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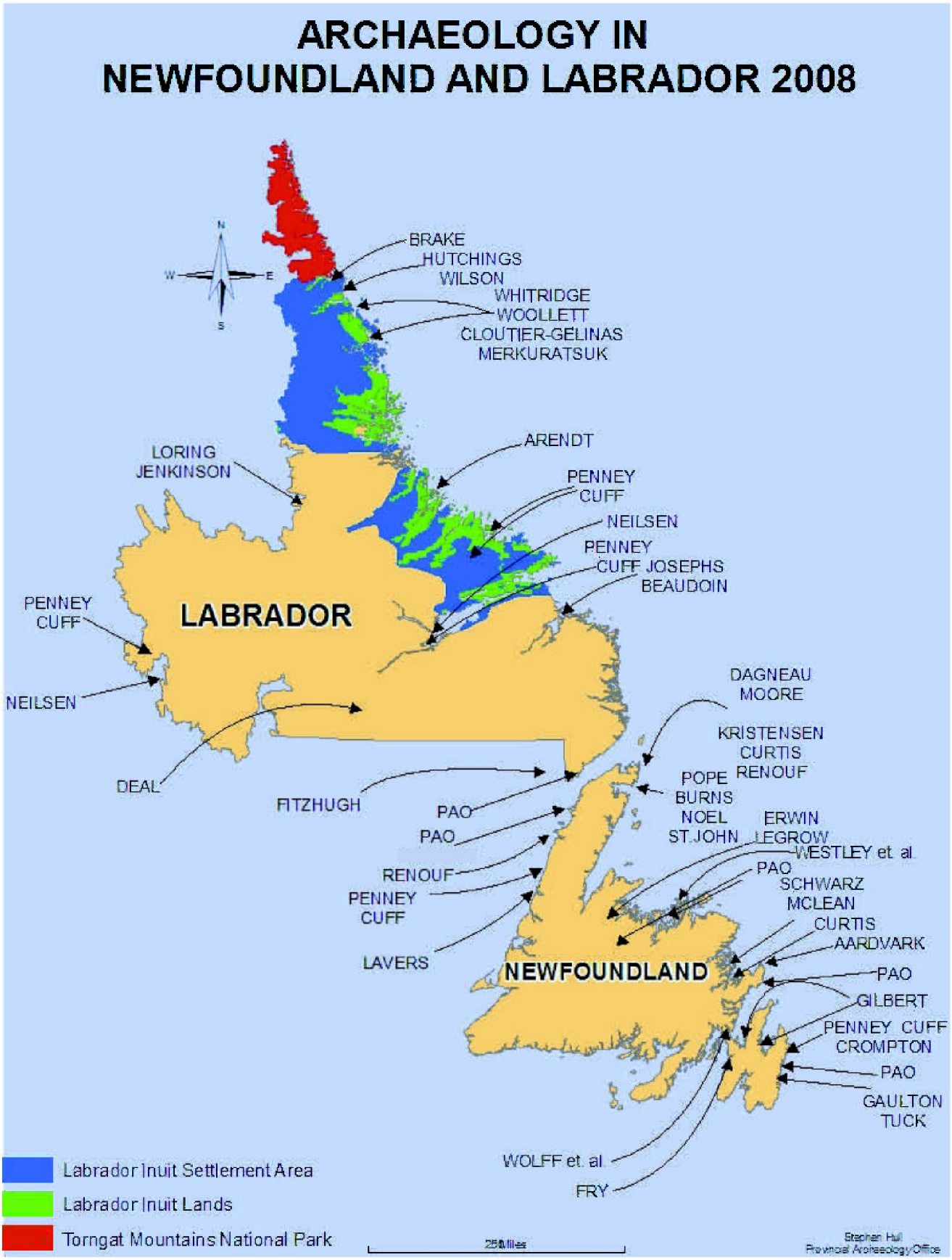
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HOPEDALE ARCHAEOLOGY PROJECT 2008: EXCAVATION OF HOUSE 1 AT ANNIOWAKTOOK ISLAND

Beatrix Arendt
University of Virginia

The Hopedale Archaeology Project (HAP) is a community archaeology project based in the northern Labrador town of Hopedale. This is the second season of the project which intends to study the influence of German Moravian missionaries on changing Inuit culture during the 18th and 19th centuries. HAP is a community-oriented program that works with the local population at all levels of research and development. As part of the program, local Inuit students are hired to assist with the excavation, and participate in an Archaeology Open House which shares our findings with the entire Hopedale community.

Last summer, the project conducted surveys on islands near Hopedale and an excavation of a 19th century midden in Hopedale established by Moravian missionaries in 1782. This second season focused on the excavation of an 18th century Inuit sod house on Anniowaktook Island (GiCa-02) located 7.5 km east of town. These excavations are part of my dissertation research which will investigate and compare Inuit archaeological deposits from the pre- and post-Moravian period to better comprehend Inuit choices to move out of sod house settlements, move to missions, convert to Christianity, and adopt European practices. While the dissertation will include data from multiple Inuit sites, this report will discuss preliminary findings and initial interpretations of the excavations at the 18th century Inuit sod house on Anniowaktook Island.

Historical Context

During the 17th and 18th centuries, Inuit culture underwent a series of significant transformations. Inuit moved towards the inner islands of Labrador from smaller, dispersed settlement patterns to larger, more concentrated sites located closer to more diverse marine and terrestrial resources (Jordan 1977; Kaplan 1983, 1985; Woollett 2003, 2007). This change coincided with the rise of European whalers and traders along the Labrador coast who introduced new raw materials into the Inuit toolkit. As the contact increased, Inuit desire for European manufactured products served as a catalyst for following transformations.

Scholars argued that a trading network developed along the entire coast of Labrador where Inuit traveled to southern Labrador to trade with European then returned north with the newly acquired European goods (Kaplan 1985:62; Jordan 1977). Prominent Inuit men who were hunters or shamans took on this new role of trader. Having access to boats, these men created an expansive settlement network by using existing kin and social relations (Jordan 1977; Kaplan 1983, 1985; Taylor 1974). As these men accumulated more European goods, they accumulated more wealth and status. Simultaneously, settlements grew more dependent upon these leaders for access to resources and increased in size to help support their leaders' enterprise (Kaplan 1985).

As Inuit underwent this internal social transformation, external tensions grew between Inuit and European traders and fishermen. Raiding between Inuit and seasonal European fisheries ensued throughout the 18th century leading to a hostile environment that interfered with a lucrative British fishing industry. British colonial administrators who controlled the area and were worried about a collapse of the fishing industry searched for a way to pacify the Inuit. A timely proposal by German Moravian Christians to establish missions along the Labrador coast appeared to be the answer. The Moravians wanted to bring Christianity and civilization to the Inuit population which the British hoped would create a more peaceful fishing and trading environment.

Unlike other missionaries active at that time, the Moravians' explicit goal was not predicated on transforming every aspect of local indigenous culture; they wanted Inuit to remain self-sufficient and maintain many of their traditions, including hunting and related material culture (Brice-Bennett 1981). But the introduction of European culture through the construction of a church, wooden houses and a trading store had immediate effects. Only thirty years after the establishment of the first Moravian mission in 1771, many Labrador Inuit moved to the missions, converted to Christianity, and engaged in a European economic market. Although Inuit had been in contact with Europeans for 400 years prior to the Moravians, the missionaries' arrival marked the introduction of a new religion and culture. The Moravians' permanent residence in northern Labrador appears to disrupt an

Inuit trade network and social system by offering easier access to many resources including desirable European goods and food.

Figure 1: Location of Inuit sod house village on Anniowaktook Island marked by red arrow (Google Earth 2008) (Arendt)

Fieldwork

This season focused on the excavation of a pre-Moravian Inuit settlement. Originally identified by American archaeologist Junius Bird during his 1934 survey, a four sod house settlement on Anniowaktook was believed to have an occupation period overlapping with the Moravian presence at Hopedale (Bird 1945) (Figure 1). In 2007, I excavated two 1x1 meter units to test Bird's conclusion, but found no evidence supporting the houses were occupied during the Moravian's tenure (Arendt 2008). For further clarification as to the site's occupation period and cultural activities, I returned to Anniowaktook Island this summer to conduct a full-scale excavation of one house.

The four sod houses are situated on the southeastern side of Anniowaktook Island clustered within meters of each other in a protected harbor. This summer's excavations were conducted in the largest of the four houses, House 1, an 11 x 6 meter rectangular semi-subterranean structure with an 8 meter entranceway. A series of sixteen 1x1 meter units were placed across the interior of the entire house and one 2x2 meter unit placed in the midden situated directly outside the entryway (Figure 2).

Early in the project, we noticed a few discrepancies with House 1. First, House 1 had a thin layer of sod (less than 10 cm thick) indicating that the collapsed sod roof had already been removed. Second, excavations revealed that a portion of the house was

been disturbed by earlier archaeologists or looters. Approximately 1/3 of the northeastern section of the house was dug down to sterile sand and boulders thrown into the southeastern half of the house; therefore we focused excavations on the western, undisturbed portion of the house.

With the assistance of five Hopedale students, we removed the thin sod level to reveal architectural elements and features that helped identify specific activity areas. Along the back, north wall of the house ran a raised sleeping platform where we found a flat, blubber stained lamp stand, a cluster of larger, blubber-stained stones, and some soapstone lamp fragments suggesting this was the cooking and living area (Figure 3). Artifacts found in the vicinity include a copper buckle, glass beads, and two soapstone lamp fragments. One interesting feature identified along the north wall was a circular depression with large fragments of red earthenware found underneath the sleeping platform in sterile sand (Figure 4). The circular feature might be a post hole for a wooden post which served as additional structural support for the large domed roof. Although the redware ceramic appears to be the only artifact, a soil sample was taken and water screened to determine whether there were any small artifacts or botanical materials.

Just southwest of the sleeping platform and features, we also uncovered the remains of an interior meat cache (Figure 5) which exhibited the highest concentration of sea and land mammal fauna inside the house. The area appears to have been sectioned off from the rest of the house by the placement of a few very large stones.

The crew also discovered other architectural features such as a slab stone floor, the fragment of a central post and post hole, and a collapsed cold trap located near the entryway, all common in 18th century Inuit sod houses. We also identified small yet distinct artifact deposits surrounding these areas; however further spatial analysis of these deposits is needed to get a better understanding of activity areas with the house.

Figure 2: House 1 before excavation facing east (Arendt)

Figure 3: Blubber-stained lampstand in foreground resting on top of the sleeping platform. Feature 1, a cluster of burned stones, and the stone floor is located just south of the sleeping platform (Photo by Arendt)

Although many artifacts were found within the house, the majority of the artifacts were located in the midden outside the house. Few objects were found complete but the array of artifact types including a toy soapstone lamp, iron nails, ceramics, lead, glass, tobacco pipes, and a few thousand sea mammal bones shed light on the consumption and discard practices of Inuit from the early historic period. Furthermore, the range of artifacts found suggests household members were active in the coastal European trade network. Even though artifact analysis is just beginning at time of publication, my hypothesis from 2007 still stands and House 1 was part of an independent settlement occupied prior to the Moravian's arrival.

The disturbance to House 1 as a result of earlier looters or archaeologists compromises the archaeological integrity of the house. Evaluating House 1's contextual and artifactual information requires compiling comparable data from the same site. I will return to the site next summer and excavate House 4, a smaller sod house just northeast of House 1. The 2007 survey suggests that materials from House 4 are contemporaneous with House 1 and can offer insight into the extent of resource availability to the occupants of this settlement (Arendt 2008).

Conclusion

Although preliminary, the findings from this season's excavation on Anniowaktook Island adds to a growing body of work on 18th century Inuit settlements and the material cultural evidence for culture contact. The excavation unearthed a great number of artifacts and faunal evidence that requires closer analysis which I intend to conduct in the coming months (Figure 5). Nevertheless, it is possible to make general assertions concerning some household activities.

Early analysis of the faunal material found the majority of the species to be marine mammals that are present in Labrador in the winter, suggesting the house's occupation period to also be during that season. Completed faunal analysis from the 2007 test unit reveals similar species distribution as other 18th century Inuit sod house sites (Dupont-Hebert and Gagne 2008; Woollett 2003). Additional faunal analysis from the midden deposit will likely confirm these conclu-

Figure 4: Interior meat cache with deteriorating bone on the surface (Arendt)

sions while enhancing our understanding of 18th century Inuit subsistence economy. Furthermore, comparison between the interior meat cache and the discarded faunal material in the midden may identify specific species preferences.

As noted earlier, the presence of particular European items such as the copper buckle, French stoneware fragments, beads and tobacco pipe fragments suggest the household's participation in the European trade network; however the lack of distinct artifacts indicating trade with the Moravians such as creamware or pearlware ceramic fragments suggests an earlier 18th century occupation period. Comparative analysis with other 18th century Inuit sod house sites can show whether this house had more or higher quality European goods, which would suggest greater access to the coastal trade market and perhaps social differentiation. Future plans to collect comparable data from House 4 to determine whether similar consumption and discard practices occurred throughout the site will also identify whether different houses within a single settlement exhibit similar or different material culture deposits. Significantly different artifact deposits between houses may suggest disparate access to goods.

While this project seeks to understand Inuit choices during the colonial period, an additional goal

Figure 5: The crew off to work (Arendt)

of the Hopedale Archaeology Project is to include all members of the community in the organization, implementation, and execution of the archaeology project. Future plans continue to include Hopedale students in next summer's excavation on Anniowaktook Island as well as three Community Archaeology Days at the island in order to share our research with the Hopedale community and expand local interest and awareness of current and ongoing heritage projects.

Acknowledgements

This project would not have been possible without the funding from the Predoctoral Fellowship from the Canadian Embassy, the Explorers Club of New York, the Arctic Institute of North America, the Provincial Archaeology Office of Newfoundland and Labrador, and the Nunatsiavut Government's Youth Employment Summer Strategy fund. I must extend my gratitude and appreciation to the entire town of Hopedale for their interest and enthusiasm in the Hopedale Archaeology Project. Without the help of many people, this project would not have come to pass. In particular, I would like to thank David Igloliorte and Juliana Flowers of the Agvituk Historical Society for their constant counsel and support; Clarence Vincent for shuttling me and the crew out to Anniowaktook Island regardless of the weather; Teena and Gil Flowers for the soft bed, hot meals, and warm hearts; and Roberta and Bernie Andersen from Makkovik for shipping additional archaeological equipment. I would also like to thank Heather Angnatok and Jaime Brake Nunatsiavut Government, and Delphina Mercer and Stephen Hull from the Provincial Archaeology Office for their direction and assistance with funding and legal issues. Last (but most definitely not least), I have to offer a huge thanks to my dedicated field crew, James Karpik, Nathan Karpik, Trevor Broomfield, Kelsey Hunter and the bear monitor Delano Torarak for their hard work despite heat, rain and flies.

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NUNATSIAVUT GOVERNMENT FIELDWORK 2008

Jamie Brake
Nunatsiavut Government

Introduction

On March 17th 2008, Jamie Brake began working as the acting Nunatsiavut Government archaeologist (NGA) – the position became permanent in November. For the first four months he worked out of the Provincial Archaeology Office (PAO) in St. John's and in late July he and his family moved to Nain on the north coast of Labrador. Since that time he has been working out of the Torgâsok Cultural Centre (TCC), which is located in that community.

The fieldwork discussed below was carried out in August of 2008, and these projects represent the first fieldwork Mr. Brake has conducted as the NGA within the land claims area.

Saglek Bay

In late July 2008, Mr. Brake was invited to spend a week at the Parks Canada base camp at St. John's Harbour, Saglek Bay. The invitation came at a convenient time since there were concerns about research related ground disturbance in the vicinity of the camp which was planned for later in the summer.

On August 3rd the archaeologist traveled from Nain to the Saglek airstrip by plane and then to St. John's Harbour by long-liner. On Monday August 4th the NGA spent time on Rose Island with Parks Canada archaeologist Jenneth Curtis and assisted her in locating several known archaeological sites, and in mapping archaeological features (figure 1 and 2). On August 5th and 6th, the NGA traveled with groups from the camp to Rose Island and North Arm where sites and features were also observed and photographed (figure 3 and 4). The archaeologists acted as interpreters on these occasions.

On August 8th Mr. Brake, in the company of two polar bear monitors, visited three known sites near the Parks Canada base camp (IcCq-03, 04 and 11) and assessed the area where there was concern about possible impacts to archaeological resources from the research activity mentioned above. Artifacts and features were observed at each of the known sites and the locations of these sites were verified using a GPS. No artifacts were collected. No evidence of human activity was observed in the area where research involving ground disturbance was to be carried out. Therefore there were no longer any concerns with the work proposed for that area, which is located approximately one kilometer southwest of the camp.

IcCq-03:

This site was described by Thomson (1980) as "5 tent rings, a cabin and a burial". No tent rings were observed near the coordinates recorded by Thomson for this site, although the remains of a cabin were clearly visible. One of the bear monitors with the NGA on August 8th noticed and pointed out what appears to be a grave. Photographs and GPS coordinates were taken.

