalebone Distribution

At least three humerus bones, one radius, many phalanges and caudal vertebrae were found evenly distributed on the eastern part of the site. Some were uncovered by the current at the exhaust end of the dredges; others were simply lying on the bottom and noticed for the first time this year. Using his knife to probe the bottom around TPZ-1, Frédéric discovered three front limbs stilled assembled in anatomical position. Counting the assembled front limbs from the TPZ-1 unit and the three others found by probing, the individual bones and last year's collection, we arrive at a minimum number of probably 6 front



Fig. 4.75: Fish bones in Layer 3 with whale vertebrae

limbs and about a dozen caudal back bones. The majority of the limb bones occurred in different areas of the site. With these new samples we hope to enhance the DNA research done from bones collected in 2006. The results obtained by Brenda MacLeod and her colleagues indicate that our collection comes from more than one individual of the humpback and bowhead whale species. This reaffirms the hypothesis of a minor whaling operation done on site, either together with or prior to the cod fishery. One question remains as to where the whales were butchered. Some local residents told us that they saw whale bones resting in the bottom at the inner end of Hare Harbor. A quick look from the surface in 2007 seems to corroborate their affirmation but no dives could be done. An exploration of the bottom here will be conducted in 2008 to corroborate this observation and perhaps uncover the missing skeletons of exploited whales. It should be noted that exactly this type of refuse removal was practiced in Red bay, where the bulky cranial and post-cranial whale parts were dumped across the bay from the processing sites so that they would not foul anchors and shoal the harbour bottom.



We hope that the summer of 2008 will bring new information to refine the relative dating of the site and better understand the origin and activities of its occupants. Also, we hope to gain a better view of the stratigraphic data from the eastern part of the site. Much is left to be done in exploring submerged archaeological resources in this region of the Quebec Lower North Shore, where so little is known of European exploitation.

Fig. 4.76: Erik Phaneuf and Marilyn Girard-Rheault, two members of the Pitsiulak dive team, topside and posing for the camera.

HH-1 Artifact Photos - Underwater Site

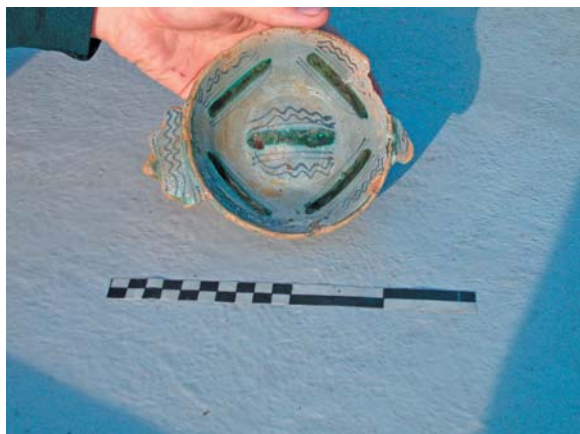


Fig. 4.77: Faience bowl with flange handle from surface of sediment

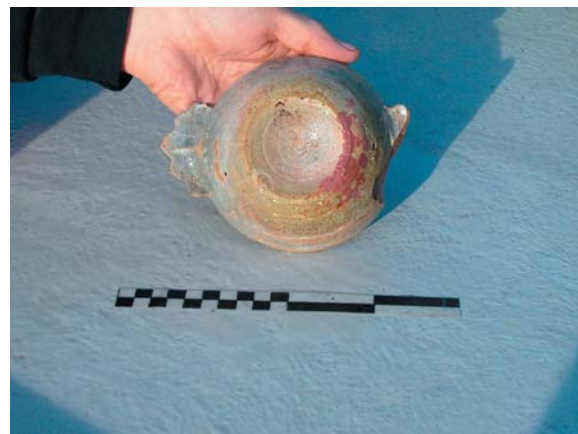


Fig. 4.78: Bottom of bowl in 4.77



Fig. 4.79: Earthenware storage vessel



Fig. 4.80: Storage vessel with decorative frieze panel



Fig. 4.81: Storage vessel

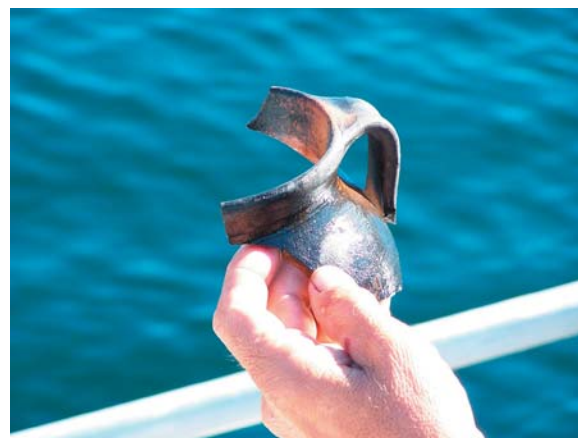


Fig. 4.82: Earthenware vessel



Fig. 4.83: Earthenware vessel



Fig. 4.84: Notched handle of earthenware vessel



Fig. 4.85: Earthenware vessel



Fig. 4.86: Limestone ballast

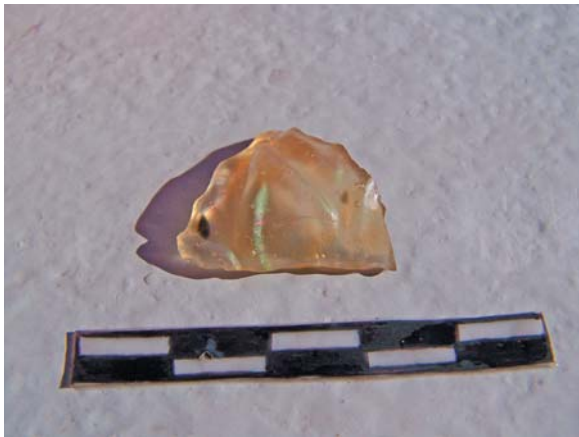


Fig. 4.87: Molded glass fragment



Fig. 4.88: Earthenware fragment showing glazing detail on rim



Fig. 4.89: Wood barrel bung/plug



Fig. 4.90: knotted rope



Fig. 4.91: Salvaged rope



Fig. 4.92: Rope varieties

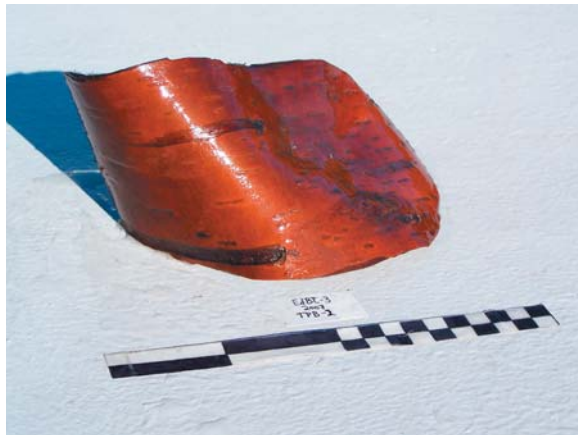


Fig. 4.93: Cut fragment of birch bark



Fig. 4.94: European flint finds



Fig. 4.95: Limestone nodules



Fig. 4.96: Whale bone phalanges



Fig. 4.97 Whale bone phalanges



Fig. 4.98: Bones recovered from the underwater site



Fig. 4.99: Fish bones



Fig. 4.100: Whale phalange



Fig. 4.101: Bird skull - possibly a loon



Fig. 4.102: Whale vertebra



Fig. 4.103 Bird remains

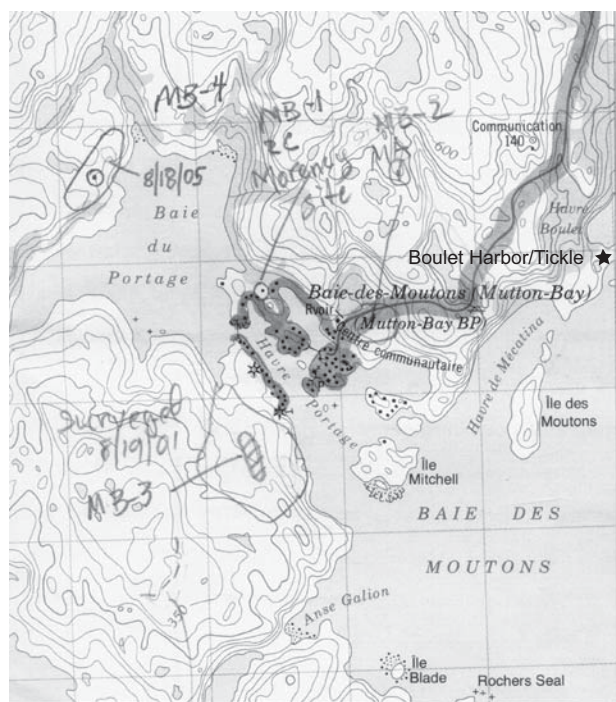


Fig. 4.104: Wooden barrel hoops with lashings



Fig. 4.105: Barrel hoop fragments

5 - Other Gateways 2007 Sites



Figs 5.1: Map of Boulet Harbor site. Section of map 12 J/14 Edition 2 (1984)