IcCq-04:

The location of this site was verified using a handheld GPS unit and lithic artifacts, including

Figure 1: Rose Island Site Q (IdCr-06) (Brake)

Figure 2: Sod house village on Rose Island (IdCr-02) (Brake)

Figure 3: North Arm, Saglek Bay (Brake)

Figure 4: Tent rings on the beach at North Arm (Brake)

Figure 5: Ramah chert flake, and possible quartz microblade core at IcCq-04, August 8, 2008 (Brake)

Ramah chert flakes and a possible quartz crystal microblade core were observed on the surface of the ground (figure 5). Photos were taken of observed artifacts but nothing was collected. A recent tent ring was observed on a lower terrace nearby, just above the active beach. The presence of a quartz crystal microblade core would support the interpretation of this site as evidence of Dorset Paleoeskimo use of the area.

IcCq-11:

According to NG and PAO records, this is a large Maritime Archaic Indian site with two loci. There is also a recent Inuit component, represented by tent rings on the lowest terrace just above the active beach. Near the cabin are many rock features, some partially buried which may be related to the Maritime Archaic use of the site (figure 6). One large Ramah chert flake was observed on a caribou trail on the slope just west of the standing cabin. Site record form information suggests that there are likely in situ deposits at IcCq-11. Photos of stone features and the Ramah chert flake mentioned above were taken this August. The flake was not collected.

Figure 6: Parks Canada base Camp and IcCq-11. Tent rings are visible on the lowest terrace right above the active beach (circled in black). Other stone features are visible on the next terrace closer to the cabin (circled in red) (Brake)

Hebron

On August 29th Mr. Brake traveled by helicopter to Hebron where crews were working to stabilize the main Moravian mission house at the abandoned settlement (figure 7). The Director of the Torngâsok Cultural Centre (TCC) had informed the archaeologist

days before of the possibility that the construction company, which was responsible for the restoration project, might be planning to burn waste material in a different location than they had been using up to that point. There were worries about potential negative impacts on historic resources that could result from this. That day the on-site foreman assured the archaeologist that fires would continue to be made in the original location and that the TCC will be contacted if a new location is to be considered in the future.

After speaking with the foreman, the NGA had time to observe features at IbCp-17 (the mission site which has pre-contact and historic components [figure 8]) and IbCp-40 (a pre-contact Inuit grave field). After dinner, the family that had been hired to stay at Hebron for the summer to keep track of visitors wanted to show Mr. Brake and his companions the Inuit burial features at IbCp-42. Bryan Hood (1997 a; 1997 b) describes viewing these graves from a distance when he was in the area 11 years ago. A handheld GPS was used to verify that the coordinates listed in the NG and PAO archaeology databases for these sites are correct. Digital photographs were also taken of archaeological features at each location. No artifacts were collected on this occasion - the only activities being observation, photography, and verification of site location data.

Acknowledgements

First of all I would like to thank my whole family for everything. I would like to express my gratitude to Delphina Mercer, Stephen Hull, Ken Reynolds and Martha Drake at the PAO for teaching me so much about government archaeology and for

Figure 7: Aerial Photo of Hebron, August 20th, 2008 (Brake)

Figure 8: Inuit Sod Houses at IbCp-17, August 29, 2008 (Brake)

being so great. Thanks to my MA supervisor Dr. Lisa Rankin, to Dr. Priscilla Renouf, Dr. John Erwin, Elaine Anton and Scott Neilsen. I would also like to thank Catharyn Andersen, Rita Andersen, Toni White, and Derek Kowalchuk at the TCC. Finally, I would like to thank all the people in Nain and throughout Nunatsiavut who have been so kind and welcoming to my family and me – the time we have spent so far in your beautiful land has been absolutely wonderful.

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FOOTSTEPS, LANDSCAPE AND MEMORY: 2008 FIELDWORK AT GREEN ISLAND 6, LABRADOR

Maryse Cloutier-Gélinas, Memorial University and Iky Merkuratsuk, Nain

On July 20 2008, members of the Green Island Archaeological Project set off for Green Island (Okak Bay, Labrador) (Figure 1) to complete the final field season of a four year archaeological project directed by Dr. Peter Whitridge (Memorial University of Newfoundland) and Dr. James Woollett (Université Laval, Québec). Archaeological work aimed at documenting the precontact Inuit settlement of Green Island 6 (HkCk-01), but as we walked around the island GPS in hand, we discovered that it was marked by the footsteps of many Inuit and pre-Inuit groups. In this report we undertake a guided tour of the island emphasizing certain features that, despite the apparent subtlety of their imprint on the landscape, appeared to us culturally rich and spatially intriguing.

The first sight we caught of Green Island was when we arrived by boat on a foggy late afternoon. Passing along its eastern coast, consisting of high cliffs that dive into the sea, we reached the archaeological site (HkCk-01) located on the north shore (Figure 2) (Figure 3). The site area, which is about 1.2 km long, is composed of three terraces (the settlement itself is situated on the lower one), and is surrounded by two high hills (to the east and west), a plateau to the south, and the ocean to the north, as well as various islands in the distance (among which Table Hill rises as a landmark). In fact, there doesn't seem to be much horizon, for these natural features create an enclosure in which the settlement was located long ago. Although the precontact Inuit component of the site is more apparent, several historic features, such as tent rings, have been

Figure 1: Map showing location of Green Island, in Okak Bay, Labrador
(Image modified from "The Atlas of Canada" online resources, http://atlas.nrcan.gc.ca/) (Cloutier-Gélinas & Merkuratsuk)

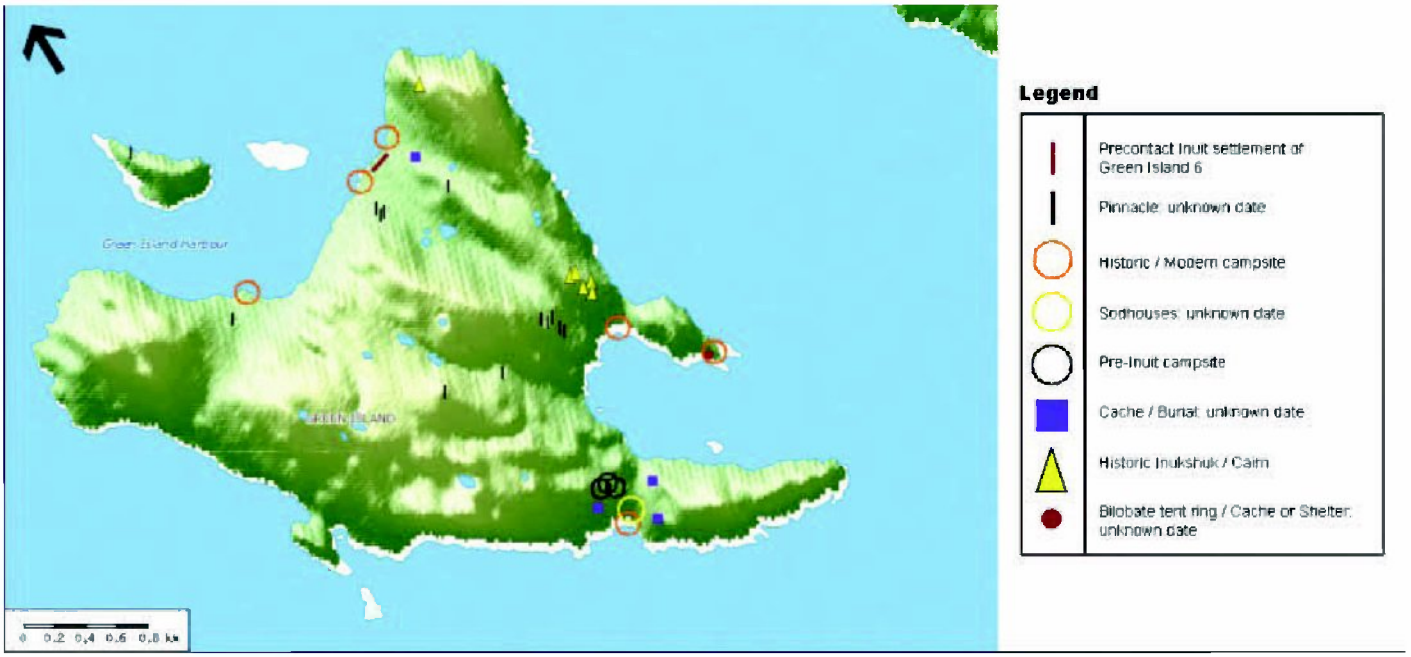

Figure 2: Topographic map showing the locations of features mentioned in the text
(Image modified from "The Atlas of Canada" online resources, http://atlas.nrcan.gc.ca/) (Cloutier-Gélinas & Merkuratsuk)

Figure 3: The archaeological site of Green Island 6, viewed from the east.
(Picture courtesy of Maryse Cloutier-Gélinas) (Cloutier-Gélinas & Merkuratsuk)

Figure 4: Stone pinnacle
(Picture courtesy of Dr. Peter Whitridge) (Cloutier-Gélinas & Merkuratsuk)

Figure 5: Two white stones found inside a cache located in the interior of the bilobate structure.
(Picture courtesy of Maryse Cloutier-Gélinas) (Cloutier-Gélinas & Merkuratsuk)

Figure 6: Cache or shelter situated near a historic settlement
(Picture courtesy of Maryse Cloutier-Gélinas) (Cloutier-Gélinas & Merkuratsuk)

recorded, as well as a large structure, possibly ceremonial, that still remains to be investigated.

The first step in situating the settlement in the landscape was to get acquainted with its immediate surroundings. We thus explored both the west and east hills. They appeared to us almost devoid of human traces, and only a fallen Inukshuk or cairn and a box cache or burial were found on the eastern slope. We then were dragged southward into the valley formed by these two hills, and we reached a modern settlement situated on the north side of the southeast bay. From there, we noticed several highly interesting features. On the eastern slope five Inukshuit seemed to look over a modern summer camp, while on the opposite hillside stood five stone pinnacles[1] (Figure 4).

Walking on to the end of the southeastern peninsula, we came across what seemed to be a historic camp (due to the presence of glass shards and iron fragments), featuring several substantial tent rings and caches built alongside huge boulders. Not far from there, two stone structures came to our particular interest: The first one consisted of a small tent ring, located to the northeast of the summer camp. It measured about 2m by 2m, and although lichen and moss growth seemed to indicate that it wasn't very old, its internal structure was arranged in what we typically associate with precontact Inuit sod houses. It was bilobate in shape, and each lobe, separated by a possible lampstand, had a platform at the back. A small cache on the right side of the main platform contained two fist-sized creamy white stones (Figure 5). The second feature that caught our attention was a cache or a shelter that was big enough for two or three people to sit inside (Figure 6). The architecture was impressive, and many strategically positioned stones balanced large boulders. It was built alongside a small cliff (which it used as a back wall) situated to the northwest of the historic camp. It was hidden from sight, as well as from the high ocean winds.

Continuing along the bay, in a westerly direction, we recorded two more pinnacles. As we arrived in

[1]Because little research has been done on the subject, and also because they do not seem to figure in Inuit oral tradition, only few things can be said about these peculiar features. Kaplan (1983:522-526) argues that, due to their location near precontact Inuit camps and the fact that these people were "great architects" (1983:526), they may be tied to this particular cultural group. However, upon further investigation, the same reasoning could be called upon regarding pre-Inuit groups.

a valley situated at the entrance of the southwest peninsula, we recorded a pre-Inuit campsite containing ramah and nephrite scatters. To the southeast, on top of the hill overlooking both the valley and the inner bay, stood a solitary cache. It was square in shape, apparently made with the same care usually seen in burial structures. A "twin" of this cache was discovered further west of it, also on top of a hill. This one, however, was perched above a group of historic tent rings, which were associated with several stone caches built alongside large boulders and rock cliffs. Two sod houses were also recorded, of which one possibly dated to pre-Inuit times (personal communication with Dr James Woollett, July 2008), and the other could not be dated. Both were built on the terrace overlooking the cobble beach on which the tent rings are located. As Dr. Woollett interestingly pointed out, this site seems to mirror (both in location and in spatial organization) the larger historic winter settlement of Uivak Point (HjCl-09), situated on the mainland at the entrance of Okak Bay, directly west of Green Island. Finally, a burial was found on the hill situated to the north, as well as two other possibly pre-Inuit tent rings (personal communication with Dr Peter Whitridge and Dr James Woollett, July 2008).

Later on in the season, probably as our eyes became accustomed to the sights, we identified a group of pinnacles erected about 500m west of Green Island 6. A brief visit to the northern part of the island allowed us to identify two others: one was on the island itself, located about 100m from the shores, while the other was erected at the top of the largest island situated in Green Island Harbour.

So in the end, what can be said about this landscape? Why is it archaeologically so interesting? Although Green Island could be considered to be of a "small" size, about 4km by 4 km overall, it shows signs of heavy human occupation dating back centuries. Why is this so? A possible explanation would be that Green Island acted as a middle ground between northern areas, such as Ramah Bay, and southern regions like Nain. No doubt there is more to it, and further research could be made on the subject.

Green Island is mostly covered by rocky hills, especially on its western half. Narrow valleys occur in between hills and on the isthmus connecting the "mainland" and the peninsulas. So far, we have observed that most settlements seem to concentrate in these areas, as well as along the shores. No doubt they offered shelter from the high winds, as well as proper fishing and hunting grounds. However, it would be interesting to push further with our archaeological questioning, and investigate if and how structures and settlement are tied to the landscape, and to more cosmological considerations. In fact, the presence of features such as pinnacles, and the above-mentioned caches, seem to lead us towards functional as well as symbolic interpretations.

Finally, discussing how limited our own surveys of the landscape were can only further assess the archaeological potential of Green Island as a place in geography, time and mind. First, our work focused on the settlement of Green Island 6 and its expression of long-term changes in Inuit household economies in Northern Labrador. As such, we did not have time to walk around the entire landscape. Furthermore, we limited ourselves to more readily accessible destinations, thus leaving aside the hilly western section of the island. Second, as proven by the fact that we only saw the pinnacles situated near our camp late in the season, one's eyes must become accustomed to a certain place in order to understand it. No doubt we probably walked right by other interesting features without even noticing them. Third, the way we experience the world is inexorably linked to our perception and subjectivity. In this particular case, not only were our archaeological eyes foreign to this land, but we were also envisioning structures in a landscape that would most likely have been covered in snow if we were to understand at least half of its components. In conclusion, if such a brief exploration of Green Island could raise as many questions as we have proposed in this report, it goes without saying that further research would prove to be socially, methodologically, and theoretically fruitful.

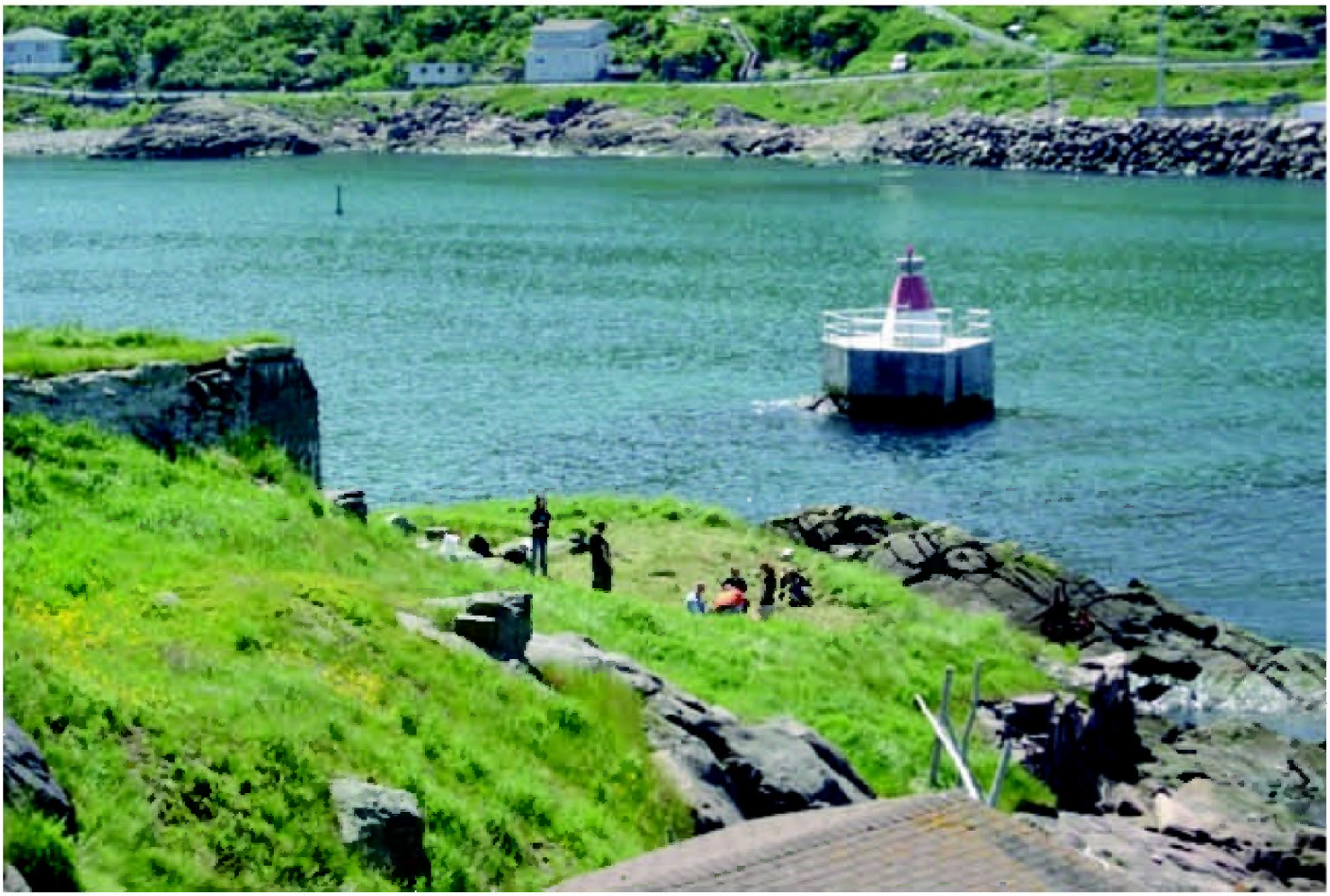

Figure 1: Chain Rock Battery locality at Signal Hill National Historic Site (Crompton)

SIGNAL HILL NATIONAL HISTORIC SITE: MEMORIAL UNIVERSITY'S ARCHAEOLOGY FIELD SCHOOL AND PARKS CANADA

Amanda Crompton
Memorial University

Archaeological excavations at Signal Hill National Historic Site in St. John's were undertaken during July and August of 2008. This was a joint venture between Memorial University's Archaeology Field School and Parks Canada. This project provided field school participants with a unique opportunity to learn archaeological excavation methods during the excavation of a historic-period site. Our work centred on the Chain Rock Battery locality at Signal Hill NHS; the work area was a low-lying terrace that projects into the Narrows, at the entrance to the harbour (See Photo 1). Our research focused on identifying the range of archaeological deposits at the site. Documentary evidence indicates that this area was home to some of the Park's earliest fortifications, and use of the site continued right up through the Second World War. This terrace had never been evaluated archaeologically, and is threatened by erosion and instability. Thus, the project was able to combine a research agenda with corresponding cultural resource management goals set in place by Parks Canada.