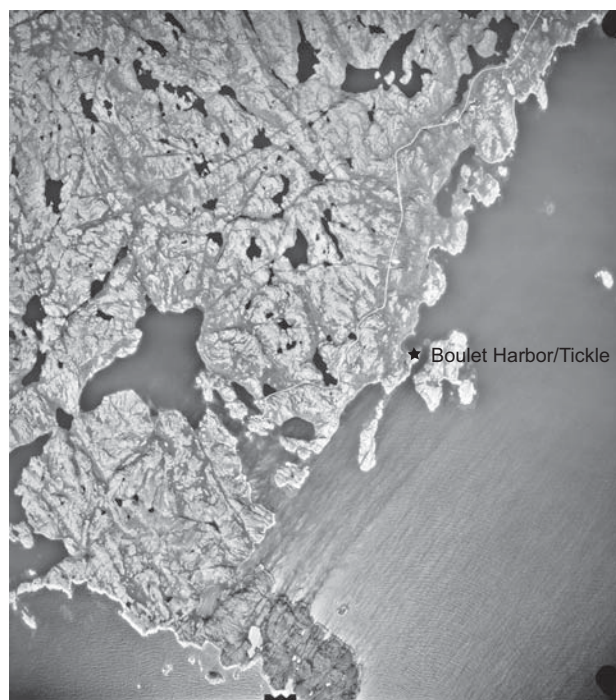


Fig. 5.2: Satellite image of Boulet Harbor (2002)

Site Name: Boulet Harbor/Tickle (2007 visit)

Borden Number: EeBr-13

Height ASL: 2-10 m

GPS: 50°46.737' N \ 58°59.981' W

Map Ref.: 12J/14

Culture: Historic European, Basque, Prehistoric (possibly Groswater)

Tentative Dating: 18th c, ca 1700? - unknown

Areal Extent of Site: About .5 km along north side of the tickle

Site Type/Seasonality: Harp seal hunting in December/January.

Site Location: Shoreline facing Boulet Tickle on south side of mainland, across the tickle from Mecatina Island, a few kilometers east of Mutton Bay. Areas of this site were tested and sketch-mapped in 2001, 2002 (?) and some collections were made. However we had not localized a Basque activity area or any prehistoric component in those visits.

Description of Site: See previous descriptions. We returned to continue to explore for Basque or other early European and prehistoric components. In 2006 we checked out Phil Vatcher's information about a seal factory structure on the Mecatina Island facing Boulet Tickle and mapped and photographed it. See sketch map. We anchored Pitsulak in the middle of the Tickle, where Phil Vatcher reports good holding ground, whereas Boulet Harbor is sand and poor ground.

Nature of Soils/Sediments/Vegetation

Cover: Tall grass, up to 3 feet, over much of the settled part of the site especially along the tickle shore and the beach pass to Boulet Harbor. Black humic soil over sea and/or mixed with sandy gravel.

Raw Materials: European, Basque tiles, various cherts: grey, black and few flakes of Ramah chert.

Collection Procedure: Eleven 30X30 cm test pits to locate most productive prehistoric foci, and in areas outside the beach pass where ground was level and settlement was likely.

Please see the map on the following pages for illustration of TP locations.

- TP1:** Nothing (Leece)
- TP2:** Iron nail in shallow deposit 4-5m west of boiling furnace (see map) (Leece)
- TP3:** Cow parsnip dump; upper level many seal bones and clams, glass, iron (round nail, sheet iron); mixed with lower level fine cherts: grey, dark and Ramah. Sterile gravel approx. 20 cm deep (Fitzhugh)
- TP4:** European and chert are mixed in 20 cm over sterile beach gravel. Square nail, ceramics, tan, grey and dark chert (Leece)
- TP5:** Ceramic, clay pipe bowl, glass, chert (Leece)
- TP6:** Round nails, glass, tile, chert flake, perform edge, ceramic (Leece & Richard)
- TP7:** Round nails, glass, grey British gunflint (see Fig. 5.3), chert flakes
- TP8:** No European material, but more chert flakes including red chert and a microblade-like flake, and Ramah chert
- TP9:** Grassy area between spruce-covered rock and shore. Plastic pipe stem, round nails, etc. (mid 20th c.)
- TP10:** 20 in. from shore. Upper level has late 20th c. materials (tar paper, file, whetstone, etc.). Lower level between 15-20 cm is a pavement of roof tiles and one piece of brown glazed ceramic
- TP11:** Mound area south of pond with fire cracked rock and roof tiles at crest where we placed our test pit. Kept a sample of roof tile.

Samples Taken: Yes, contents of test pits was saved, except for bones, which were returned to soil.

Potential for Further Work (# of Squares, Depth of Deposit ?): Excellent potential for a major study combining oral history of local people, archival records, and field studies. There were two important discoveries from this survey.

First, we have localized one area where Basque tiles are present in stratigraphic context (approx. 15 cm below the surface) and are probably extensive along 50-100 meters of the shore, and might prove important to excavate.

Second we have found extensive areas of prehistoric chert flaking throughout the middle and south side of the beach pass – looking most likely like Groswater cherts and flaking, with some microblade-like flakes (but no diagnostic tools yet). Further testing is needed along the shore and in the meadow extending from the pond to the Boulet Cove/Harbor, which has not been tested at all by us, or the inner cove where some gravel are reported by local people. See attached maps and sketches.

Color slides: Yes, digital shots

Surveyed by: William Fitzhugh, Christie Leece, Will Richard

Date: 16 August 2007

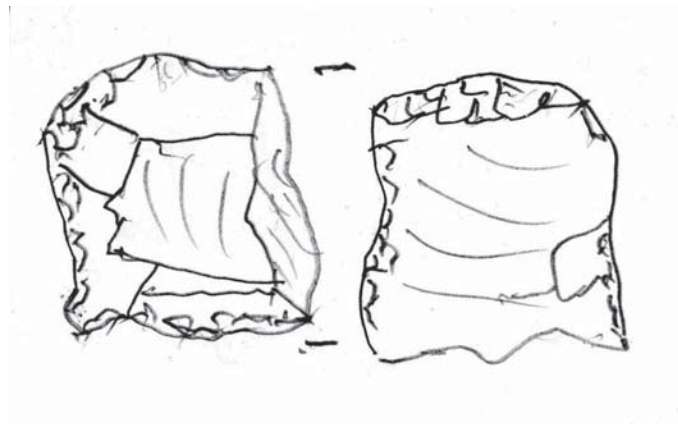


Fig. 5.3: Grey British gun flint from TP7.