Our project was able to determine that twentieth century occupations (both Second World War and post-war) are easily demonstrable at the site; these occupations have, to some degree, disturbed older contexts. However, an undisturbed context was discovered below these layers, provisionally dated from the late eighteenth through to the mid-nineteenth century. An artificial terrace and retaining wall had been constructed of stone (see lower terrace and stone wall in Photo 2); below this lay the remains of a small midden, containing fish and mammal bone and broken ceramics. This midden lay on top of a second rubble-filled terrace, which likely extended right out to the outer boundary of the Chain Rock terrace. There may well

Figure 2: Artificial terrace and retaining wall (Crompton)

be older deposits below this, covered by the nineteenth-century construction. However, we left the nineteenth-century walls and rubble terraces *in situ* so that we would not destabilize the extant stone retaining walls that surround the locality today. The Chain Rock excavations provided a glimpse into this little-known occupation at Signal Hill, and we hope to continue this joint venture between the Memorial University Field School and Parks Canada in the future.

EXCAVATIONS AT THE BANK SITE, TERRA NOVA NATIONAL PARK

Jenneth Curtis
Parks Canada

In June 2008 Terra Nova National Park conducted salvage excavations at the Bank Site (DdAk-5) located on the north shore of Clode Sound. The Bank Site was originally identified during the 1979 archaeological survey of Terra Nova National Park directed by Jim Tuck (1980:37). Monitoring visits by Parks Canada staff in the early 1990's indicated that the site was also documented. In September 2007 a monitoring visit to the site again revealed that the rapid erosion was threatening cultural deposits. The author thus returned to the site to direct additional salvage excavations in June 2008. An area of 16 m^2 was opened along the eastern part of the bank and excavated by trowel. Diagnostic artifacts were piece plotted while screening and flotation recovered abundant lithic debitage. The results add significantly to the Dorset and Recent Indian components at the site and hint at a previously unrecognized, early European presence.

Figure 1: View of the Bank Site from Clode Sound (the excavation area is just behind the birch tree at the right end of the eroding bank) (Curtis)

larger and more significant than previously believed. It was also rapidly eroding along the front of the bank. In response to these observations, Fred Schwarz led a salvage excavation on the bank area in 1992. His excavation showed the Bank Site to be a complex, stratified site with components dating from the Maritime Archaic through Groswater and Dorset Palaeoeskimo to the Recent Indian period. The Recent Indian component consisted of a linear hearth feature associated with a large number (13) of Ramah chert points (Schwarz 1992:68 and Table 12). Two Dorset house structures with associated features and middens were

Recent Indian

The 2008 excavations exposed the end of the linear hearth feature that had been partially excavated by Schwarz in 1992, giving this feature a total length of 7.5 m. An additional corner-notched point of Ramah chert was recovered (Figure 2, top left). The excavations also expanded the extent of the Recent Indian component with the identification of two smaller hearths a few metres away from the linear hearth. One of these hearths consisted of an oval concentration of fire-cracked-rock. The other was a circular hearth capped with an 8 cm thick deposit of uniform, water-

Figure 2: Recent Indian Points (Curtis)

worn gravel. Several corner-notched points of grey chert and rhyolite were associated with these two hearths (Figure 2).

Dorset Palaeoeskimo

The Dorset component was encountered across the entire excavation area, stretching from the edge of a house structure excavated by Schwarz (1992) to a slope midden and additional features beyond it. Portions of the house floor and an earth wall were identified atop the bank. Just outside the wall the bank began to slope downwards towards the east and this area was covered by a midden that was at least 20 cm thick in places. Where the slope began to flatten out an additional axial feature was represented by a darker-coloured soil and several fire-reddened stone slabs (Figure 3). It was not clear whether this feature represented a third house or an outdoor activity area, but it

Figure 3: Axial Feature represented by dark band across the centre of the unit. The fire reddened slabs are beginning to appear to the left (Curtis)

was surrounded by a dense deposit of small lithic debitage.

European

A cluster of European ceramic fragments in the easternmost excavation unit hinted at an early 18th century visit to the site. Three objects were represented: a coarse, red earthenware vessel with a green glazed interior (Figure 4); a finer, buff-coloured earthenware (surfaces were completely exfoliated); and a ceramic pipe (stem fragments). The red earthenware vessel may be a Mediterranean ware and would thus suggest the presence of French fishermen. Though the Bonavista Bay area was nominally part of the French Shore at this time, the French confined their fishing area further to the north and English settlement of the area continued (Major 1983:22).

The analyses of the results of these excavations are ongoing and promise to add more details to our understanding of the Recent Indian and Dorset Palaeoeskimo occupation of the Bonavista Bay area. Due to the complexity and richness of the deposits at the Bank Site we were not able to reach the bottom of the cultural layers and thus plan to continue salvage work at the site in 2009.

Acknowlegements

Thanks to Christina Fry, Starlen Thistle, Stephanie Kean, and Marcus Hancock for their work as members of the excavation crew and to Terra Nova National Park staff, especially Kevin Robinson and Barb Linehan, for their interest and support with logistics for the project.

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Figure 4: European ceramic (Curtis)

UNDERWATER ARCHAEOLOGY AT L'ANSE AUX MEADOWS NATIONAL HISTORIC SITE OF CANADA IN 2008

Charles Dagneau and Jonathan Moore
Underwater Archaeology Service, Parks Canada Agency

In 2008 Parks Canada's Underwater Archaeology Service (UAS) began the first phase of a multi-year project at L'Anse aux Meadows. The aim is to complete a submerged cultural resource inventory of the marine component of L'Anse aux Meadows National Historic Site of Canada (NHS), a 49km^2 area encompassing Sacred Bay and adjacent minor inlets as well as numerous islands, shoals and reefs (Figure 1). More specifically, this project attempts to locate and evaluate a range of archaeological site types representing all chronological periods of regional history and prehistory.

The principal reason for the creation of the marine component of the NHS was to ensure the protection of potential marine cultural remains associated with the terrestrial Norse site (EjAv-1). While it is possible that there are marine sites related to this period, there is no certainty that they exist or can be detected.

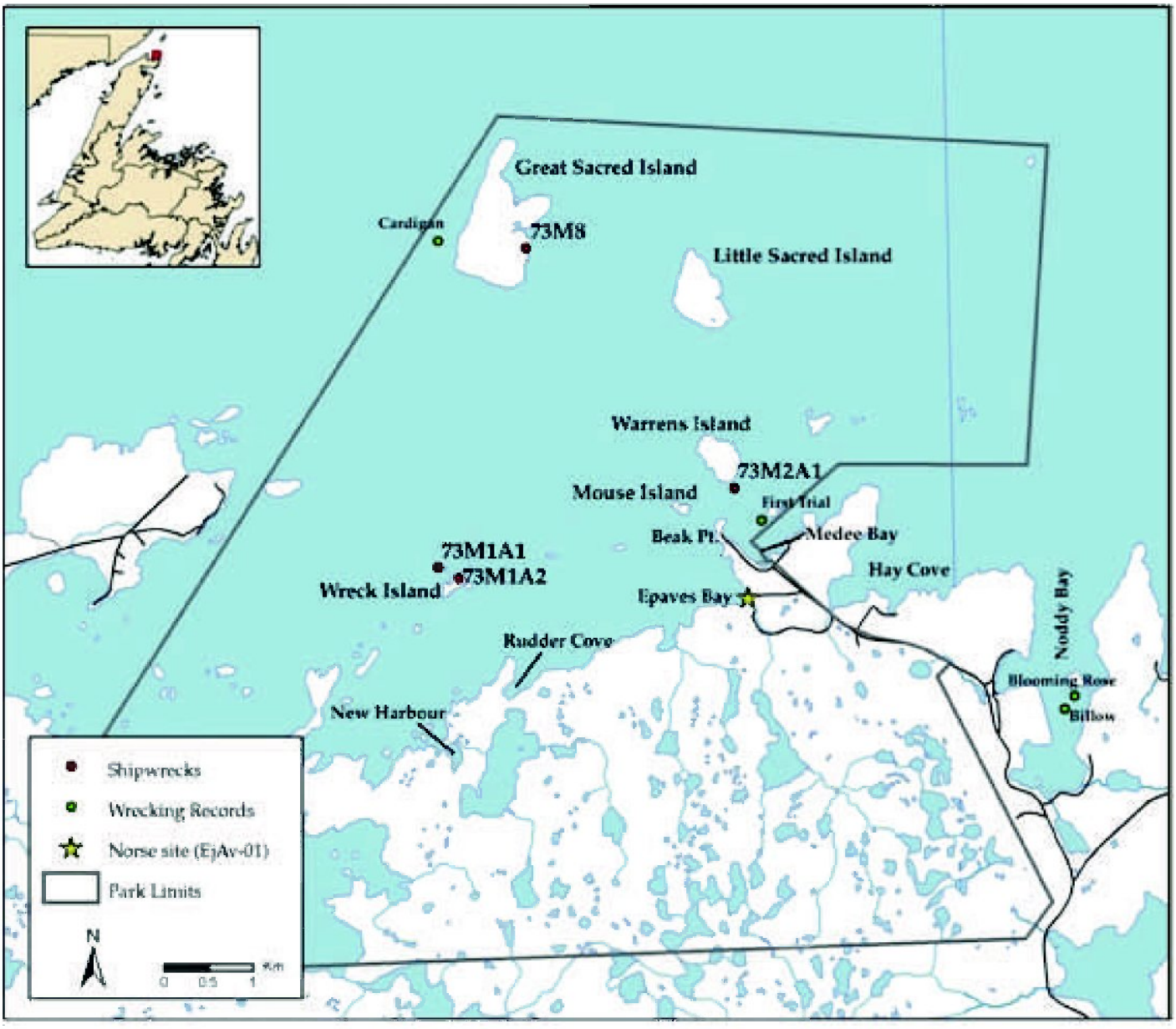
It is taken for granted that a full chronological range of sites are to be found during the inventory and each site type would have a particular significance at a local, regional, provincial or national level.

The UAS survey took place from July 19th to July 29th, 2008 and team members included Jonathan Moore (permit holder), Ryan Harris, Charles Dagneau and Chriss Ludin. Additional fieldwork will be required in 2009 and possibly 2010, each with a duration of approximately four weeks.

Archaeological Background

No comprehensive underwater archaeological survey of the study area has been undertaken in the past, although the 2008 UAS project was certainly not the first time the area has been searched. Indeed, in the mid-1970s, Parks Canada underwater archaeologist Walter Zacharchuk conducted a limited diving search of Épaves Bay near the Norse site. Over the last several decades recreational diving has taken place in the area, and a number of shipwreck sites are known. In 2005 a UAS team conducted a reconnaissance of the region and made a single dive off Wreck Island. No archaeological finds were observed during this short visit. Information on known or suspected wreck sites

Figure 1: General map of the study area (Dagneau & Moore)



was collected and initial contacts were made with the diving community.

Objectives

The overall objective of this project is to provide information on the number and distribution of underwater archaeological sites to allow informed cultural resource management (CRM) decisions regarding the marine component of the NHS (Parks Canada 2003: 28-31, 36-37). The specific objectives of the 2008 survey were as follows:

- Begin a comprehensive side-scan sonar survey of the marine component of L'Anse aux Meadows NHS, with particular emphasis on areas bordering the terrestrial archaeological site as well as known underwater sites;
- Conduct selected target diving, shoreline searches and other reconnaissance work when weather and wind conditions preclude sonar surveying; and
- Meet local stakeholders and Parks Canada staff to provide an introduction to the UAS and the project and to gather local information.

Methodology

This inventory combines several means of archaeological field investigation, including side-scan sonar, shoreline fieldwalking searches, shoreline dive searches and target or site diving, inspection and recording. Search areas are determined based on previous archaeological work, other known site locations, historical information including oral tradition, local topography and information from local fishermen (such as fishing gear snag spots).

Most of the planned survey work was to be done with the side-scan sonar system for fast and effective coverage of large areas of the seabed. The UAS employs a Klein 3000 side-scan sonar that is towed by its diving and survey boat *Red Bay* equipped with accurate differential GPS equipment. Unfortunately, the *Red Bay's* trailer was damaged on the highway while en route to L'Anse aux Meadows, so the boat was not available for the entire operation. Only limited sonar

Figure 2: Divers conducting an underwater survey in front of the Norse site, EjAv-1 (Moore)

trials with a rented boat could be accomplished.

In the absence of the side-scan sonar gear, the UAS team focused on diving searches and investigations. The diving operations were made from a UAS inflatable boat and a rented speed boat. In addition, shoreline fieldwalking searches were made at low tide. Relatively large areas of the tidal flats and shorelines were covered in this way. Three archaeological sites were discovered and partly studied in 2008 using these two methods, and include the Warrens Island Wreck, Bell Shoals Wreck and the Wreck Island Boat.

Survey Areas and Site Descriptions

Side-scan Sonar Survey

During one half-day when side-scan surveying could be deployed, a remote survey was conducted in an area northwest of Beak Point, around Mouse Island. Local fishermen had reported snagging fishing gear there and hauling out from the water a ship's timber in the past. Reportedly a schooner named the *Nelson* was lost in that area sometime during World War II. At the time, "Canadian authorities" based at Cape Bauld had to dynamite a projecting spar as it posed a hazard to navigation. No shipwreck was located during that brief survey. Some official accounts of this wrecking and the clearance work still remain to be found.

Dive Searches

Dive searches were conducted in front of the Norse settlement in Épaves Bay (73M6A1), as well as other locations through the park, namely New Harbour (Pond Cove, 73M4), Rudder Cove (Duck Pond Cove, 73M7), Atlantic Shoal (Lower Wreck Cove, 73M5) and Bell Shoals (Wreck Island, 73M1). A total of nearly 10 hours was spent underwater, mostly at shallow depths ranging from 1 to 8 meters.

In all cases, a team of two divers usually cover an area following specific depth lines or compass bearings. While searching for cultural remains, divers specify bottom type and depths to the surface using an underwater communication system. Waypoints are taken in the meantime with a handheld GPS to accurately record the diver search tracks, and relevant observations or discoveries. While conducting these searches, invaluable information was gathered on the sea bottom nature in order to guide future survey. Only one site was discovered during dive search survey. It constitutes the remains of a shipwreck lost on Bell shoals, North of Wreck Island, that will be addressed later.

Shoreline Searches

Terrestrial surveys are intended to be carried out along the shores at selected locations inside L'Anse aux Meadows NHS. The 2008 fieldwork included land searches in Médée Bay shores and Wreck Island. The first area, in Médée Bay, ranged from the government wharf to Beak Point traveling westward. It was chosen mainly for its easy access and a known history of occupation. The remains of a presumed "French Oven" are apparently located in the village of L'Anse aux Meadows, not far off the shore. Among a host of later and more modern artefacts on the foreshore, a number of finds of ceramics from the eighteenth or nineteenth centuries were found, probably of French and British origin.