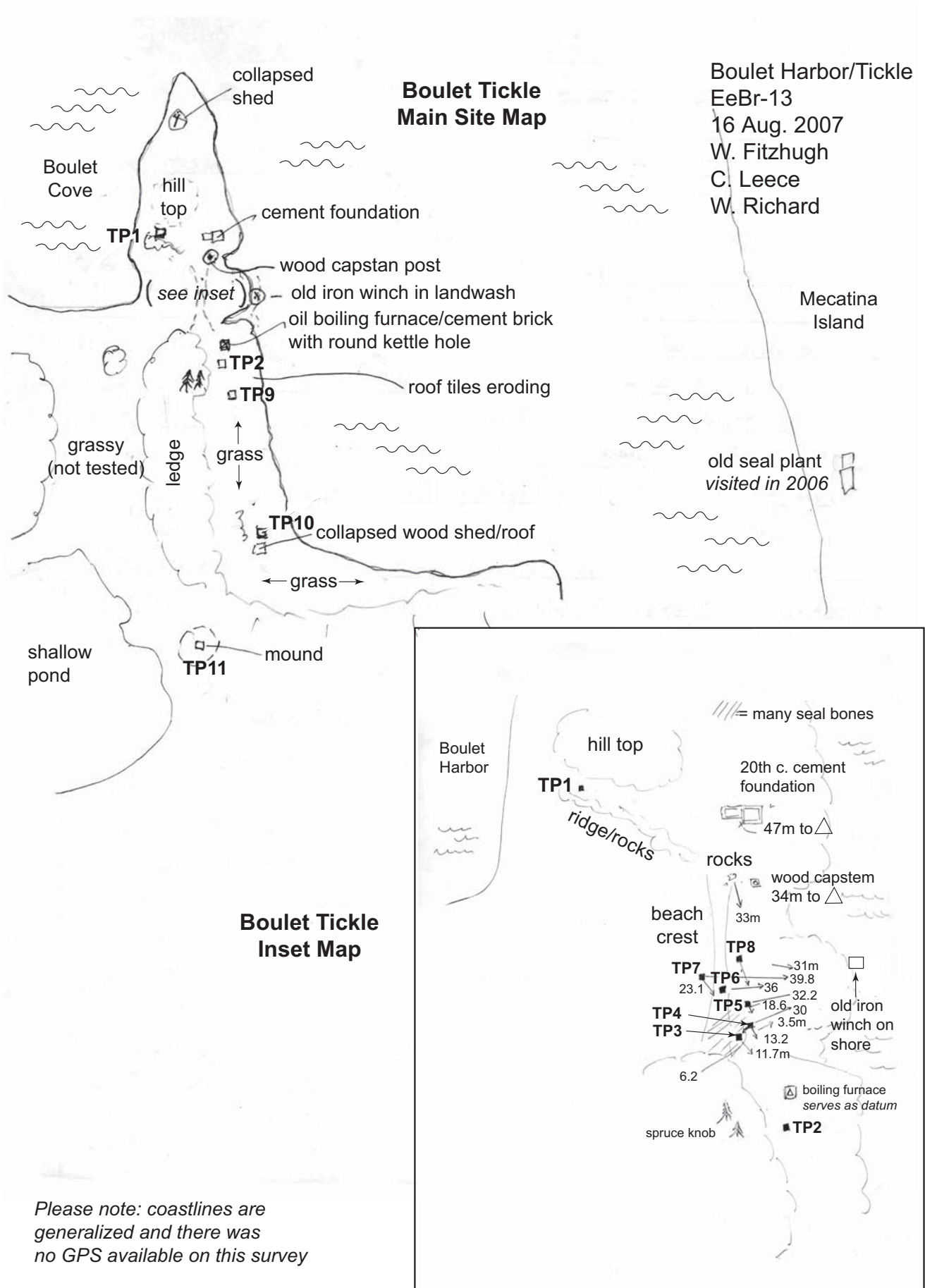


Fig. 5.4: Boulet Harbor/Tickle field maps

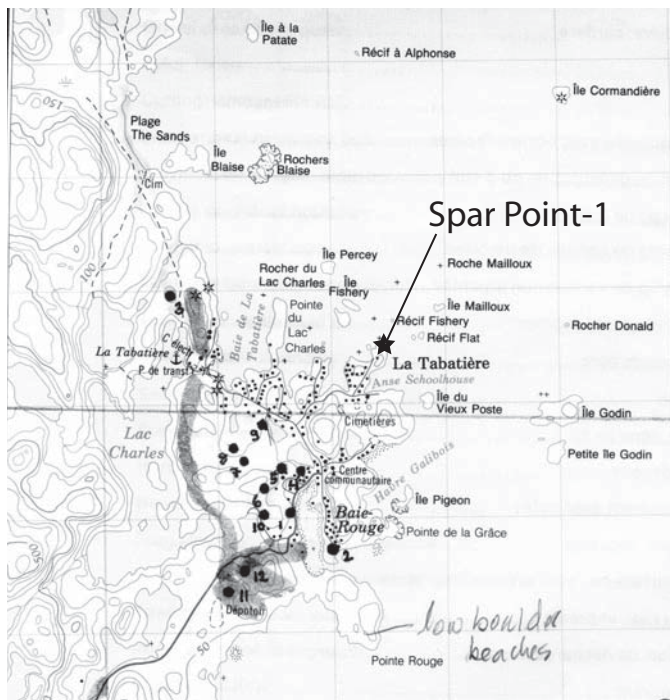


Fig. 5.5: Map of Spar Point-1 site. Section of map 12 J/15 Edition 2 (1984).

Site Name: Spar Point-1
Borden Number: EfBr-6
Height ASL: 2-4 m
GPS: 50°50.316' N \ 058 °57.194' E
Culture: Historic European
Areal Extent of Site: Small area 15X20 m.

Site Type/Seasonality: Unknown site type, but the seal fishery here takes place in December/January.

Site Location: See Phil Vatcher's sketch map. Located in a small grassy clearing at the cove on the end of Spar Pt., a southeast cape of Tabatière. This is a famous harp sealing location, for netting harps, and it might have been a reason for the sites existence, although we found no seal bones.

Description of Site: A small sandy beach with mussel shells at shore wash, with a clearing running up from the beach

about 25-30 m, and about the same width at the shore. The clearing must have been cut out of the spruce when occupation occurred and a dense spruce forest surrounds it: no obvious features seen in the high grass and other meadow vegetation, except for a depression in the area of TP2 and mound with 3-4 boulders and a fallen wood post near the upper right area of the clearing.

Nature of Soils/Sediments/Vegetation Cover: Grass, fireweed and others. Rich humic soil at top 5-10 cm, with gravel, sand and small beach cobbles near the surface. However TP2 had a deeper deposit lined with thin slabs at 15 cm below surface – perhaps a hearth area.

Raw Materials: European/recent ceramics, nails, etc.

Collection Procedure: Three 30X30 cm test pits.

Samples Taken: Yes

Potential for Further Work (# of Squares, Depth of Deposit ?): Rather limited potential, but the nearby areas along the bay south of Spar Point will have great potential but is settled heavily by modern residents and has been for generations. This area has the oldest European settlements in La Tabatière because of the seal fishery and would have been an important cod fishing location.

TP1: Nothing found, close to beach (Fitzhugh)

TP2: Square and round nail, tan (early?) ceramic, shotgun shell, ball? (Fitzhugh)

TP3: Glass, beach glass (Leece)

TP4: Coconut shell, glass, shotgun shell casing (Fitzhugh, Leece)

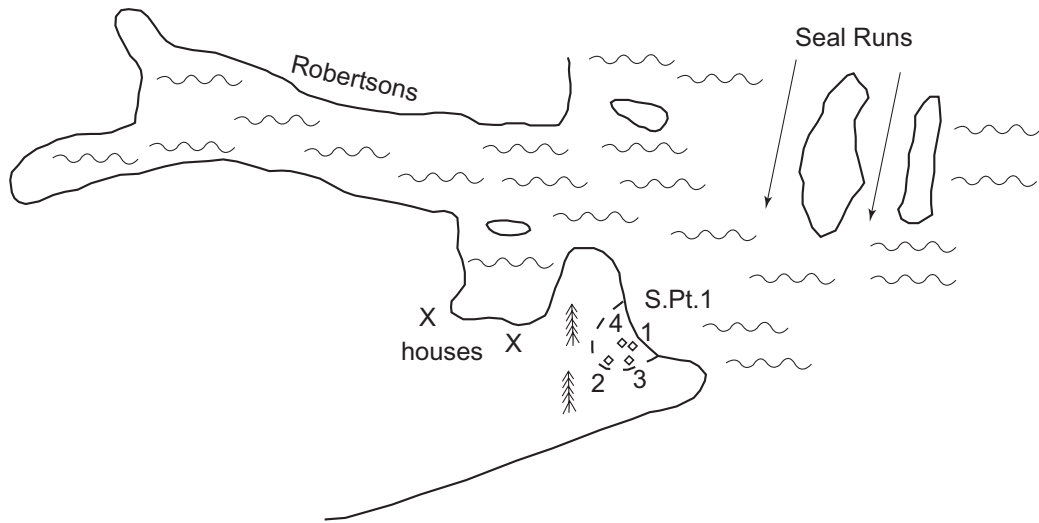
Color slides: Will Richard has pictures

Surveyed by: William Fitzhugh, Christie Leece, Will Richard

Date: 17 August 2007

Spar Point-1
EfBr-6
17 Aug. 2007
William Fitzhugh
Christie Leece
Will Richard

Spar Point-1 - Site Map



Spar Point - Close-up Site View

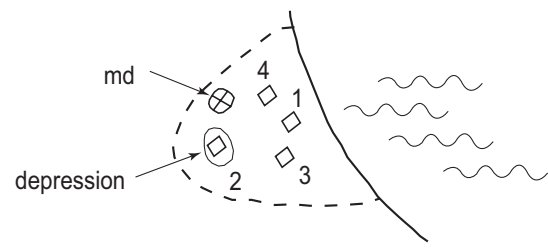


Fig. 5.6: Spar Point site map showing locations of excavated test pits

Site Name: Baies des Belles Amours

Borden Number: EiBi-12

Height ASL: 2 m

GPS: 51°28.339' N \ 57 °25.921' W

Map Ref.: 12 P/6

Culture: Labrador Inuit

Tentative Dating: 18th century

Areal Extent of Site: 100X100 m

Site Type/Seasonality: Two winter houses with entrance passages and sod walls.

Site Location: West side of Belles Amours Point on a small peninsula extending into Baie des Belles Amour.

Description of Site: Previously described by Dumais and Porrier (1994). See attached map. House 1 has a large rectangular main room and a small annex room on the east side of the home.

Nature of Soils/Sediments/Vegetation

Cover: Lichen tundra, one small spruce tree growing along west side of the House 1 entrance passages. Very thin deposit.

Raw Materials: European materials

Collection Procedure: Two test pits in the House 2, one test pit in House 1 entrance.

Samples Taken: Yes

Potential for Further Work (# of Squares, Depth of Deposit ?): Excellent. An Inuit cairn burial was found on the hillside to the east of the site, previously opened.

Color slides: Yes

Surveyed by: Pitsiulak crew

Date: 18 August 2007

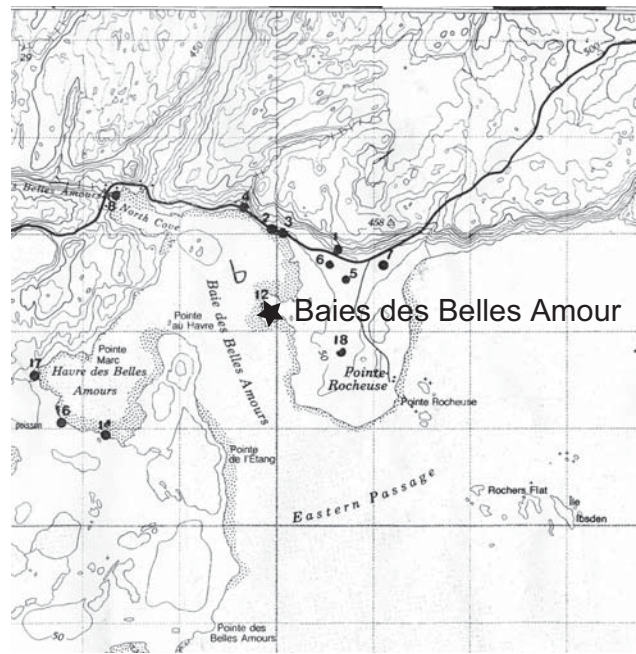


Fig. 5.7: Map of Baies des Belles Amours site. Section of map 12 P/6 Edition 2 (1984)

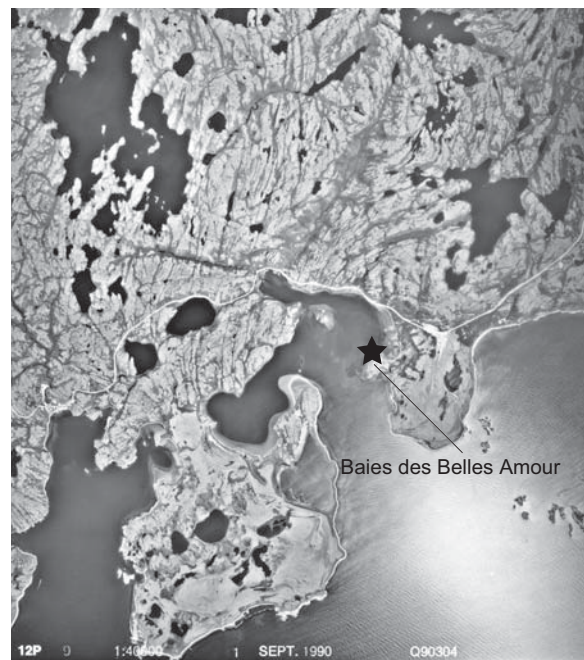
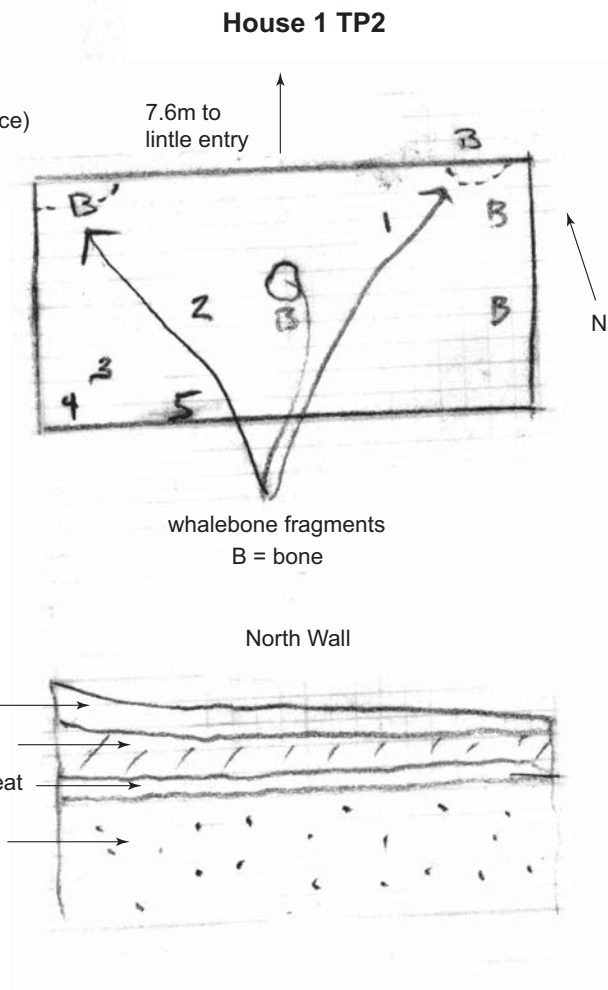
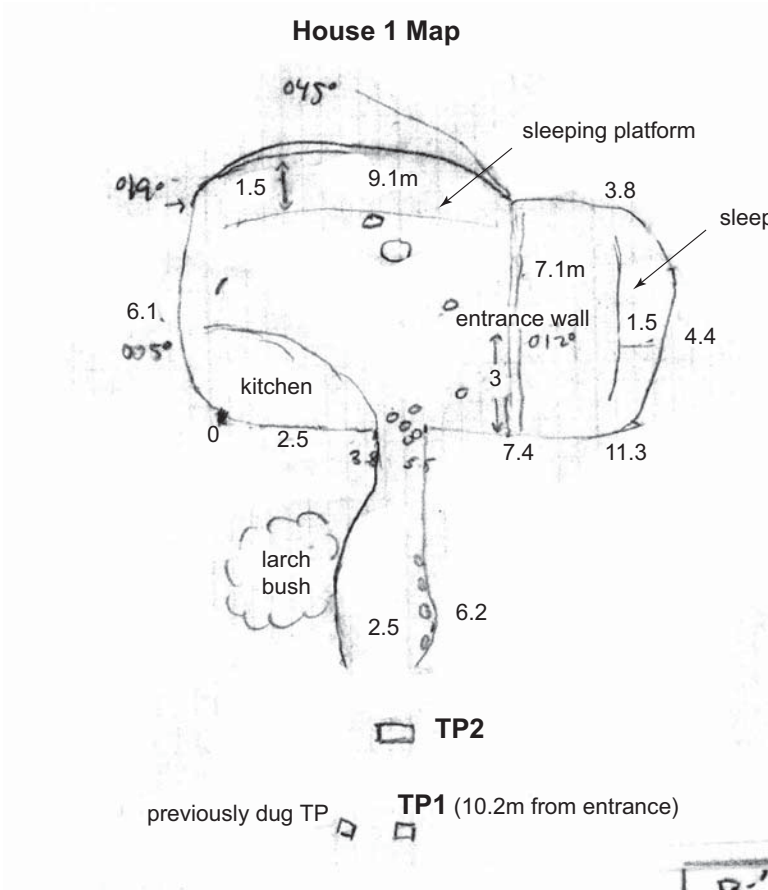


Fig. 5.8: Satellite image of Baies des Belles Amours site (2002)

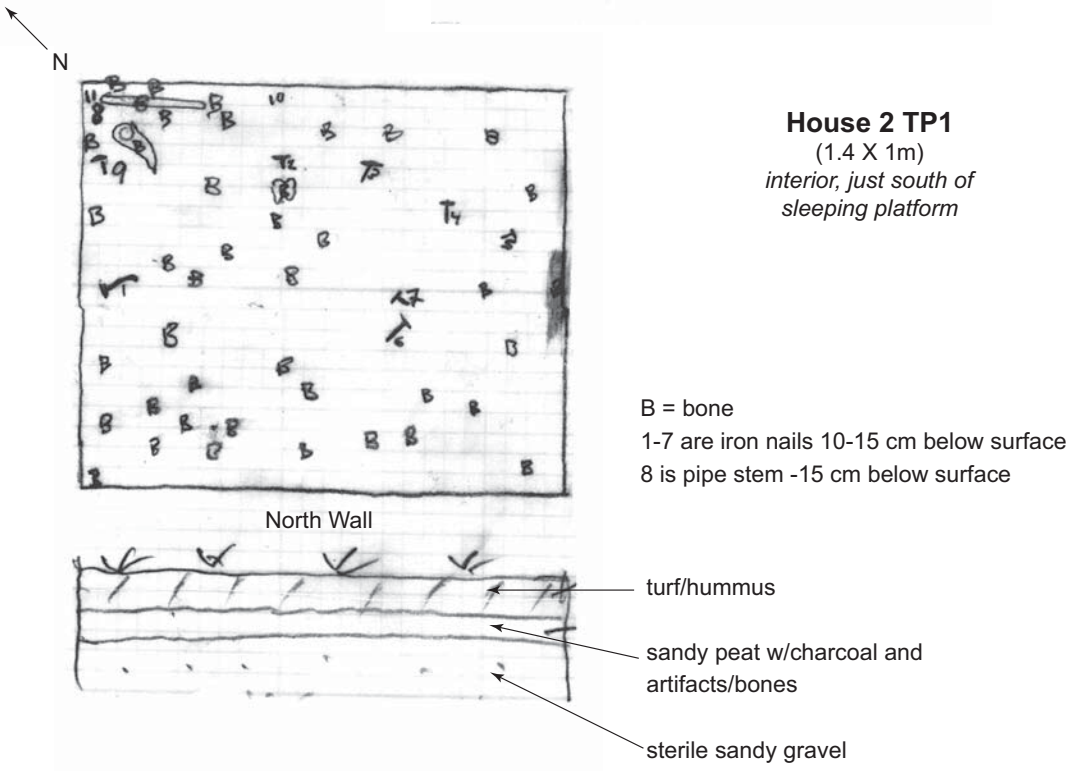
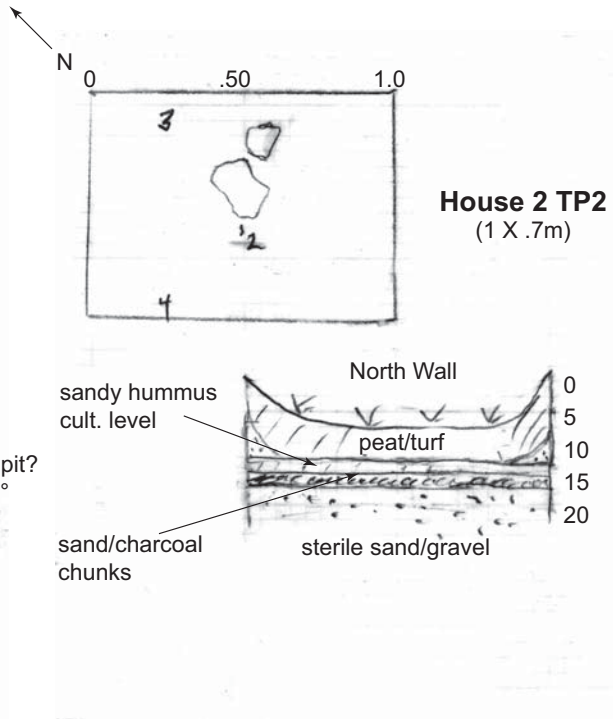
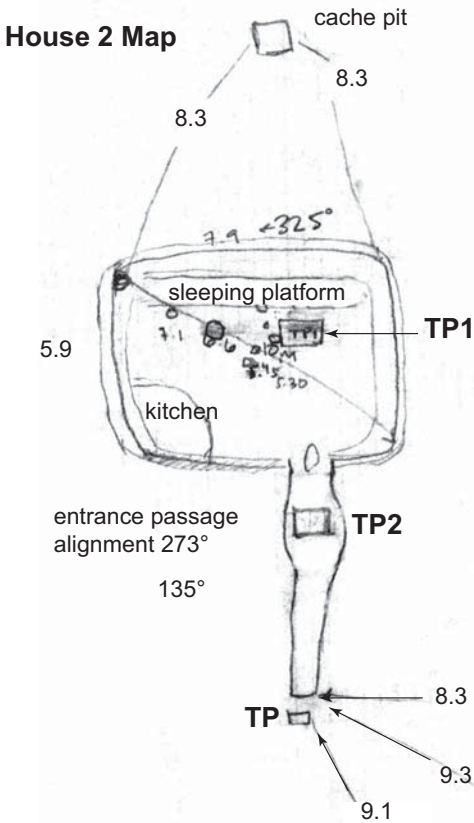
Baies des Belles Amours
 19 Aug. 07
 EiBi-12
 House 1