A land search was also conducted around the circumference of Wreck Island, following a local custom stating that a vessel carrying a large bronze bell en route for England was wrecked on Bell Shoals. Flint stones supposedly from a British ship's ballast have also been collected by local fishermen for many years and can still be found on the north shore of Wreck Island. Whether or not these two lines of evidence are related is not known at present. Interestingly, flint samples collected by the UAS and later analyzed by a geologist were found not to be indigenous to Northeastern America. The sampled chert in fact would correspond most probably to ship ballast originating from the Strait of Dover, separating France and England (Desrochers 2008).

Bell Shoals Wreck (73M1A1)

A few diagnostic shipwreck remains were discovered during a dive search around Bell Shoals, off Wreck Island. Divers encountered a brass gudgeon fragment, most probably from a ship's rudder, next to an iron knee and a nail. Meaningless for some, these small pieces of artefacts may indicate that a ship was stranded on the Bell Shoals before sinking in the deeper surrounding waters. These remains might relate to the ballast stones found on nearby Wreck Island or they may represent another navigation accident.

Wreck Island Boat (73M1A2)

A small, late 20th-century wooden boat was discovered on the rocks at the Northwestern end of Wreck Island. The site, named the Wreck Island Boat (73M1A2), consists of a small keeled lighter partly disassembled and with a broken sternpost.

Warrens Island Wreck (73M2A1)

This site consists of a portion of ship's hull preserved on the rocky sea bottom of the "Boat Channel", between Warrens Island and Beak Point on the mainland (Figure 3). The wreck was reported to the UAS by a local diver as well as a Parks Canada staff member, Clayton Colbourne. He graciously placed a marker buoy on the wreck prior to a UAS diving inspection.

Figure 3: Underwater site inspection on Warrens Island Wreck (Harris)

The highly eroded hull structure section is approximately 7 meters long and 2.5 meters wide. It includes 15 relatively flat and parallel futtocks, forming 8 to 9 assembled frames. Ceiling is not preserved, but the external planking is visible under and around the framing. These are fastened to the frames mostly with wooden treenails, even though a few copper alloy pins were also found. Many loose copper pins from lateral frame fastening are exposed here and there on the site. There is no evidence of a keel or other main axial timber on the remains. No evidence of sheeting was found either. A concentration of small stones (10-30 cm) situated on one side of the wreck could be considered as part of the ship's ballast and could also cover more structure. From these observations, this shipwreck most likely dates from the 19th century. Local residents refer to the wreck as the "Carrigan" (spelled variably) but there is no evidence supporting such identification for now.

Beached Ship Timber (73M99X-001)

A ship timber fragment found ashore in Médée Bay after a storm is believed to come from the Warrens Island Wreck. Since the construction type, dimensions and appearance of the timber are similar to the ones observed on the Warrens Island Wreck, it is very likely it is associated with the ship remains. Wood analysis conducted by Louis Laflèche at Parks Canada Ontario Service Center reveals the timber is made out of Birch (*Betula* sp.).

Langleycraag (73M8)

The wreck of the *Langleycraag* stands high on Great Sacred Island's south shore where it was stranded on November 15, 1947. It is a highly visible and distinctive maritime archaeological site that attracts considerable interest from visitors to L'Anse aux Meadows. Despite the fact that most of the wreck lies on shore, it is possible that a debris field exists underwater. Indeed, local residents report that divers removed a bronze propeller in the 1970s. The wreck was apparently moved and tipped by a subsequent storm, around 1985-1990. Historical research on the ship and its loss remain to be completed. No archaeological investigation was carried out at the wreck site.

Conclusion

These preliminary results are promising for the coming years. Now the UAS team has a better idea of L'Anse aux Meadows' operational environment and marine component. A few interesting sites were discovered and it is hoped more will be found in the study area with the use of a side-scan sonar in 2009. Excellent contacts were established with the local community, especially with fishermen and many Parks Canada local staff. The UAS team also benefited from the use of the local Parks Canada facilities for the survey. An update on the project's progress will be provided in next year's PAO Archaeology Review.

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THE A-20 HAVOC RECOVERY PROJECT

Michael Deal
Memorial University

In the fall of 2008 members of the MUN Archaeology Unit (Michael Deal and Lisa Daly) and a representative of the North Atlantic Aviation Museum (David Hebbard) took part in the recovery of a downed World War II Douglas A-20 Havoc that crash landed 122 km southwest of Goose Bay, Labrador, on October 10, 1942. The archaeological survey of the site was sponsored by Underwater Admiralty Sciences (UAS). The U.S. Department of the Air Force waived ownership of the downed aircraft, and UAS claimed it as salvage (Allen 2008). On March 10, 2008, UAS received permission from the Minister, Department of Tourism, Culture and Recreation, to recover the aircraft.

The A-20 was part of the very successful Douglas DB-7 Series of aircraft, which had a total production run of over 7000 units for all models (Jackson 2004:122). According to the Aircraft Service Card acquired from the US Air Force, the aircraft wreck at FbCj-01 is a Douglas A-20 (F-3) serial number 39-741 (AAF 1942). It was one of 63 A-20 units ordered by the US Army Air Corps from the Douglas Aircraft Company in 1939. It and two other units were modified as prototypes of a high-speed photographic reconnaissance aircraft, and served under the designation F-3. It was provided with two Wright Cyclone R2600-11 engines. The identification markings on the wreck had been effaced, but according to Mark Allen (per. comm.), the UAS crew discovered "F-3 #2" painted on all of the interior sides of the speed rings from #2 engine. He believes that the "F-3 #2" confirms that this wreck is the second F-3 unit.

Today, less than 10 units of the A-20 (all models) can be found in museums around the world (e.g., Blaugher 2007), making A-20 (F-3) #39-741 a very rare aircraft. The UAS objective was to disassemble the aircraft and ship it to Legendat Flyers in Everett, Washington, for restoration and eventual museum display. The archaeological component of the recovery had the following objectives:

1. To monitor and record the aircraft recovery proc-

ess.

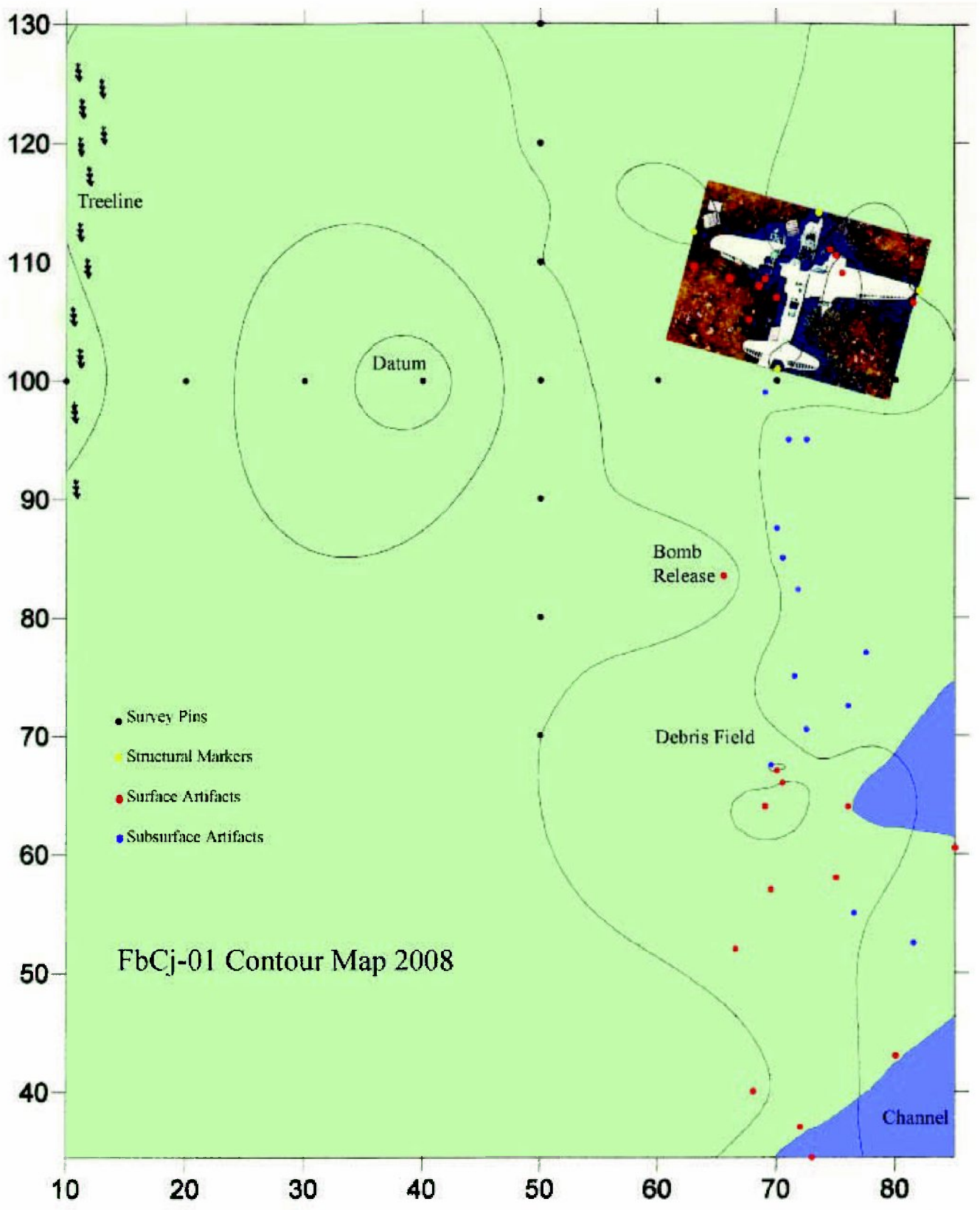
2. To produce an archaeological survey map of the aircraft *in situ* and the debris field.
3. To record and recover any material culture not attached to the main body of the aircraft (such as under the wreck and in the debris field).
4. To visit and record other aircraft crash sites in the Goose Bay area as a continuation of ongoing attempts to inventory aviation resources in the province.

The crash site (FbCj-01) is located in a remote portion of the Little Mecatina River, southwestern Labrador. Helicopter support was provided by 444 Combat Support Squadron, 5 Wing Goose Bay, which treated the operation as a training exercise. Logistical problems and weather conditions were factors in the recovery operation. Original plans called for the use of two helicopters, but one aircraft was out of service until the last two days of the project. The helicopter squadron also received orders for redeployment, which shortened the recovery window by two days. Furthermore, initial access to the site was delayed for two days due to high winds and a cloud cover too low for helicopter flights. The wreck was situated in a bog, between the treeline and river (see Figure 1). Heavy rains from the tail-end of two hurricanes left the bog highly saturated, which slowed down the recovery and archaeological survey.

The recovery operation began on October 2. Before the UAS crew began their work, the archaeology crew sat up a site datum and began mapping the crash site and debris field. In other to situate the air-

Figure 1: Physical location of site FbCj-01 along the Little Mecatina River. This photograph was taken by 444 Squadron prior to the recovery operation (Deal)

Figure 2: Contour map of FbCj-01 indicating location of wreck site and debris field (Deal)



craft on the grid, four fluorescent pins were placed at the extremities of the aircraft (nose, tail and wing tips). A photograph was taken from directly above the wreck so that the image of the aircraft could be superimposed onto the survey map (Figure 2).

The UAS plan was to airlift the aircraft in sections by helicopter to a trans-shipment point. The aircraft disassembly began with the tail section and proceeded to the wings and engines. Large lift bags were used to raise each section (Figure 3). The engines proved to be difficult to detach, due to the means of manufacture and construction. The engines were eventually removed from the nacelle firewalls to be recovered at a later date. The wings were also left at the site due to time constraints, but 444 Squadron agreed to bring them out at the first opportunity.

Figure 3: Tail section and port wing lifted by air bags. Note extensive damage to underbelly of fuselage and tail section (Deal)

The archaeological survey continued with laying in a grid system and taking elevation measurements for a contour map of the site. Surface materials around the wreck and the debris field were then recorded. A metal detector was used to search the debris field for buried parts of the aircraft. On the first run the MUN ferrous iron metal detector was used and no hits were recorded. When we switched to a UAS metal detector, which also scanned for aluminium, several hits were recorded and these points were added to the survey map. As time permitted, we attempted to recover the buried materials. Some pieces were deeply buried in the bog and had to be abandoned.

A total of 35 artifacts were recorded, and five additional hits were made by the metal detector on unrecovered objects. Significant artifacts from the debris field included the cockpit escape hatch, window frame sections with plexiglas from the cockpit "greenhouse" (Figure 4), the bomb release frame and lever, and the reconnaissance camera (Figure 5). The latter, along with a brass US uniform pin were returned to the conservation laboratory at Memorial University for treatment. Two fragments of film from the camera were freeze-dried and the case and cover were dried and cleaned. The brass pin was mechanically cleaned using swabs and ethanol, then immersed in a 3% BTA and ethanol solution under vacuum, rinsed with ethanol, and finally, two coats of 3% B72 and acetone solution were applied. The brass pin has since been returned to UAS, while the camera will be loaned to the North Atlantic Aviation Museum for a new display on the A-20 recovery.

The Service Card for the Labrador wreck states that the pilot, Captain Secord, crash landed the aircraft

due to low fuel. The crew was rescued, but the aircraft had to be abandoned. The debris field at the site indicates that it approached the bog at a bearing of 85 degrees to the northwest. It may have hit tail first, tearing

Figure 4: Douglas A-20 Havoc being serviced at Langley Field, Virginia, July 1942. Note lowered cockpit hatch (beside wheel) and plexiglass windows in the greenhouse. (Source: United States Office of War Information Photograph Collection at the Library of Congress, call number LC-USW361-203).(Deal)

away the underbelly. A concentration of artifacts from the cockpit area indicates that the nose of the aircraft hit hard and was torn away, leaving much of it imbedded in the bog. The aircraft then veered to the right and came to a stop at a bearing of 115 degrees to the northeast. Due to its remote location, the aircraft has remained relatively in tact, although the propeller of the starboard engine has been removed. There is also evidence of fire in the cockpit area, which may have been set by military personnel or by collectors. The film in the reconnaissance camera was probably removed shortly after the crash.

Information was collected on several other aviation crash sites in the Goose Bay area. One of these sites was visited and later given the Bordon designation FhCd-01. It is the crash site of a Cold War reconnaissance aircraft (a USAF RB-45C Tornado, serial number BE-032). It crashed in a hilly area 13 km southwest of Goose Bay (Anonymous 1951). A temporary site datum was established and photographs were taken of the wreckage. The reconnaissance camera was located in the wreckage and a film spool was brought back to the conservation laboratory.

Over 100 aircraft crashed in Newfoundland and Labrador during World War II (Deal 2006). Many of the wreck sites were visited by military personnel in order to remove ordnance and personal effects of the crews, and in some cases, to recover missing in action airmen. Others have only been recorded from the air. Wrecks in accessible locations were often recovered by salvors for scrap metal. A few wrecks have made their way to aviation museums. Only four other projects in this province have involved professional archaeologists. One was an unsuccessful survey by The International Group for Historic Aircraft Recovery (TIGHAR) in the 1990s to find the 1927 Nungesser and Coli crash site. In 2004, a Boeing B-17G Flying Fortress, which was forced to land on Dec. 24, 1947 on frozen Dyke Lake, Labrador, was recovered by Underwater Admiralty Sciences and Minaskuat Limited Partnership (Skanes 2005). In the fall of 2005, a crew from the MUN Archaeology Unit spent two days recovering remains of Lockheed Ventura #2169, a coastal reconnaissance aircraft that crashed on takeoff from the Torbay airport on August 5, 1943 (Deal 2006b). Finally, in the summer of 2007, another MUN

Figure 5: Reconnaissance camera packed in the field with wet moss for hydration. Photograph by Lisa Daly (Deal)

crew mapped and recovered remains from a Consolidated B-24M Liberator (#44-42169), which crashed north of Gander Airport on Feb. 14, 1945 (Deal 2008). The MUN projects, along with the A-20 survey, are part of a concerted effort to establish an inventory of downed aircraft sites in this province, as well as to assess their value as heritage sites and evaluate the potential for recovery and restoration.