Please see following pages for correlations of artifact numbers to actual objects



Figs 5.9: Baies des Belles Amours House 1 field map, diagrams, and profile

Baies des Belles Amours
 19 Aug. 07
 EiBi-12
 House 2

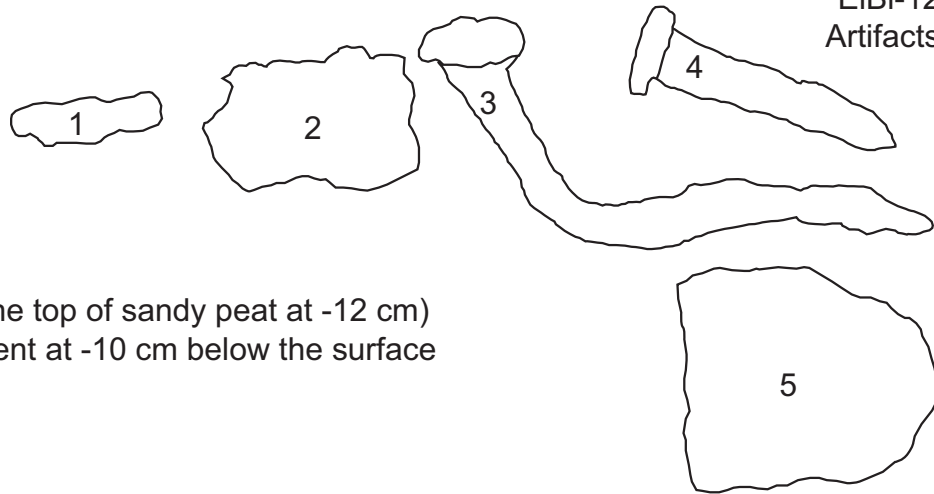


Please see following pages for correlations of artifact numbers to actual objects

Fig. 5.10: Baies des Belles Amours House 2 field map, diagrams, and profiles

H1 TP1 (18 Aug. 2007)
 One nail
 Ceramic fragment
 Not pictured

Baies des Belles Amours
 19 Aug. 07
 EiBi-12
 Artifacts



H1 TP 2 (WF)

1. Iron nail
2. Iron sheet
3. Iron bent nail
4. Iron nail (all from the top of sandy peat at -12 cm)
5. Ceramic tile fragment at -10 cm below the surface



H2 TP2 (WR)

1. Ceramic sherd
2. Iron nail (broken)
3. Iron nail
4. Iron nail



H2 TP1 (CL)

1. Iron nail
2. Iron nail
3. Iron nail
4. Iron nail
5. Iron nail
6. Iron nail
7. Iron nail
8. Pipe stem (side and front view)
9. Iron spall
10. Iron nail
11. Pipe stem (side and front view)

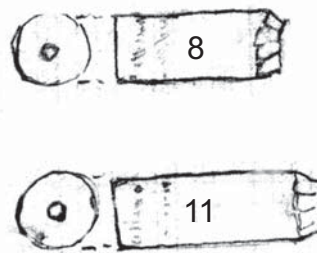


Fig. 5.11: Baies des Belles Amours artifact drawings

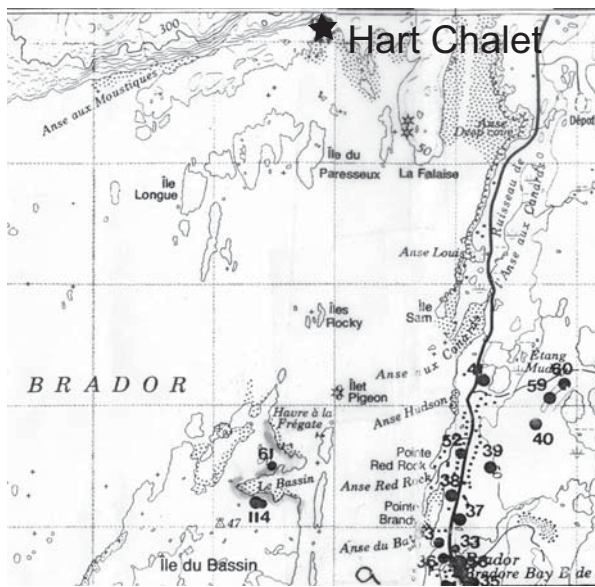


Fig. 5.12: Map of Hart Chalet site. Section of map 12 P/6 Edition 2 (1984)

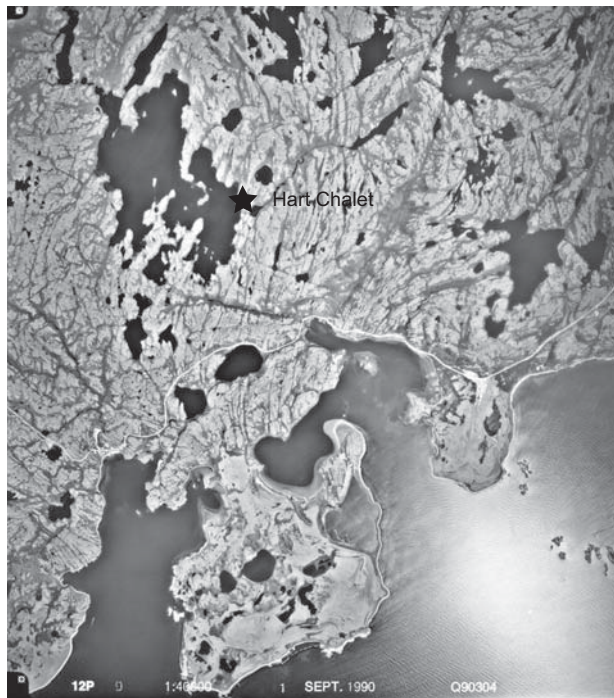


Fig. 5.13: Satellite image of Hart Chalet site (2002)

Site Name: Hart Chalet

Borden Number: EiBh-47

Height ASL:

GPS: 51°29.921' N \ 57°15.736' W

Culture: Basque, Inuit?

Tentative Dating: 16-18th century? 16-17th century?

Site Type/Seasonality: Not known – Basque component is presumably open water season.

Site Location: Located around – and certainly under – the cottage owned by Clifford and Florence Hart, just west of the falls and south of Route 138 in Blanc Sablon. Material has been collected and excavated from the site previously by René Levesque and by myself, as well as by Clifford Hart in the past.

Description of Site: The location is full of archaeological materials, several phases of prehistoric culture (Maritime Archaic, Intermediate Indian, Groswater, Late Indian) as well possibly Inuit or Inuu, Basque and other European groups. This is my second visit to the site and was to see if we could locate some of the features that Clifford says René Levesque found around the cabin. The grassy area is slowly being grown over by trees over the years and some areas René dug may now be in the woods where Florence Hart says there are pits and mounds. We looked briefly for these to the north of this clearing but did not find any pits and did not test there. See map for the test pits excavated to the north of the house in the clearing.

Nature of Soils/Sediments/Vegetation

Cover: Grassy – bones begin to be found immediately below the sod, with iron nails and small tile fragments. General stratigraphy is turf, cultural zone, old ground surface peat, leached grey sand.

Areal Extent of Site:

Raw Materials:

Collection Procedure: Seven test pits of varying sizes, mostly 50X50 cm.

Samples Taken: Yes

Potential for Further Work (# of Squares, Depth of Deposit?): Excellent, though areas of disturbance will be frequent, some from original inhabitants and some from first people to clear the area, Clifford, and René Levesque, who may not have made records/maps of his activities and Clifford's memory is not good as to where René found different material. We did not find

the “tile” in the TP3 area where Clifford had marked the spot with small sticks in the ground. Christie excavated at test pit in an area where supposedly RL had found a “sluiceway” or drain lined with tile or rocks. She found several cobbles and large fragment of stoneware in what may be a structure or feature – located in a trough in the earth running N/S – with lots of bones in the upper levels.

TP4 (WF) was located along the west edge of a mounded area of earth that looked like it might have been cut by a bull-dozer. Cliff says he did not do that, and perhaps this area had been disturbed by an earlier tenant or by René. There was a truncation of the upper deposits at this point. Nails and tiles and many bones begin just beneath the sod and continued down some 15-20 cm. At approx. 23 cm below the surface I found a ‘floor’ of sorts (defined only by the presence of several interesting tools and bone remains). This coincided with a change in deposit from a sandy charcoal-stained upper zone with tile fragments and nails to be a peaty charcoal stained level here and below. Some of the upper deposit might have been redeposited, but there was no sterile peat separating the two, so it might be intact. All finds were in horizontal position, so are probably naturally deposited. Probably the whole mounded surface area has a similar deposit. The reason for the mound became clear below the peat level at the base of the cultural level where sterile peat was underlain by a sterile sandy unleached soil of 10-15 cm thickness overlying another sterile peat level (the original ground surface), in turn overlying leached sandy soil. It appears someone excavated deeper sandy soil and dumped it here on the old ground (Basques?) after which vegetation grew and then the area was re-occupied by the people who left the tools and bones in the upper level, including use or redeposit of the earlier Basque deposits from elsewhere.

The question is who left these remains? It does not look like an original Basque or other early European group as the diet was very local and seems to be mostly harp seal, caribou and some fish – but not lots of fish as only a few were found, and they were well preserved so preservation is not an issue. A dog or wolf is also represented in the bone samples. The tools suggest an Inuit presence, based on a single-drilled whalebone sled runner, (preserved lots of whole bone generally) a ground stone cylindrical bead, a probably fish or bird spear base, an iron point and a probably winter or spring occupation (when Basques would not be present). It could possibly be an Innu occupation, but there is little evidence for that. At this point, it looks to me like an Inuit group utilizing a site previously occupied by Basques, salvaging Basque iron and tile materials – and could be related to the Belles Amours Point Inuit group. At this point the evident is tenuous but quite interesting. René is supposed to have found some small blue beads near the north end of the clearing.

As far as Basques we need to determine original features and structures and who left all the bones and deposits in the upper cultural level, if not a post-Basque group.

TP1: Located in a shallow trough running N-S toward the house from the spruce woods in the northern part of the grassy yard. Supposed to be where René Levesque found a ‘sluiceway.’ Many bones collected in upper 20 cm of humic soil. A possible stone feature consisting of cobbles about 15 cm below surf. At bottom on sterile soil a large fragment of stoneware ceramic. Roof tile frags throughout, and one large fragment and two nails (see map and profile). Several chert flakes through cultural level. (Leece)

Addendum to Test Pit 1 (CL): While cleaning up the bone bags we found Christie had a recovered the middle portion of an Inuit needlecase in her square – broken off at the top and bottom, made of ivory. This is the most specific and interesting evidence for early

Labrador Inuit in this site, including women, and makes certain the Inuit origin of the upper level deposit here.

TP2: In eastern area near edge of cleared land. Lots of seal bones in upper humic soil 5-20 cm above an old peat ground surface (see profile). Some small tile flakes. 50X30 cm (Fitzhugh)

TP3: Located where Cliff says René found a cache of roof tiles, but we never found more than a few tile flakes, bones, and one iron nail. 20X20 cm (Cliff Hart)

TP4: This is an east-west trench across a 30 cm drop in ground level that seemed like a wall or a bulldozer cut lowering the surface, with an elevated mound to the east. Found it to probably result from removal of earth from the surface by ground removal when clearing land. Cliff says no one bull-dozed this area, only shoveled down a bit under the NE corner of the house. Many bones, including seal, a dog (?) jaw, caribou teeth (?), caribou antler, shoulder blade, bird bones etc. Several nails and tile fragments found throughout cultural level below humus and above sterile peat. A whalebone sled runner near top of deposit; an iron point blade; green cylindrical stone bead; prox. end of a leister (?) with hatch-marks for hafting; all on one -22/23 cm level, just above cut caribou antler and shoulder blade. Some of this level had been cut away in west part of square. Below cultural level, sterile peat band, lens of sterile sand and a lower peat over sterile sand. 50X100 cm (Fitzhugh)



Fig. 5.14: Artifacts from TP1 and TP4 including: 1) an iron point; 2) an Inuit needle case; 3) a stone bead; and 4) a whalebone sled runner. For further details see following artifact drawings.

Some very Inuit-like material in this TP, mixed with tile frags and much bone food remains – all in situ deposited level, but upon a layer of sterile sand over old ground peat. A post-Basque native occupation?

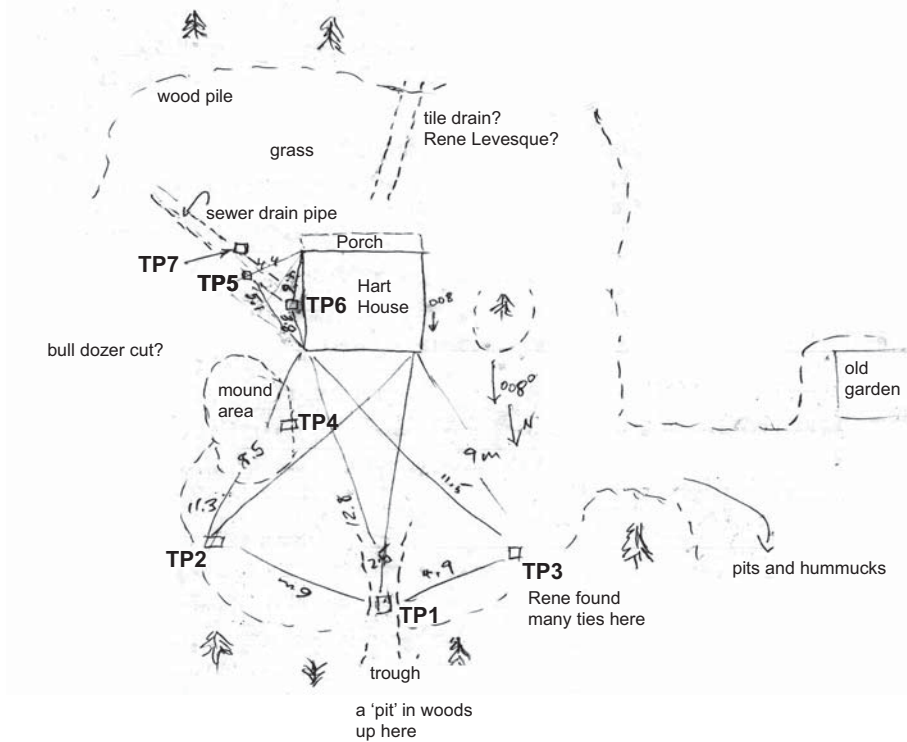
TP5, TP6: Along drain line where Harts found “lots of big iron nails and tiles” – but Christie found only a small bit of tile and small nails. (Leece)

TP7: I dug a quick shovel test closer to porch on a slightly mounded area and found tile and a piece of chert. More testing needed here and all around the Hart place. (Fitzhugh)

Color slides: Yes several of the house area and pits/excavations.

Surveyed by: Fitzhugh and Christie Leece **Date:** 20 August 2007

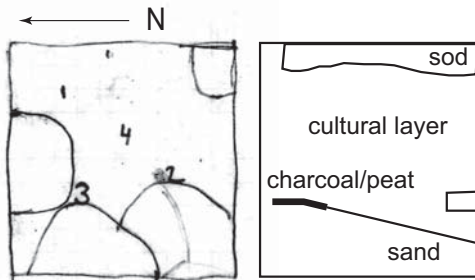
Hart Chalet Site Map



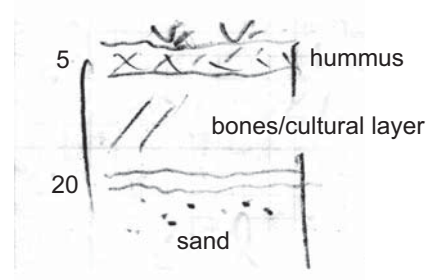
Hart Chalet
 20. Aug. 2007
 Site map and profiles
 Christie Leece,
 William Fitzhugh,
 Clifford Hart

Please see following pages for correlations of artifact numbers to actual objects