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HALLS BAY STAGE ONE ARCHAEOLOGICAL IMPACT ASSESSMENT AT DOCK POINT (DiBa-6)

John Erwin And Derrick LeGrow
Archaeological Research Associates

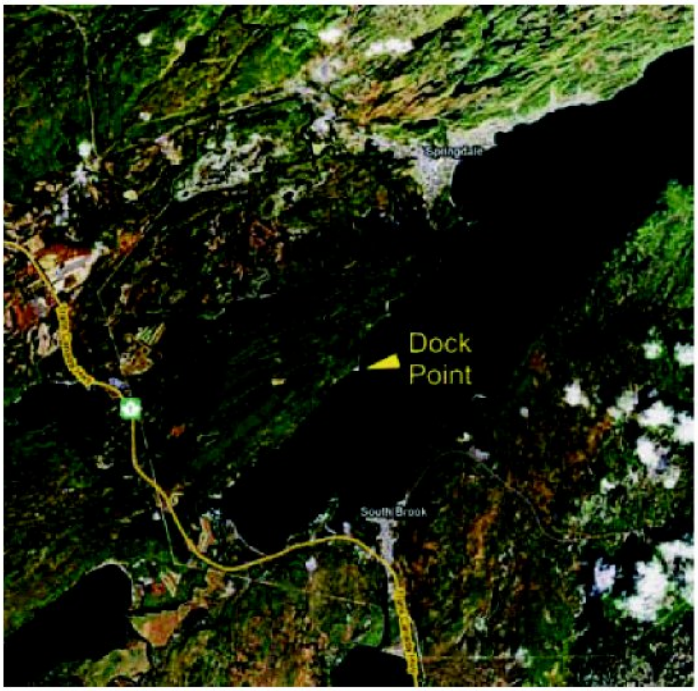
A stage one archaeological assessment was conducted on June 15, 2008 in Halls Bay at Dock Point (Figure 1) by Dr. John Erwin and Mr. Derrick LeGrow in accordance with Provincial Archaeology Office Permit 08.24. The resulting survey produced evidence for a multi-component site which included late historic and pre-contact use by Groswater Palaeoeskimos. Dock Point consists of a large low-lying relatively flat grass-covered area of land measuring approximately 5000m2 and is bounded by a single raised beach ridge. Behind this beach ridge, the topography slopes gradually back toward the tree-line which flanks the northern portion of the point. While the natural topography of the grassy area is relatively flat, there is evidence for subsurface cultural alterations from historic use, including garden plots, cabin construction and a root cellar-turned-midden. A small fast running stream is also located about 100 meters north of the site which empties into Halls Bay, and provides fresh water to the point.

Survey Results

Subsequent to a surface inspection of the beach and the excavation of 18 test pits (Figure 2), we discovered that Dock Point was first visited by Groswater Palaeoeskimos on the basis of the recovery of a box-based chert endblade. Later European use is marked by late 19thC to mid 20thC ceramics and tobacco pipe fragments.

Stratigraphically, the Dock Point soil profile is relatively simple, consisting of a very thin topsoil layer

Figure 1: Site Map (Erwin & Legrow) Google Earth



(presumably owing to repeated soil erosion from ice rafting) which overlays a reddish brown sandy cobble-filled beach. Cultural materials were largely found in proximity to the interface between these two layers, with most of the artifacts found mixed in the reddish brown sand. No stratigraphic separation was observed between the historic and pre-contact materials, confirming that the site is heavily disturbed. It is con-

Figure 2: Dock Point Site Plan (Erwin & Legrow)

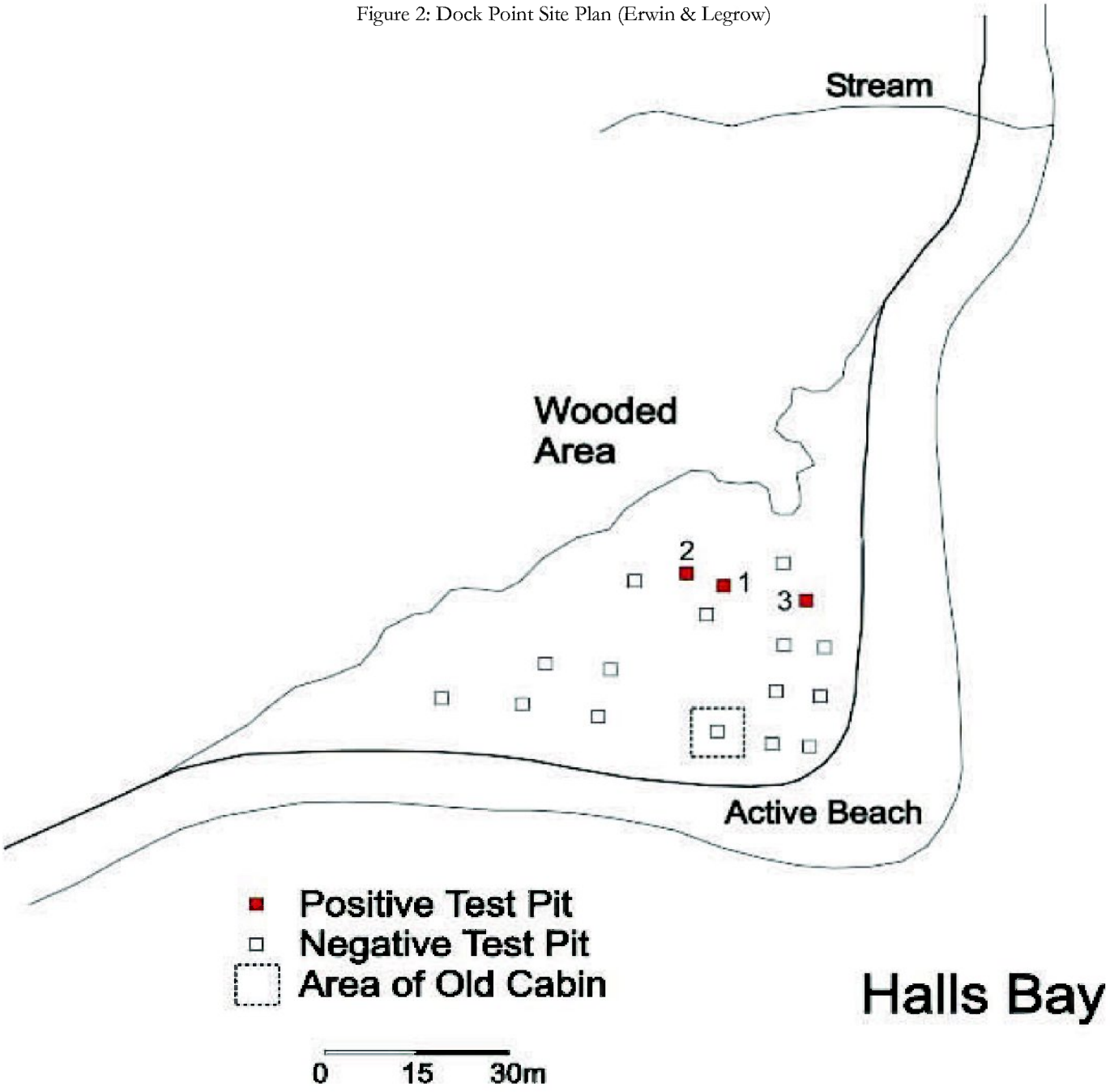


Table 1: Summary of Positive Test Pits (Erwin & Legrow)

Test Pit #	Depth Below Surface	Materials Recovered
1	20cm	Flake, Ceramic Vessel, Faunal
2	38cm	Tobacco Pipe, Nail
3	22cm	Endblade, Flakes, Ceramic Vessel

Discussion

While no previous recorded archaeological work had been conducted at Dock Point, the surrounding area of Halls Bay has long been of interest to historical and archaeological researchers. Historically, the Beothuk have been of considerable interest in this area (Howley 1915, Marshall 1996), and in more recent years, research in this region expanded to focus on a number of aboriginal groups, including Maritime Archaic (Reynolds 2003), Dorset (Penney 1998); Recent Indian (Penney 1988); and Mi'kmaq (Boyles 1981; Marshall 1996).

In summary, there were seven previously known archaeological sites within a five kilometre radius of Dock Point (Figure 3 and Table 2). While this in-land area has historically been described as Beothuk "country", archaeological investigations have demonstrated that most of the Island of Newfoundland's aboriginal inhabitants had occupied this area at one time or another, including Groswater Palaeoeskimos, as demonstrated by this assessment.

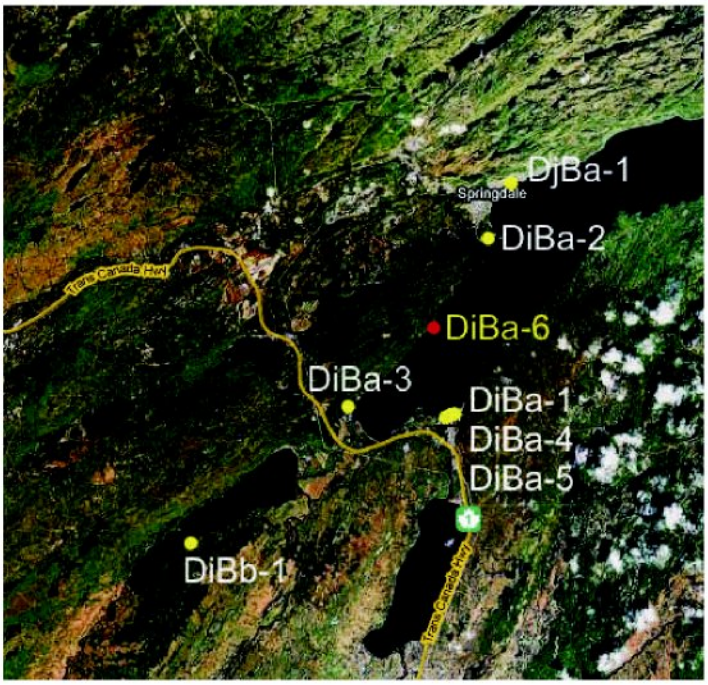


Figure 3: Existing Sites in the Vicinity of Halls Bay (Erwin & Legrow) Google Earth

Conclusions

Our testing revealed that there are no discreet limits to either the historic or the Groswater portions of the site. In fact, the cultural materials for both occupations appear indiscriminately mixed along the north-eastern portion of the point. The lack of evidence for in-situ remains suggests that Dock Point has most significantly been disturbed by natural erosion processes, and to a lesser extent, the historic use of the site, including a previous cabin owned by the father of the proponent, which stood during the 1970s. Notwithstanding the disturbed nature of the site, its inner coastal location is important insofar as it adds to a growing number of Early Palaeoeskimo sites which support Pastore's observations (Pastore 1986) regarding inner/outer coastal locations for Early and Late Palaeoeskimo sites.

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Table 2: Summary of Previously Known Sites in the Vicinity of Halls Bay (Erwin & Legrow)

Site Name	Borden #	Culture/s
West Bottom (Eaton Point)	DiBa-1	Maritime Archaic, Dorset, Recent Indian, (Beothuk?) and European
Indian River 1	DiBa-2	Dorset
South Brook 1	DiBa-3	Maritime Archaic
South Brook 2	DiBa-4	Maritime Archaic
South Brook 3	DiBa-5	Maritime Archaic
West Pond 1	DiBb-1	Recent Indian (Beothuk?)
Springdale	DjBa-1	Maritime Archaic

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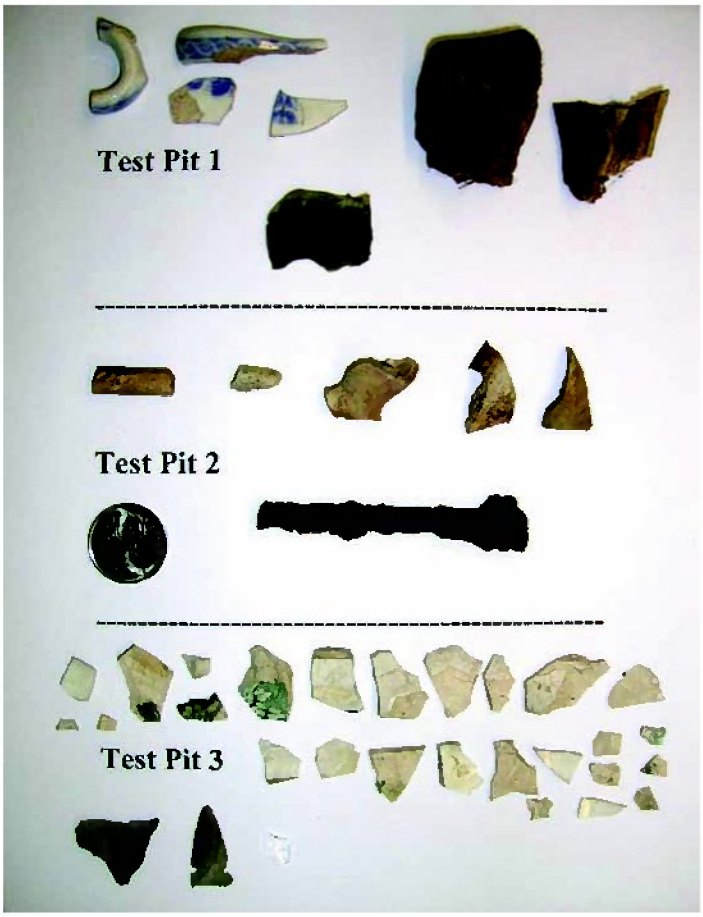

Figure 4: Artifacts from Dock Point (DiBa-6) (Erwin & Legrow)

INUIT SITES FOUND AT PETIT MÉCATINA AND BRADOR: ST. LAWRENCE GATEWAYS PROJECT 2008

William W. Fitzhugh[1]
Smithsonian Institution

August 2008 marked the eighth year of St. Lawrence Gateways Project research along the Quebec Lower North Shore. As in recent years, work focused on the late Basque whaling and fishing site at Hare Harbor 200 km west of the Strait of Belle Isle on the southern tip of Petit Mécatina Island between the towns of Harrington Harbor and Tête à Baleine (Whale Head). The Hare Harbor site documents a period of Basque exploitation of the Lower North shore that dates a century or more later than the majority of Basque whaling and fishing sites known in the Gulf and Straits (Turgeon 1994). The 2007 project was directed at underwater excavations to obtain larger samples of artifacts, faunal remains, and ballast rock as well as to explore sub-floor deposits beneath the site's blacksmith shop, the second structure (the first being a cook-house) found on the land portion of the site. (Figure 1) We also planned further work at the Hart Chalet site in Brador Bay which in 2007 produced Basque and early Inuit materials. Work was conducted under Permit 08-Fitz-01 from the Quebec Government's Ministry of Culture and Communications administered by Frank Rochefort, with assistance of Geneviève Meunier and Claudine Giroux.

Previous Reports and Studies

2007 field work and collection research has been summarized previously in this journal (Fitzhugh and Phaneuf 2008) and in other presentations during the past year (Fitzhugh 2008; Fitzhugh et al. 2008). A variety of laboratory studies were undertaken with samples from the 2007 season, including (1) preliminary geological analysis of Hare Harbor ballast rock samples, coordinated by Brad Loewen of the University of Montreal and Anja Herzog of Laval University to determine the origin of the twelve underwater ballast piles, and therefore, presumably, the home or staging ports of the vessels; (2) continuing studies of Hare Harbor material culture by Anja Herzog; (3) analysis of fish remains conducted by Sophia Perdikaris of New York University; and (4) DNA studies by Brenda McLeod to identify the species of faunal (especially whale) remains.