TP1: artifact locations and profile



TP2: profile



TP4: artifact locations and profiles

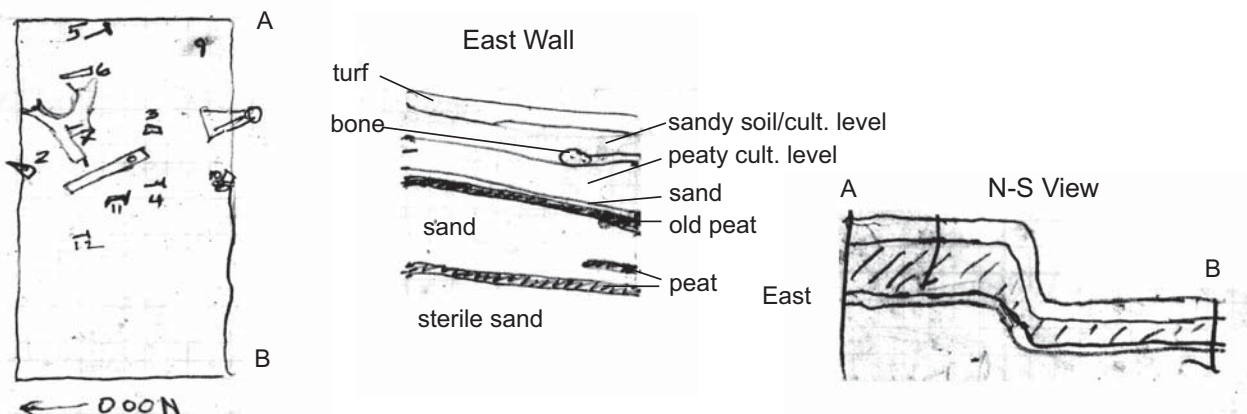


Fig. 5.15: Hart Chalet field maps, diagrams and profiles

Hart Chalet
 20. Aug. 2007
 Test Pits 1-3
 Christie Leece,
 William Fitzhugh,
 Clifford Hart

Test Pit 1 (CL) 30X30

1. Large stoneware vessel body shard -33
2. Iron nail (beut)
3. Iron nail (shaft)
4. Iron nail (shaft)
5. Numerous small tile fragments -35
6. Two flakes of chert found in main cultural deposit, not at bottom or below lower peat (i.e. some mixing of deposits?)
7. Large bag of bones -10 to -35
8. Needlecase (see addendum below)

Note: 5-7 not pictured

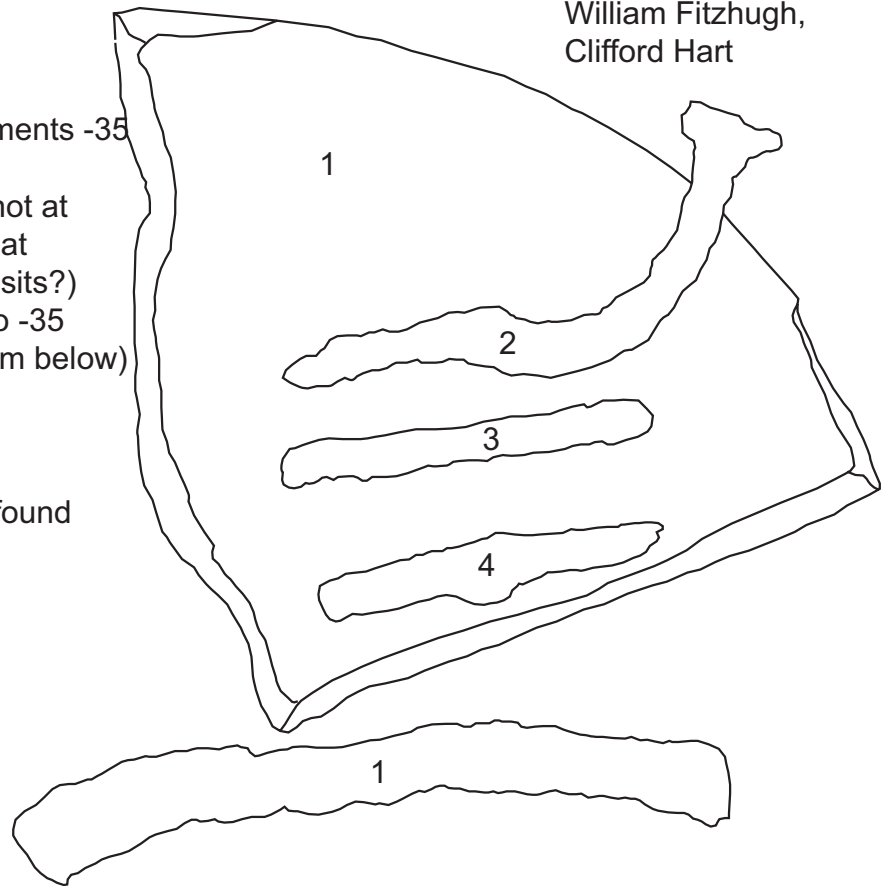
Test Pit 2 (WF) 50X30

Bag of bones - only tile flakes found and not collected

Not pictured

Test Pit 3 (CH) 20X20

1. Iron nail - large, square
- 2-4 pieces of tile Not pictured



Addendum to TP1 Artifact 8

While cleaning up the bone bags, we found Christie had recovered the middle portion of an Inuit needlecase in her square, broken off at the top and bottom, made of ivory. This is the most specific and interesting evidence for early Labrador Inuit in this site, including women, and makes certain the Inuit origin of the upper level deposit here.

Length 6.3 cm
 Width 3.6 cm
 Thickness 2.0 cm

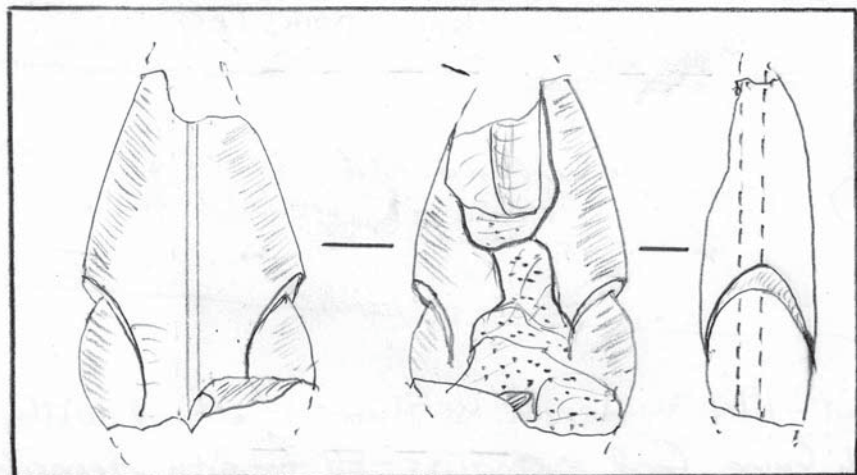
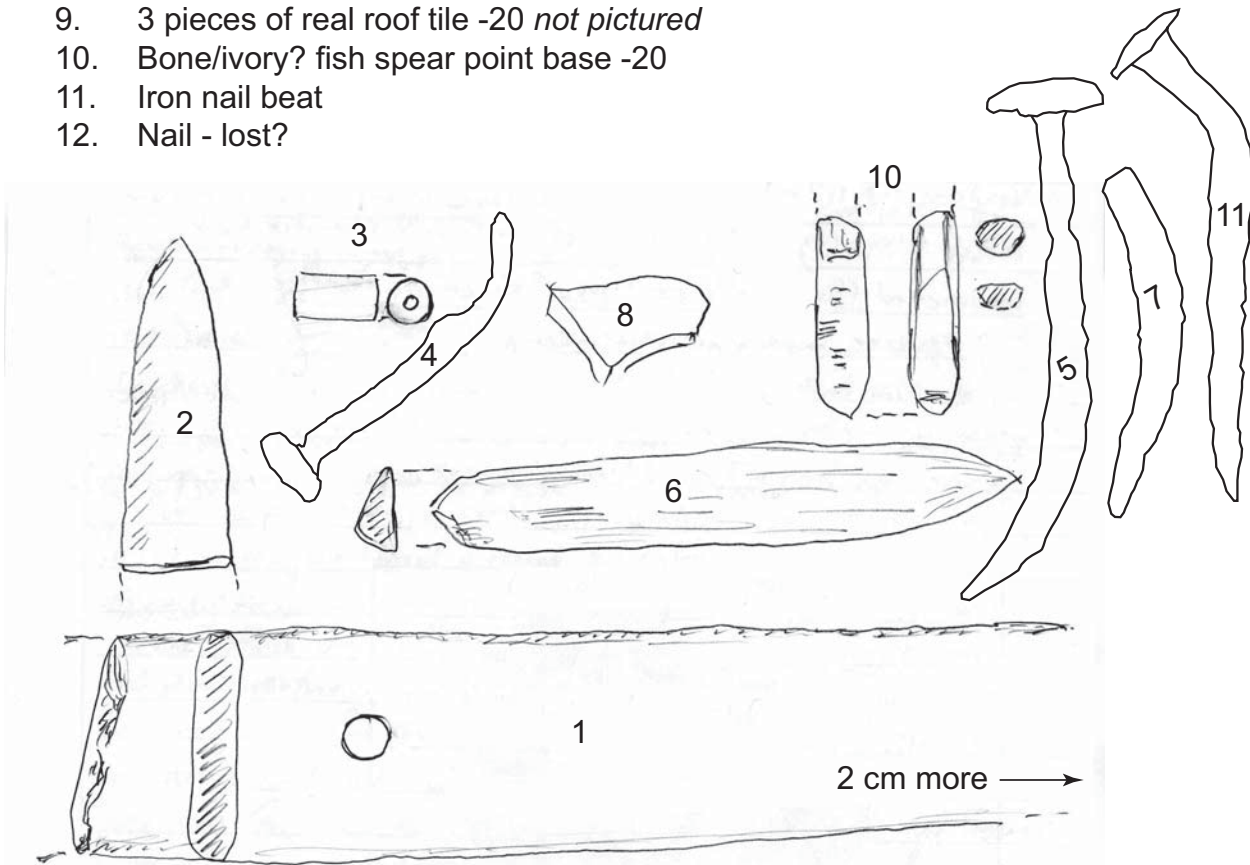


Fig. 5.16: Hart Chalet Test Pits 1, 2 and 3 artifact drawings

Hart Chalet
 20. Aug. 2007
 Test Pits 4-6
 Christie Leece,
 William Fitzhugh,
 Clifford Hart

Test Pit 4 (WF)

1. Whalebone sled runner -23
2. Iron point -23 below surface
3. Perforated cylindrical stone bead, green -23
4. Small nail -24
5. Iron nail
6. Whalebone peg -15
7. Small nail
8. Tan stoneware sherd -20
9. 3 pieces of real roof tile -20 *not pictured*
10. Bone/ivory? fish spear point base -20
11. Iron nail beat
12. Nail - lost?