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Figure 1: Hare Harbor 1. Inuit house floor exposed beneath Basque blacksmith shop pavement. The large slabs are the collapsed remains of the entry lintel (photo: Will Richard) (Fitzhugh)

Publication of the underwater finds at Red Bay (Robert Grenier et al. 2008) has facilitated comparison of the Hare Harbor and Red Bay finds. Both collections have similar porringer styles and storage jars, suggesting that the Hare Harbor underwater finds might date as early as the late 16th century, a date also suggested by a yellow-glazed plate or platter found in a deep deposit north of the blacksmith shop on-shore (Herzog, pers. comm.). However, Iberian ceramics have unusually long stylistic 'shelf-lives'. Porringers similar to those found at Red Bay, Middle Bay, and Hare Harbor continued to be made in Iberian factories, especially in the Zaragoza region, until the early 18th century (Sánchez-Panchez 1997:242; Myles 2007:121), and the coarse earthenware storage vessel styles found at Red Bay and Mécatina continued to be made in the French Basque region well into the 18th century (Gusset 207:67). Therefore these ceramic types do not provide fine-grained chronological control, although they do point toward general source locations. The few diagnostic early finds like the glazed mustard ware contrast with the bulk of materials excavated from underwater, cookhouse, and blacksmith contexts. These finds, besides the storage jars and porringer, include other types of earthenware, Normandy stoneware, glass beads, clay pipes, gun flints, gun parts, and sounding leads and other materials of both Iberian and West European origin and date to the 17th or early 18th centuries. The diverse Hare Harbor assemblage suggests that provisions for Basque voyages, as would be

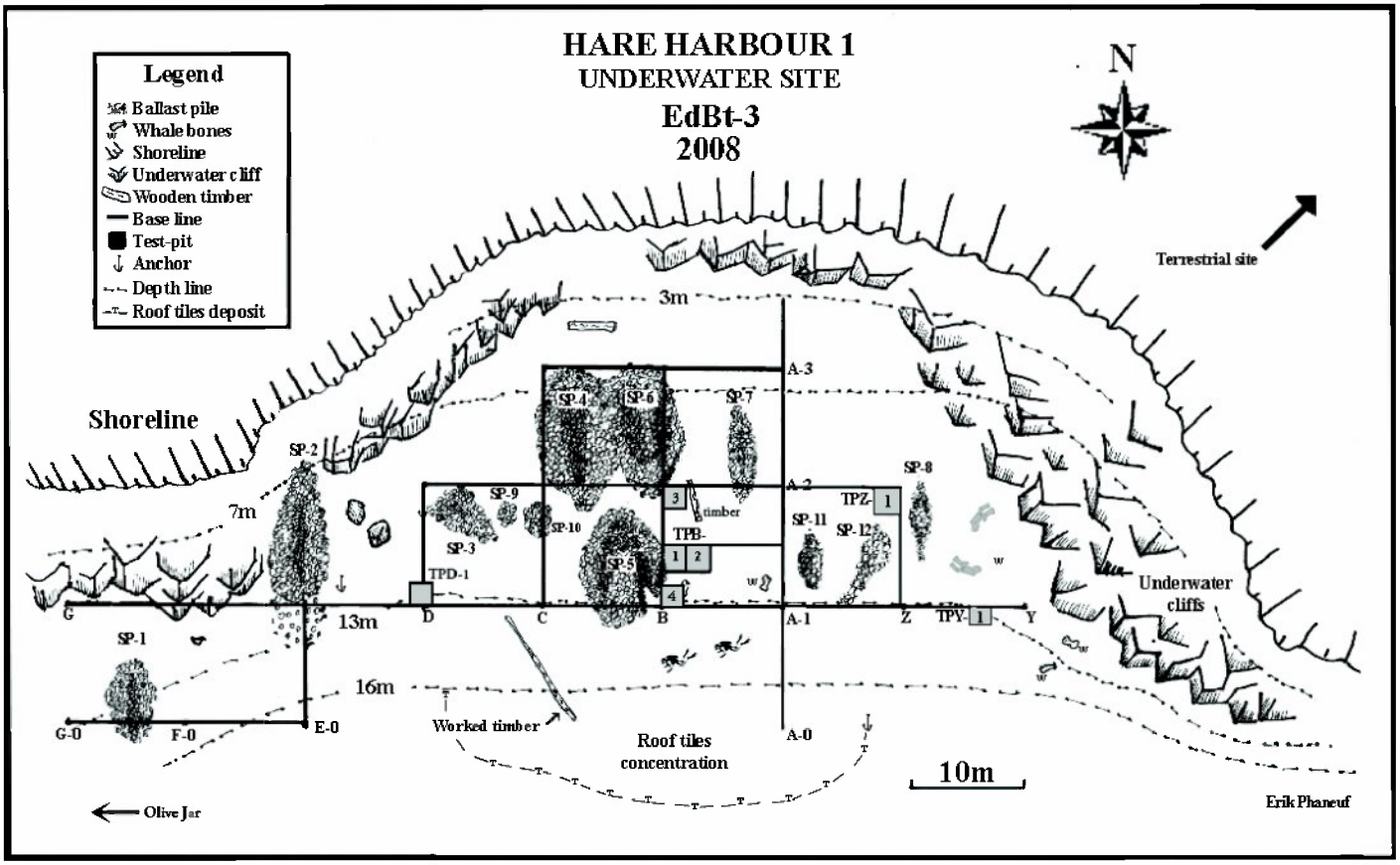

Figure 2: Hare Harbor underwater site map showing excavation grid, ballast piles, test pits, whale bones and other features (map: Eric Phaneuf) (Fitzhugh)

expected, diversified during the 16 and 17th centuries, drawing upon wider variety of materials and sources, especially from Western Europe, and that this is one reason for the greater diversity in material culture seen at Hare Harbor when compared with mid-16th C. Red Bay finds. Pipes and stoneware, for instance, came from western France and the Channel region, while earthenware storage vessels and faience porringers probably originated in Iberian and Basque regions around the Bay of Biscay. To date we have not located specific historical documentation referring directly to the Hare Harbor site, although a report by Martel de Brouague in 1720 notes Basque activities in the Mécatina region (see below).

Field Team Logistics

The project took place from 23 July and 29 August and encountered a series of easterly storms that restricted field activities and kept water temperatures unusually warm by impeding turn-over of the Gulf's colder, deeper Labrador Current waters. This year's field team included William Fitzhugh and Abigail McDermott from the Smithsonian's Arctic Studies Center; Christie Leece, formerly of the SI but now working at the Peggy Notebaert Nature Museum in Chicago; photographer and geographer Will Richard of Georgetown, Maine and a Smithsonian Research Collaborator; Laurie Penland, photographer and assistant diving officer at the Smithsonian, and her daughter Alix; Benjamin Ford, dive team leader and a graduate student in underwater archaeology at Texas A&M University; Vincent Delmas, graduate student at the University of Montreal; and Christine Bender, of Basque descent and a professional writer and researcher associated with the Basque Museum in Boise, Idaho. As usual our skipper, Perry Colbourne of Lushes Bight, Newfoundland, acted as captain, occasional cook, bakeapple provider, and surface steward for the dive team. Thanks to all who participated in and facilitated this year's project.

Hare Harbor, Petit Mécatina

Underwater Finds

Bad weather and a smaller dive team than had

been planned restricted the dives to about 50 over a two-week period. Nevertheless we completed two 2x2 meter test pits, two 1x2m pits, and made an exploratory test in the western portion of the site (Figure 2). Penland and Richard obtained excellent photographic coverage of the underwater work, and our excavations, utilizing two Parks Canada designed dredges, confirmed our earlier stratigraphic series, as follows: (1) initial occupation; (2) massive wood-working horizon; (3) whaling; (4) cod-fishing; (5) Basque abandonment; and (6) post-Basque trace occupations. Our most surprising finds – a large nearly complete olive jar of Iberian origin with a narrow spout and pointed base and a roof tile with multiple star markings (Figures 3, 4) – came from the surface of the underwater site rather than from excavated contexts. These pieces are provisionally dated to the mid/late 17th C. The pits in D-quadrant at the western extremity of the underwater site produced few cultural remains, and its bones, wood, and artifacts were found in a single cultural horizon with no stratigraphic separation. New pits in B-quadrant (TPB3 and 4) reaffirmed stratigraphy noted in 2006-7 and produced similar finds, although no large ceramic vessels and few new items were found this time. A test in the area of whalebone concentration at the east end of the baseline A1 revealed a shallow deposit with little stratigraphy. We succeeded in collecting ballast rock samples from several of the stone ballast piles (2, 4, 5, 6, and 12) and also recovered faunal remains, rope, and new whalebone samples.

While this summer's work was originally directed largely at underwater excavations, discoveries on land in what had been expected to be a routine 'clean-up' and mapping at the blacksmith shop produced a major surprise.

Figure 3: Iberian olive jar exposed on the bottom at the west end of the site (photo: Laurie Penland) (Fitzhugh)

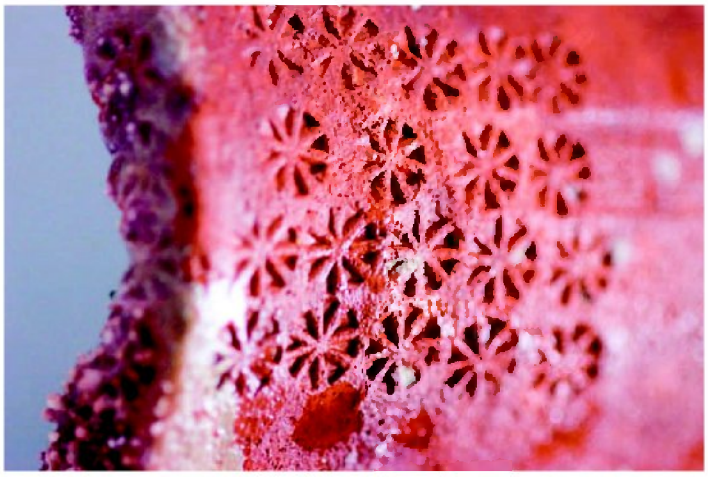

Figure 4: Star-stamped roof tile from the underwater site (photo: Laurie Penland) (Fitzhugh)

Inuit Winter Structure

After mapping the blacksmith shop (Structure 2), we removed its pavement and discovered directly beneath it, with no intervening humus or soil level, the charred remains of a wood floor (see Figure 1, above). Some of the flooring was made of sawn planks, but the majority was re-cycled barrel and tub staves and bottom slats. The upper surfaces of these boards were charred while their under surfaces were un-burnt, having been protected by the wet peat below. The area of this lower floor was twice as large as the blacksmith shop pavement and extended 2-3m beyond the east and west sides of the pavement (Figure 5, 6). At the western end of the structure a 2m wide band of crushed tile had been laid down on top of the peat/wood floor apparently to serve as a pathway leading from the blacksmith shop westward toward the cookhouse (Figure 7). The lower floor was littered with charcoal and burned bone, most of which was too calcined and mushy to identify, although some small mammal and bird remains were noted.

In the center of the southern side of the blacksmith shop pavement was a cluster of slab rocks much larger and thicker than the rest of the paving stones. Upon excavation, these rocks turned out to be the collapsed remains of an Inuit-style slab doorway. Excavating below this we found the remains of a 4-meter long

Figure 5: Exposed section of Inuit house with burned barrel and tub stave floor. The stone pavement above is the Basque blacksmith shop floor (Fitzhugh)

entrance passage that had been dug into sterile, water-logged peat 30-40 cm below the level of the house floor (Figure 8). Wooden poles that had once formed the roof of the passage were lying upon the passage floor, which was paved with barrel staves and stone slabs. A heavy deposit of charcoal along the west side of the tunnel may be the remains of the structure's main hearth. A vertical rock slab set transverse to the passage's southward orientation functioned as a 'cold trap' a meter south of the inner entrance of the house. Between the slab and the house floor was a door-step consisting of two large roof tiles and a small rectangular tool-box made of sawn planks pegged with wood nails which had been placed upside-down as an entry step into the floor (Figure 9). Across the longitudinal axis of the house we found the basal portions of several large (8-14cm) and small (3-6cm) roof support posts. The preserved post bases extended 50-60cms into the waterlogged peat beneath the house floor and were reinforced by small rocks wedged around their bases. Some of these posts had sawn butts while others were axe-cut. The saw-cut posts probably served as roof supports for the blacksmith shop while the axe-cut ones were probably the supports for the Inuit house.

House Assemblage

Like the stone blacksmith shop floor, the lower stave-paved floor and entryway contained a substantial amount of European material. In addition to tiles this lower floor produced iron nails, two glass beads, a few

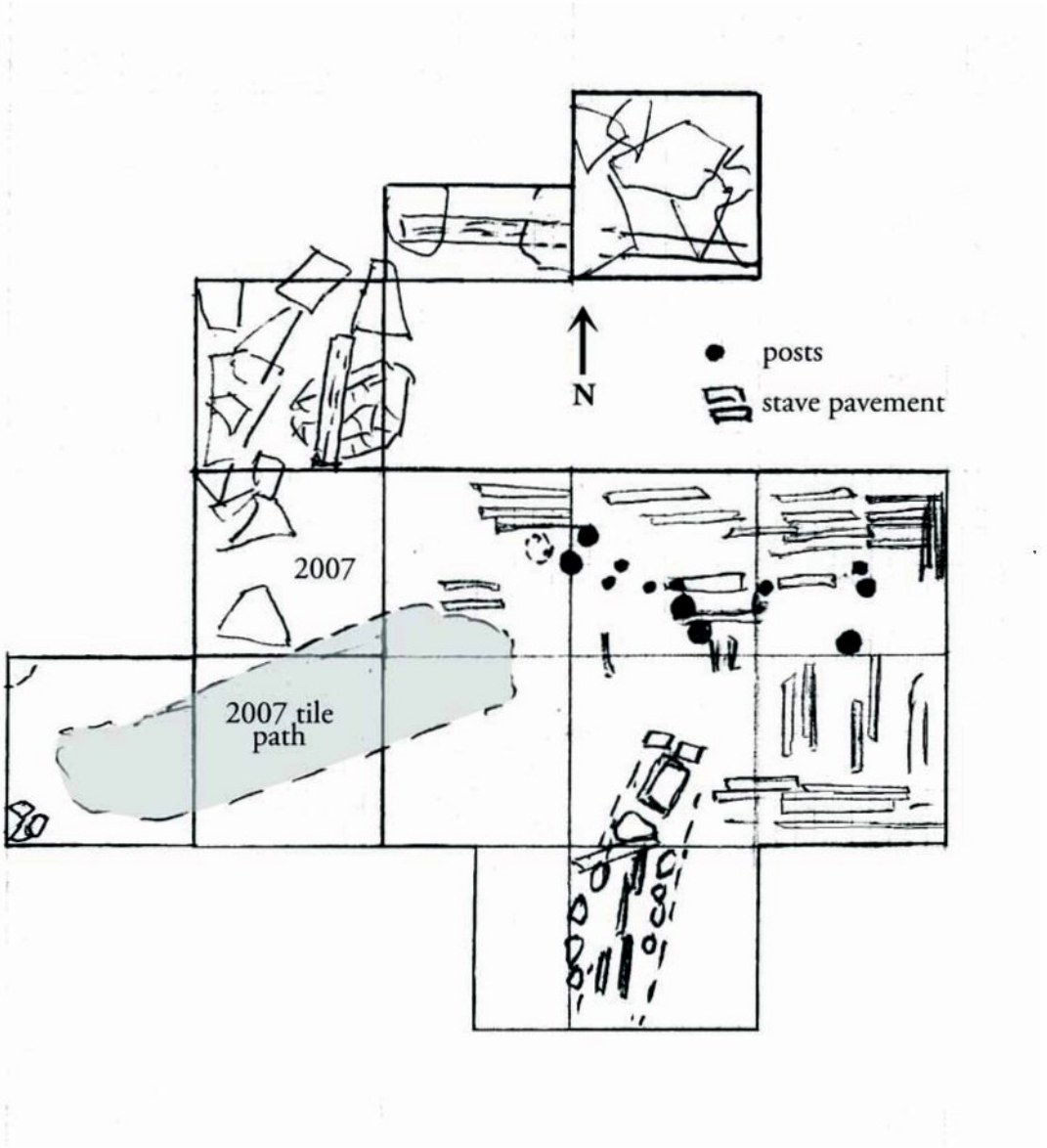

Figure 6: Sketch of the Inuit house floor showing barrel stave flooring and wood posts of Inuit and Basque structures (Fitzhugh)

clay pipe stem and bowl fragments, a nodule of pyrites, a lead musket-ball, charred remains of coarse fabric (canvas?), barrel and tub staves, a possible lead button, several grindstones, a piece of European flint, small amounts of glazed earthenware, glass fragments, a tool-box made of sawn planks, two wood tool handles, a metal awl in a wood handle, and part of a lathe-turned wood platter, probably made of oak. The most interesting finds, however, were Inuit implements that would not have been present if this had been a European occupation. These include the broken arm of a tiny model bow, the broken arm and end of a child's bow, three small toy soapstone lamps (one discovered in 2007) (Figure 10 a-d), and several lamp wick-trimmers used to tend soapstone oil lamps. The bow ends had the distinctive notching style found on Inuit bows all across the North American Arctic. The relative scarcity of artifacts suggests the house was occupied only a short period of time, perhaps a single winter. The similarity of finds suggests the lower floor dates to the same period as the cookhouse and blacksmith shop. Analysis of glass beads, clay pipes, and other materials suggests the Hare Harbor site dates broadly within the period ca. 1660-1740 (Herzog and

Moreau 2004:73-76)

Inuit Affiliation

The architecture and artifact assemblage associated with the lower structure suggest that it is the remains of a communal Labrador Inuit winter house. The subterranean entry, cold trap, slab doorway, and rectangular house shape are common features of Labrador Inuit winter structures dating to ca. 1700. Also common in these structures, but missing at Hare Harbor, are stone-paved floors, elevated sleeping platforms, and oil lamp stands. Further evidence of Inuit construction may be seen in the flooring, since a European structure probably would not have been floored with barrel and tub scraps but rather with stone or sawn planks. Finally, Basque operations rarely included habitation quarters on shore, as the crews customarily abandoned their shore stations and wintered in Europe. Had this structure been occupied by Basques whose ship(s) had been caught in an early freeze-up, we would expect their winter quarters to have followed European architectural conventions, not Inuit ones. In short, the evidence strongly suggests that the lower component was a large rectangular Inuit winter structure with a south-facing entry passage. The size of the dwelling would have accommodated a multi-family household, such as those in use among Labrador Inuit in the late17/early 18th century (Jordan 1978; Jordan and Kaplan 1980; Kaplan 1980, 1983, 1985a, b). The presence of Inuit and European artifacts, which included the same types found on the cook-house and blacksmith shop floors, suggests that the Inuit who lived here had access to the same material culture as the Basque site operators and participated freely in their social and economic activities, including canvas materials, tool boxes, iron nails, beads, and other items, possibly even possession of firearms since in 2007 we found part of a flint-lock mechanism. None of these materials would have been present if this oc-

Figure 7: Crushed tile walkway lying on top of the Inuit floor, leading from the edge of the blacksmith structure toward the cook-house (Fitzhugh)

Figure 8: Remains of Inuit entry passage below Basque floor. The larger broken bow was found on the passage floor (Fitzhugh)

cupation had preceded the Basque occupation of the site. Inuit soapstone lamp and pot fragments and oil lamp stains on the cook-house floor twenty meters southwest of the Inuit house also are difficult to explain without an Inuit presence.