Test Pit 5 (CL) 50X50

1. Thin Nail
 2. 2 pieces of tile *not pictured*
- Very shallow cult. deposit - possibly disturbed*



Test Pit 6 (CL) 50X60

1. Iron nail
- Very shallow cult. deposit - disturbed soil*



Fig. 5.17: Hart Chalet Test Pits 4, 5 and 6 artifacts

6 - Conclusions

This year's project produced exciting new results that substantially advance our knowledge of the early history of the Lower North Shore. The expanded underwater excavation completed four 2x2 meter pits excavated with careful documentation and stratigraphic control. In addition to recovering a number of ceramic vessels, including a fine decorated faience porringer bowl and several large storage jars, we discovered many more whalebones that were stratigraphically-linked to the early occupation of the site. Flint, molded glass and other remains were also recovered. We now have evidence of spatial distinctions at the underwater site representing, at least, localization of whale butchery, fish processing, and wood-working activities in different areas of the site. Profiles of the deposits have allowed us to refine the sequence established last year: (1) initial occupation; (2) site preparation represented by extensive wood-working and timber processing; (3) whaling and related activities; (4) a hiatus period; (5) and an extensive cod fish processing enterprise with evidence of local bird and animals (especially seal) procurement. We have not yet been able to establish the relationship of the large ballast piles to these phases. Tiles are present throughout the sequence. The storage jars appear to be coming from southwest France; the faience from the Iberian peninsula; and the limestone ballast probably represents the geology of La Rochelle in the northern Bay of Biscay.

The Petit Mécatina land site also produced interesting results. This year's work extended the margins of the blacksmith shop excavation several meters to the east, north, and west of the paved floor, revealing evidence of charred timber footings along the margin of the pavement and an earlier sub-pavement wood floor whose upper surface was heavily charred, representing a burning of a timber-floored structure prior to establishment of a stone floored feature. Outside the structure we found midden refuse including flintlock gun parts, 'French' and 'English' gunflints, and continental European flint stock, in addition to barrel parts, pyrites, ceramics, clay pipes, and other materials. No Normandy stoneware, so common in the cookhouse structure, was found. A particularly interesting recovery was the lead from a ship's sounding line. North of the structure we found large hearths, most of which are still to be excavated, extending up the slope which were probably the source of the large deposits of charcoal we found along the north side of the smithy. A rough log floor was laid down outside the east wall of the structure, and on the west we found a tile-paved walkway extending to the southwest toward the lower part of the site and the cookhouse. One small fragment of a small soapstone disc or miniature plate was recovered just north of the smithy wall and appears to be either of Dorset or Inuit manufacture.

These finds suggest a more complex history for the Petit Mécatina site than we previously envisioned. In addition to Inuit presence we have evidence of multiple European occupations, most of which appear to be Basque-related, but with a wide range of European products and technology present. Further, evidence of extensive burning suggests that the site was occasionally – if not repeatedly – sacked, and may have changed hands. While historical research on the Lower North Shore is still in its infancy, there is growing evidence that from the 16-18th C. this region was a frontier zone utilized by a variety of groups for extracting resources, including whales and seal mammal products, fish, furs, and timber. Further archival and archaeological research may provide information to clarify the complex economic and social history that is beginning to be revealed at Mécatina.

Elsewhere, our surveys along the Lower North Shore produced information that reinforces this view of the region as a cultural and economic frontier. Continued testing at the Boulet Tickle site between Mutton Bay and La Tabatière allowed us to localize a Basque component that should provide interesting counterpoint to our work at Mécatina. Verification that the Belles Amours Point sod houses reported by Dumais and Poirier in 1994 are Inuit winter houses adds assurance of Inuit-style settlement in the Brador region, although the occupation of this ‘communal house’-type settlement of two structures, with entrance passages and raised rear sleeping platforms, appears to have been brief, perhaps only a single season. The date suggested by the architecture and European finds would be ca. early 18th c. Our tests at the nearby Hart Chalet site originally explored by René Levesque in the 1960s, revealed evidence of Inuit occupation from an earlier time, ca. 16th-early 17th c., based on the presence of stone beads and early Inuit needle-case forms. The extensive sea mammal and caribou faunal remains and presents of iron nails, European ceramics, and stilet remains suggests long-term occupation by Inuit who camped at and utilized materials salvaged from an earlier Basque occupation at this location.

All-in-all, the 2007 Gateways project produced many new ideas and exciting results that need to be pursued during the coming year. We were extremely pleased to have had the assistance of a fine, hard-working field crew, which included a diving team from the University of Montreal who will be assisting the project through their academic programs during the coming year. Vincent Delmas will be concentrating on Basque occupations in the Gulf of St. Lawrence, including Mécatina, and Marilyn Girard-Rheault will be analyzing the faunal remains, especially fish. We wish them well and hope all can return to Petit Mécatina for what will certainly be an even more exciting 2008 field season.



Fig. 6.1: Our whale bone “ET” mascot watching over our underwater operations in 2007.

7 - References Cited

Belvin, Cleophas

2006 *The Forgotten Labrador: Kegashka to Blanc Sablon: a Short History of the Lower North Shore*. Montreal: Queens University Press.

Drouin, Pierre

1988 Des Baleiniers Basques à l'Île Nue de Mingan. *Canadian Journal of Archaeology* 12:1-15.

Dumais, Pierre, and Jean Poirier

1994 Témoignage d'un Site Archéologique Inuit, Baie des Belles Amours, Basse-Côte-Nord. *Recherches Amérindiennes au Québec* 24(1-2) :18-30.

Fitzhugh, William W.

2001 *The Gateways Project 2001: Archaeological Survey of the Quebec Lower North Shore, Gulf of St. Lawrence, from Mingan to Blanc Sablon*. 90 pp. Arctic Studies Center, Smithsonian Institution. Report on file at the Ministry of Culture and Communication, Quebec.

Fitzhugh, William W.

2005 Cultures, Borders, and Basques: Archaeological Surveys on Quebec's Lower North Shore. In: From the Arctic to Avalon: Papers in Honour of James A. Tuck Jr. Edited by Lisa Rankin and Peter Ramsden. *British Archaeological Reports International Series* 1507:53-70.

2006 Gateways Project: 2005 Field Report. In *Archaeology in Newfoundland and Labrador, Provincial Archaeology Office Newsletter* 4:25-31. Department of Tourism, Culture, and Recreation, Government of Newfoundland and Labrador. St. John's. (web publication)

2007 Underwater Archaeology at the Hare Harbor Basque Site at Petit Mécatina. *Archaeology of Newfoundland and Labrador, Provincial Archaeology Office Newsletter* 5:45-56. Department of Tourism, Culture, and Recreation, Government of Newfoundland and Labrador. St. John's. (web publication)

Fitzhugh, William W. and Matthew D. Gallon

2002 *The Gateways Project 2002: Surveys and Excavations from Petit Mecatina to Belles Amours*. 174 pp. Arctic Studies Center, Smithsonian Institution. Report on file at the Ministry of Culture and Communication, Quebec.

Fitzhugh, William, and Helena Sharp

2003 *The Gateways Project 2003: Surveys and Excavations from Hare Harbor to Jacques Cartier Bay*. 196 pp. Washington DC: Arctic Studies Center, Smithsonian Institution. Report on file at the Ministry of Culture and Communication, Quebec.

Fitzhugh, William W., Yves Chrétien, and Helena Sharp

2004 *The Gateways Project 2004: Surveys and Excavations from Chevery to Jacques Cartier Bay*. 211 pp. Arctic Studies Center, Smithsonian Institution. Report on file at the Ministry of Culture and Communication, Quebec.

Fitzhugh, William W., Erik Phaneuf, and Christy Leece

2007 *The Gateways Project 2006: Land and Underwater Excavations at Hare Harbor*. Field Report and artifact catalogs for permit 06-FITZ-01 on file at the Ministry of Culture and Communications, Quebec, Canada.

Grenier, Robert, Marc-Andre Bernier, and Willis Stevens (eds.)

2007 *The Underwater Archaeology of Red Bay: Basque Shipbuilding and Whaling in the 16th Century*. 4 vols. Park Canada.

Levesque, René

2002 *Bible d'Aménagement du Saint-Laurent Fleuve, Estuaire, Golfe. Phase Premier. La Basse-Côte-Nord: Porte Priviliégée des Pionniers d'Amérique*. Draft manuscript available from the author and on file at Arctic Studies Center.

McLeod, B.A., M.W. Brown, M.J. Moore, W. Stevens, S.H. Barkham, M. Barkham, and B.N. White

2008 Bowhead Whales, and Not Right Whales, Were the Primary Target of 16th- to 17th-Century Basque Whalers in the Western North Atlantic. *Arctic* 61(1):61-75.