Internal Site Chronology

Discovery of an Inuit house adds a new dimension to the Hare Harbor Basque operation. It would appear that the first structures to be constructed at the site were the Inuit house (S3) and cook-house (S1), whose function is based on its large hearth and extensive European/Basque domestic debris. As noted above, Inuit soapstone vessel fragments suggest Inuit women were present when the cookhouse was being used. Sometime after these structures were built, the Inuit house burned, leaving only its entrance tunnel and some barrel planking in the water-saturated eastern part of its floor. Immediately after this, a rough stone floor similar to that found in the cookhouse was laid down on top of S3, forming the floor for a blacksmith shop that incorporated some of the large entry slabs from the Inuit house entryway. After this, both the cookhouse and blacksmith shop seem to have remained in use at the same time. Still later, the blacksmith shop and its sill beams and roof supports also burned, possibly more than once. Tile fragments and charcoal found in multiple thin matted peat lenses in the boggy area between S1 and S2/3 indicates the Hare Harbor site had many re-occupation episodes over the course of several decades, presumably before and after 1700.

Inuit-Basque Interaction at Hare Harbor

The presence of an Inuit winter dwelling helps explain the presence of Labrador Inuit materials found on the cook-house floor. The large pot and lamp fragments and the oil-stained pavement rocks in the cookhouse suggest Inuit women served as cooks or domestic helpers at this facility, which may have been used as a bath-house, for clothes-washing, and for preparing of meals. The toy soapstone lamps – girls' toys – and the small hunting bows – boys' toys – in the Inuit house suggest that Inuit children were present and that residency included winter as well as summer seasons. Quite likely, an Inuit extended family was employed to assist the Basque whaling and fishing operations during the summer and fall and served as care-takers and site defenders during the winter/spring period when Basque crews were in Europe.

In 1729 Martel de Brouague, who was superintendent of the French establishment at Brador after Courtemanche, noted increasing hostilities between Inuit and Innu (Montagnais Indians) in the Gulf (Brouague 1923:384). Their enmity was no doubt exacerbated by the loss of Indian coastal territories in Labrador resulting from the 16th century advance of Thule/Labrador Inuit south along the Labrador coast, where Innu had exercised hunting rights since the departure of Dorset Eskimos ca. A.D.1350. Between 1550-1600 Inuit were actively raiding and trading with Basques and other Europeans in the Straits, and later expanded west along the northeastern Lower North Shore of the Gulf (Claremont 1980; Martijn 1974,

1980; Fitzhugh 2009). In that year Brouague reported two Inuit families had been murdered at Mécatina in 1728 by a party of French and Indians and carried off a woman and a young Inuit boy whom they sent to Quebec. While we found no identifiable human remains at the Inuit house and cannot positively identify Hare Harbor as the site of this massacre, this is a likely conjecture since Hare Harbor has long been known as "Eskimo Bay" to members of the nearby French-speaking community of Tête à la Baleine (Whale Head).

Inuit Sites at St. Augustine

In previous surveys around St. Augustine we located Inuit stone fox-traps on Canso Island and recorded local stories about L'Anse au Portage where there was reputed to be a stone grave of an Inuit woman, thought to have been a shaman, containing a stone pot or lamp. This summer we were invited by Nicholas Shattler of St. Augustine to test a site on Mikey's Island in the western part of the Grand Rigoulette. This site had some local notoriety because it had been partially excavated 20-30 years ago by people searching for 'pirate treasure.' While pirate stories seem like a fantasy today, pirating by European and American operators was rife along this coast in the 17-18th centuries (Belvin 2006). The Mikey's Island site was located in a peculiar spot, hidden into a narrow cleft in the rocks behind the remains of Mickey's late 20th century cabin and consisted of a cemented field stone foundation about 4x5m in size. It is not clear whether this was a habitation structure, a processing site, or some other type of structure. No specific Inuit features were noted other than its strange location, but its European derivation was equally unclear.

More certainly of Inuit origin was a tent ring site discovered a year ago by Nicholas Shatter in a small cove on the southeastern end of Cumberland Island (Figure 11). In a boulder beach below the tent ring were several stone cairns and caches, one of which contained a seal bone and the bowl of a burned wood spoon. The circular tent ring upslope to the north had its upper (rear) portion set on exposed bedrock while its central and lower portion was covered with moss and berry bushes. Our excavation produced a number of seal bones, a few iron nails, a piece of heavy iron strap, and fragments of green bottle glass with bubbles. The location and architecture of the site, the faunal remains, and the artifacts suggest this was an Inuit summer camp, although no diagnostic Inuit artifacts were found.

Figure 9: Remains of upside-down tool box used as a step from the inner end of the entryway to the Inuit house interior (Fitzhugh)

An Early Inuit Village at Brador

Ever since the arrival of Basque whalers and fishermen in the 1530s, Blanc Sablon and the Labrador shore of the Straits had become a target of early Labrador Inuit interest for obtaining iron, wooden boats, and other European materials. Throughout the 16th century these activities were largely restricted to raiding and sporadic trade, with raids being the dominant form of interaction, given the massive Basque presence and firepower (Barkham 1980). Evidence of Inuit settlement during this period is almost completely absent. But after the decline of Basque activities following great losses of Basque ships in the English and French wars, including the Spanish armada disaster, Inuit quickly responded to the vacuum in the south and Inuit began to settle permanently south of Battle Harbor in Labrador (Auger 1987, 1991, 1993, 1994; Stopp 1997, 2002, 2006). The only Inuit sites known are scattered remains from Twin Islands near Red Bay and St. Paul River (Martijn 1974, 1980a, b, c) and two briefly-occupied, unexcavated winter houses at Belles Amours Point found in 1993 (Dumais and Poirier 1994) dating, probably, to the early 1800s. It was therefore with great interest that we found, in 2007, 16/17th C. Inuit artifacts in a spruce thicket at the Hart Chalet site near the mouth of the Brador River. In exploring this location further this summer we found two and

possibly three large sod-walled winter houses at a place that had been investigated initially by René Levesque in the late 1960s. At the time Levesque thought a depression ("sluiceway") which he had found lined with stone slabs, tiles, and whale bones indicated the location as a Basque whaling station (Levesque pers. comm. 2001). It now seems that Levesque must have been excavating in the entrance passage of one of the Inuit winter house and found whale bones and Basque artifacts.

Tracing the outlines of the mounded earth in the spruce, we were able to identify the outlines of two and possibly three Inuit winter houses excavated into sandy soil and surrounded by mounded walls typical of 17/18th C. Labrador Inuit winter dwellings. The geographic location is anomalous for Inuit as it lies at the bottom of a sheltered bay in the forest and near the outlet of the Brador River. However, its local resource base was excellent, lying on an important harp seal run, with adjacencies for salmon, trout, caribou and other game. The Hart Chalet site must have been occupied by a large group of Inuit who were trading with Basques or scavenging from Basque sites. It contains large amounts of Basque roof tiles, European ceramics, and large spikes and nails, and has extensive middens containing diagnostic Inuit artifacts including such items as ivory needle-cases, ground tubular stone beads, Inuit-style whalebone sled-runners, and iron projectile points. The Hart Chalet site is considerably earlier and more productive than the nearby Belles Amours site found by Dumais and Poirier about ten km to the west on Belles Amours point. Location of these two sites establishes that Inuit did in fact hold, for some decades at least, permanent year-round occupancy in the Straits region far south of the central Labrador coast territories in Hamilton Inlet and Cartwright. Future research at both of these sites dating to different time periods will provide excellent opportunities for exploring early Inuit relations with Europeans in a little-known focal region of European-Native interaction in the northern sector of the Americas.

Conclusion

The 2008 Gateways field season produced important information on Basque and Inuit occupations of the Lower North Shore. Underwater archaeology at Hare Harbor produced new artifact finds and expanded previous samples of faunal remains and ballast piles. Excavation beneath the floor of the blacksmith site revealed an Inuit winter residence that was probably occupied concurrently with the cookhouse. Presumably the Inuit group was engaged to assist the Basque whale-hunters and fishermen and help operate their shore facilities. In addition, they appear to have served as custodians and caretakers for the premises during the winter and spring while the Basques were in Europe delivering their cargo and refitting for the next season. In this isolated circumstance a small group of Inuit, already deep into Innu territory, would have been highly vulnerable to attack by competitors, be they European or Indian. We also found evidence of probable Inuit occupations at St. Augustine, and in Brador Bay identified a large Inuit winter settlement with extensive middens containing Inuit and Basque artifacts. These data add substantially to knowledge of southern Inuit extensions into the rapidly expanding European economic and settlement zone in southern Labrador, the Straits, northern Newfoundland, and the Gulf.

The unexpected Hare Harbor results explain the presence, known for the past five years, of earlier finds of Inuit artifacts at the cookhouse structure and fit well with the historic record of Basque-induced Inuit expansions west along the Quebec Lower North Shore, a region that had for the previous 1500 years been the undisputed domain of various Innu-related (Indian) groups. Given the perpetual state of conflict between European powers – English, French, Spanish (Basque) – it is not surprising that that the Hare Harbor site may have seen numerous episodes of violence, as evidenced by the multiple burn horizons found in its structures and the destruction, by fire, of a large Inuit winter residence and the blacksmith shop that had been constructed literally upon the ashes of the Inuit occupation. Finds of Inuit structures in St. Augustine and a large, early Inuit settlement in Brador add greatly to our knowledge of how Inuit were drawn into direct contact with early European contenders, taking advantage of opportunities for acquiring European goods by trade, scavenging European sites, as well as direct service employment, while also suffering many disasters. These finds begin to answer the contentious question raised by the heretofore puzzling issue of the southern Inuit – e.g. 'where are they?" – and whether they exploited the expanding Euro-American

Figure 10 A

Figure 10 B

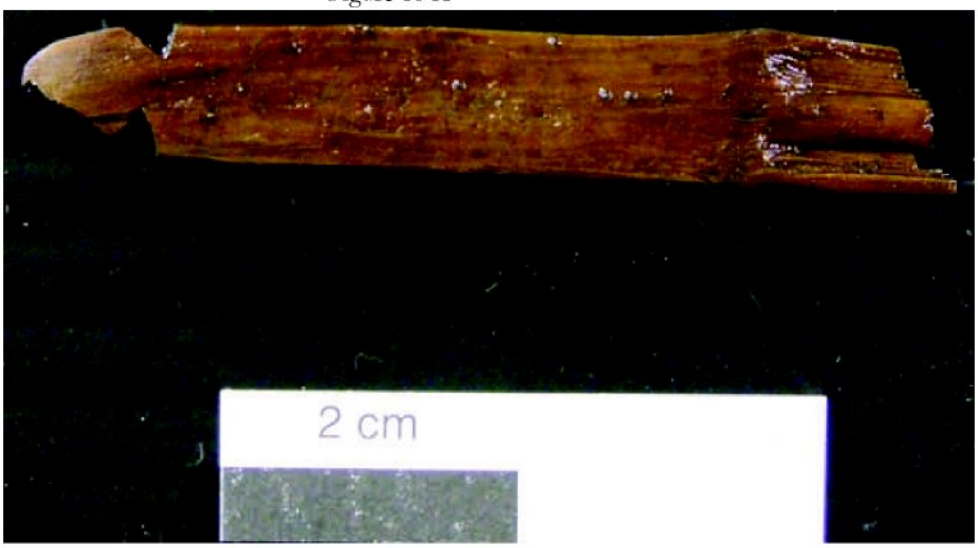

Figure 10 C

Figure 10 D

Figure 10: Inuit artifacts (a, b) miniature soapstone lamp toys, and (c, d) broken bows, one a child's bow and the other a miniature, found on the Inuit house floor. (photos: Frederic Simard) (Fitzhugh)

Figure 11: Cumberland Island tent-ring, probably of Inuit origin (photo: Will Richard) (Fitzhugh)

trade zone in southern Labrador, the Straits, Newfoundland, and the Gulf only by seasonal raids or by other means. At least now it appears certain that those other means included periods of permanent residency, first as pioneers with a wholly Inuit way of life, and later as partners or assistants to European enterprises. These southern Inuit sites add a new geographic focus to research on Inuit-European interaction studies which for the past several decades has focused on Central Labrador. Compared to this more secure region, the Straits and Gulf brought Inuit new-found opportunities and as well as grave new dangers.

Acknowledgments

As in previous years, the 2008 Gateways was assisted by many people, especially by the field team members identified above. In addition I thank Christine and Wilson Evans, Paul and Cynthia Rowsell, the Community Seafood Cooperative, the Harrington Medical Center, and other members of the community; Clifford and Florence Hart of Lourdes de Blanc Sablon, Boyce Roberts of Quirpon, Kelly and Robert Linfield of Gander, Greg and Joanne Wood of Deer Lake, and the extended Colbourne clan of Lushes Bight, Newfoundland.

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ARCHAEOLOGY IN PLACENTIA: THE 2008 FIELD SEASON

Town of Placentia
David A. Fry

The 2008 archaeological field season in Placentia was an exciting one. The work being conducted in 2008 was a continuation of what was accomplished in the previous two years. Our fourteen week field season allowed us to continue on our quest to find Fort Louis and continue excavating the New Fort on the Jerseyside of town. Fort Louis and the New Fort were fortifications constructed between the 1690s and 1740s by the French and later the English. In the 2008 season we focused mainly on the powder magazine of the New Fort and continued looking for the palisade line of Fort Louis, partly uncovered in 2007.

With the information gathered through the 2007 excavations, the decision was made to hunt for Fort Louis palisade line. Our purpose was to define the location of the forts exterior walls to gain a better understanding of the fort's size and scale. In the 2007 field season we stumbled upon the palisade line while excavating a 1 by 35 meter long test trench. In 2008 the decision was made to open a 5 by 10 meter square in the general direction the palisade line was following. This turned out to be a challenging excavation as the palisade posts found in 2007 were located below sea level. The Jerseyside ball field where the excavation took place is approximately 120cm above sea level and the palisade posts from the previous season were 140-150 cm below the surface. Finding the palisade line underwater meant constantly pumping out the site to control the depth of water as well as keeping the flowing water controlled to keep the stratigraphic layers intact.

Figure 1: Boot Spur found in the water logged part of the site (Fry)

Figure 2: Aerial photograph of the powder magazine and eastern wall of the New Fort (Fry)

The benefit of having a water logged site was the perfect preservation of all the organic material. Our excavations, unfortunately, did not produce a palisade line, but our efforts were not in vain. We did find a large midden which produced a large amount of artifacts. Bone, wood, leather, and seed material were all present and provided a fantastic picture of what the French people were eating and wearing in Placentia in the late 1600s and early 1700s. Ceramics, glass, and a small amount of metallic objects rounded off the list of artifacts which came out of this part of the site.

The other area designated for excavation in 2008 was the powder magazine. The investigation in the area resulted in an unexpected find. The foundation of what was the powder magazine was used as a foundation for a domestic residence that was occupied

Figure 3: Bone tools found in the water logged area of the site (Fry)

between approximately 1770 - 1800. The area was full of refined earthenware ceramics like Pearlware and Creamware. The foundation, after being abandoned in

Figure 4: Examples of some of the French ceramics found (Fry)

the mid-1700s, would have made the perfect place for someone to build a house and that's exactly what someone did. Not only were ceramics found, a number of thimbles, needles, coins and glassware were found inside the structure.

The excavations on the Jerseyside ball field were very rewarding this past summer and with the size of the site and the success we have had there is still a lot more excavating to be done. The future for the area is almost limitless in an archaeological sense. The area is rich which French and English history and excavations should continue for many years.

Figure 5: Examples of some shell-edge Pearlware found inside the powder magazine (Fry)

ARCHAEOLOGY AT FERRYLAND 2008

Barry Gaulton and James A. Tuck
Memorial University of Newfoundland

The 2008 field season began with an extraordinary discovery. Less than one week into excavations, a complete Scottish 'Sword and Sceptre' gold coin dating 1601 was found while re-exposing the footing of an early seventeenth-century building (Figure 1). The coin is roughly the size of a 'Loonie', weighs approximately 5 ounces and is made of 22 carat gold. The obverse bears the arms of Scotland and the legend *IACOBVS 6 D G R SCOTORVM* (James VI, by the Grace of God, King of Scots). The reverse shows a crossed sword and sceptre flanked by two thistles, above which is a crown and below a date of 1601. The reverse legend reads *SALVS POPVLI SVPREMA LEX* (the safety of the people is the supreme law). Further investigation at the place of initial discovery determined that the coin was an isolated find and not part of a cache. How it came to be deposited here remains a mystery but it must have been a great loss for its former owner. When issued in 1601, it was valued at £6 or 120 shillings (Paul Berry, Personal Communication 2008). To put this in perspective, a laborer working in London in 1601 earned one shilling per day (van Zanden 2008). When James VI of Scotland ascended to the English throne in 1603, this same coin was made current in England at 10 shillings (Berry, Pers Comm. 2008). In either case, this piece represented a substantial amount of money in the seventeenth century.

There were three primary goals for this year's excavation. First, to continue investigating a rich midden located at the western extent of Area F. This deposit, partially excavated in 2007, continued to yield a vast collection of objects dating to the second half of the seventeenth century such as the Spanish Lustreware jug or vase shown in Figure 2. Another interesting object found in this same location, but excavated from a disturbed context, was a copper token issued in 1672 by a Dublin butcher named Michael Wilson (Berry, Pers Comm 2008). South of the midden, the crew found the remnants of a rectangular 'post-in-ground' building outlined by a series of post holes/molds. It measures 14 ft east-west but its north-south dimension has yet to be determined. It is possible, though not certain, that this outbuilding is associated with the large domestic structure at Area G believed to be occupied by Philip Kirke and his family/servants.

Our second goal was to expose the remaining portions of a cobblestone-floored building first found in 2001 and initially thought to be part of the 'Kirke house'. In 2006, this location was interpreted as a tavern owing to the prevalence of clay tobacco pipe and wine bottle glass fragments found in and around the hearth area (Gaulton 2006). Recent excavations helped to clarify our understanding of this structure and its

Figure 1: James VI 'sword and sceptre' coin, obverse (left) and reverse (right) (Gaulton & Tuck)

Figure 2: Spanish lustreware jug or vase (Gaulton & Tuck)

development over the course of the seventeenth century. It turns out that this building is associated with the 'Kirke house' but is separated by a 3 ft wide cobblestone pavement and oriented in a north-south, as opposed to an east-west direction (as is the Kirke house). The preservation of the wooden sills also allowed for a precise measurement of its size at 13 by 30 ft (3.96 x 9.14 m). Artifacts on the floor of this 'tavern' date its construction and occupation from the 1640s to 1696.

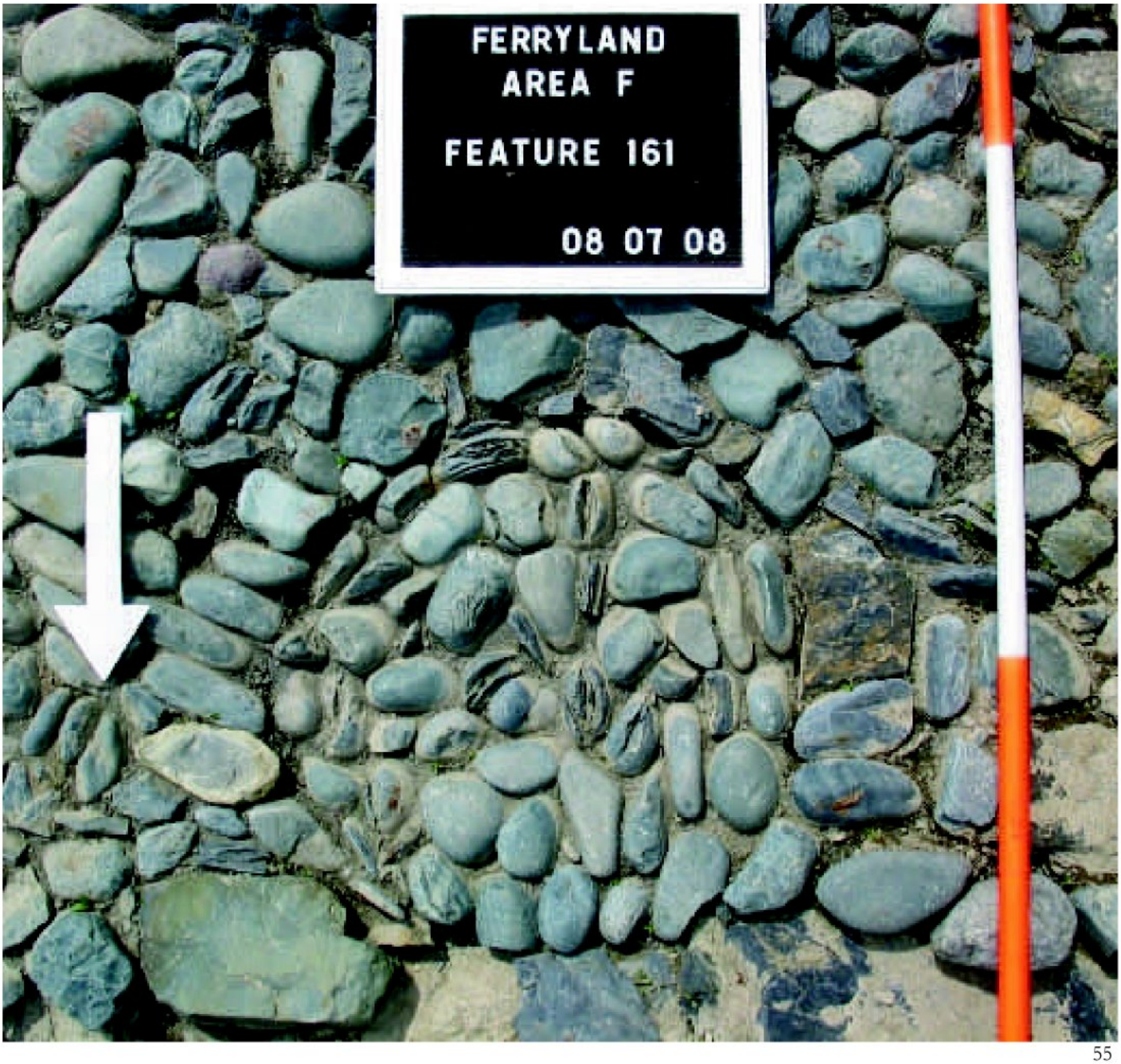
Six inches below this structure is an earlier Calvert-era building likewise floored in cobblestones (Figure 3). Its overall dimensions are slightly smaller than the overlying Kirke-period feature, measuring 14 by 22 ft (4.27 x 6.70 m), and it is set upon a footing of large, flat stones. It also differs architecturally in that there is no provision for heating and it contains a water basin and an underground drain, the latter of which appears to have functioned to remove animal waste. The water basin originally consisted of a half barrel set

Figure 3: 14 by 22 ft building dating to the Calvert period, Area F (Gaulton & Tuck)

into the cobblestone floor but was later taken up and cobbled over (Figure 4). The drain, though slightly damaged by the subsequent Kirke-period dismantling and overlying construction, begins inside the building and continues north until reaching the exterior and then turns east. Like the other stone drains found at Ferryland (all associated with the Calvert period) this feature has a slate floor and is lined and capped with slate stone. However, it differs in the fact that it contains other construction material including red brick and a floor tile to cap the drain, and bricks for portions of its sides. This oddity is only visible in a 5 ft section of drain at the north side of the building and may have been constructed in this manner if its builders ran out of suitable stone and substituted for reasons of expediency.

Preliminary testing of soil samples collected on the floor of the Calvert-era building identified eggs from several parasite species such as *Anisakis*, *Ancylostoma*, *Trichuris*, *Taenia* and *Hymenolepis* (Eric Baggs and

Figure 4: Circular water basin filled in and cobbled over, inside the 14 by 22 ft building, Area F (Gaulton & Tuck)



Jean Finney-Crawley, Personal Communication 2008). Their parasitic hosts (for all except *Anisakis*) include humans, mice and rats, dogs, sheep, cattle and pigs. This evidence, combined with the water basin and drain features, strongly suggests that the building was an animal shed or stable for at least part of its use life. Future plans for this location involve the collection and testing of samples from inside the drain.

The final goal of the 2008 excavations was to further explore parts of the site immediately south of the brewhouse and bakery. This area did not appear to have seen the kind of extensive digging and leveling that typify a majority of the work-related and domestic spaces at Calvert's colony of Avalon. Therefore, it was important to examine this location to see what functions it served. In 2004, a 3 by 6 metre area was first opened up, revealing several discernable stratigraphic layers dating from the 20th back to the 18th century. Below this was a few seventeenth-century artifacts and a curious collection of large rocks arranged in a curvilinear pattern. This year's excavations continued to the south, east and west to expose more of these rocks and the true nature of this feature. As seen in Figure 5, it is a 3 ft wide pathway bordered on both sides by rocks and continuing in a southwest direction to an undetermined location. Speculation is that this seventeenth-century feature may be associated with the colony's defenses or lead to a cemetery or well. Further excavation will be necessary to prove or disprove these theories.

During the last two weeks of the field season we were able to conduct preliminary testing in an area 10 metres east of the pathway feature, exposing the remnants of a substantial stone fireplace built some-

Figure 5: 3 ft wide 'pathway' bordered by rocks and continuing southwest, Area F (Gaulton & Tuck)

time in the late 18th to early 19th century (Figure 6). A nearby refuse deposit, likely associated with this fireplace, contained many contemporaneous artifacts including pearlware and whiteware vessels, assorted stoneware, wine bottle glass and clay tobacco pipes. Other notable finds include a small collection of rosary beads, a brass button from the 74th highland regiment, more than a hundred fish hooks of different sizes and several mended plates and dishes. Excavations are slated to continue here in 2009.

Overall, this year's field season was both productive and exciting. Site visitation was also on par with previous years. With the generous support of federal and provincial governments and Memorial University, we will continue to unravel the story of this fascinating archaeological site.

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Figure 6: Stone fireplace dating from the late 18th to early 19th century, Area F (Gaulton & Tuck)

THE BACCALIEU TRAIL ARCHAEOLOGY PROJECT 2008: A PRELIMINARY REPORT ON EXCAVATIONS AT CUPIDS AND DILDO ISLAND

William Gilbert
Baccalieu Trail Heritage Corporation

Dildo Island

Background

The first evidence of an aboriginal occupation on Dildo Island was uncovered by amateur archaeologist Don Locke who dug there in the 1970s and found 440 Dorset Eskimo artifacts (McLean 1990). In 1990 Ingeborg Marshall undertook a brief survey of the Island and found more Dorset material (Marshall 1990). Documentary research conducted in 1992 indicated that there also had been a Beothuk presence on one of the islands at the entrance to Dildo Arm in the early seventeenth century and Dildo Island seemed the most likely candidate (Gilbert 1992, 1996).

In 1995 the Baccalieu Trail Heritage Corporation (BTHC) conducted a four week survey of Dildo Island in an attempt to better define the boundaries of the Dorset site and uncover evidence of the Indian occupation. Our work indicated that the main Dorset site covered an area of roughly 25,000 square metres in the southern half of the island (Areas A and B). Traces of an Indian occupation were also uncovered at several locations but the major concentration of Indian material was found on a wooded terrace (Area C) rising about six metres above beach just north of Barry's Cove on the western side of the Island (Gilbert 1996).

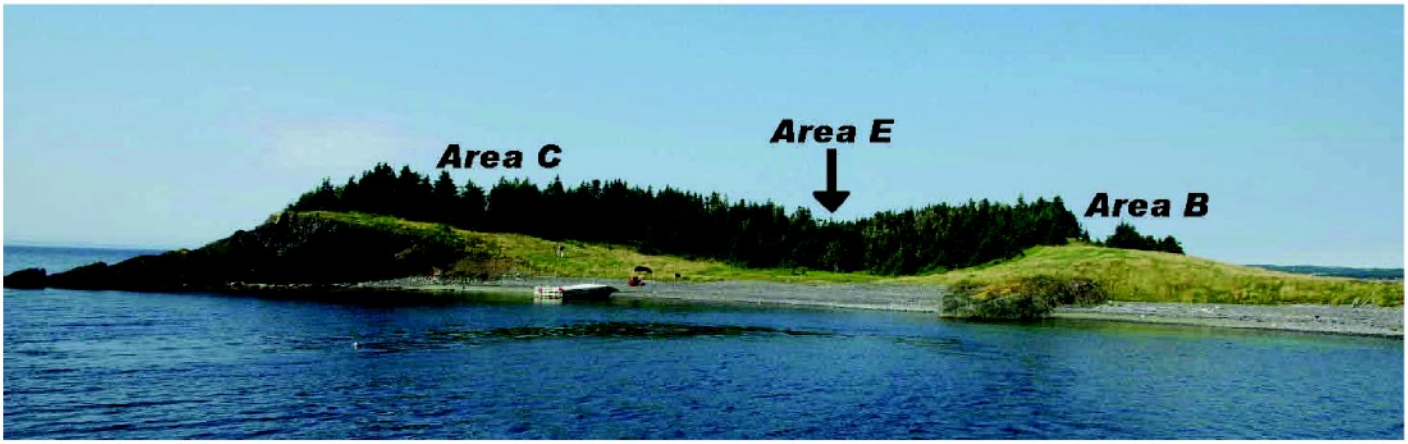
Between 1996 and 1999 the BTHC hired archaeologist Sylvie LeBlanc to conducted excavations on the Dorset Eskimo site. LeBlanc uncovered the remains of two Dorset houses in Area B: one of these, a large semi-subterranean dwelling with a 8.25m long flagstone floor, was completely excavated. Radiocarbon samples from this house indicate that it was in use between roughly AD 70 and AD 630. A single radiocarbon sample recovered from the other structure produced a date of circa AD 720. LeBlanc also found evidence of an earlier Groswater Eskimo occupation (Gilbert 2003b; LeBlanc 2003).

During 2001, 2002 and 2004 the BTHC conducted survey work and excavations in Area C in an attempt to better understand the nature of the Recent Indian occupation of the Island. During this time three Recent Indian features were uncovered: a stone feature that appears to be the remains of a sweat lodge; a concentration of artifacts and lithic debitage that probably marks the location of a dwelling; and a 5m long linear hearth (Hearth 1). Radiocarbon samples recovered from the hearth indicate that it was in use between circa AD 780 and AD 820 and an analysis of the faunal material from the hearth suggests that it and the other features were part of a camp occupied during the late spring, summer and early fall (Gilbert 2003a, 2003b, 2006a; Stewart 2005).

The 2007 Survey

Although some evidence of a later Indian presence had been found on Dildo Island between 1995 and 2004, evidence of an early historic camp such as the one described by colonist Henry Crout in 1613 had so far eluded us. We returned to the Island in 2007 and spent six weeks conducting excavations and survey

Figure 1: Dildo Island showing the locations of Area B, Area C and Area E (Gilbert)



work. Our main objective during this time was to find evidence of a late-prehistoric and/or early-historic Indian camp.

Most of our work in 2007 concentrated in Area C. Testing here soon revealed that Hearth 1 was not the only fireplace on the terrace. Over the next six weeks we uncovered four more Recent Indian fireplaces. One of these, Hearth 4, was located roughly 26m south of Hearth 1; two more, Hearths 2 and 3, were roughly six metres south of Hearth 4; and a forth, Hearth 5, was found about 22m to the southeast of Hearth 1. Test pits dug two metres south and four metres east of Hearths 2 and 3 revealed more dense concentrations of fire-cracked rock that may mark the location of still other fireplaces.

Artifacts and flakes recovered from above and around these fireplaces indicate that they are all roughly contemporary with Hearth 1 and probably also date to the eighth and/or ninth centuries AD. Hearths 2, 3, and 5 were fully exposed and photographed. Their outlines were drawn and their locations recorded on the site map. Hearth 4 was only partially exposed. The portion of it that was exposed was photographed and recorded on the site map. Once properly recorded, all four features were covered in sheet plastic and reburied.

Aside from artifact typology, the most obvious distinction between the early Recent Indian people who occupied Dildo Island and the later Little Passage/Beothuk people who inhabited this part of Trinity Bay is the raw material from which each made their tools. The vast majority of the stone tools from the early Recent Indian occupation are made from either blue or purple rhyolite that seems to have come from Bonavista Bay. In contrast, the Little Passage/Beothuk people made most of their stone tools from a grey chert that appears to have originated somewhere in Trinity Bay. Obviously, one of the main clues pointing to a Little Passage/Beothuk presence on Dildo Island would have to be the presence of grey-chert flakes.

We did find concentrations of grey-chert flakes in several places in Area C. Testing immediately east of Hearth 5 revealed a scattering of grey-chert flakes and debitage over an area measuring roughly 10m in diameter but, unfortunately, no diagnostic artifacts were recovered. Testing and some preliminary excavations along the edge of the terrace, roughly 9m east of Hearths 2 and 3, revealed more grey-chert flakes along with fire-cracked rock. No diagnostic stone tools were recovered from this area either. However, a wrought iron nail was found beneath a concentration of fire-cracked rock suggesting that it was probably deposited during the Beothuk occupation of the Island.

As is so often the case in archaeology, the most significant discoveries are frequently made near the end of the season. By week six of our survey we were beginning to think that the Little Passage/Beothuk presence on Dildo Island must have been fairly transitory and certainly nothing like the substantial Dorset Eskimo and early Recent Indian occupations. In a final attempt to find a camp, we moved down from the terrace and had a look at the low ground behind the beach in Barry's Cove.

At first this seemed an unlikely spot. A cod hatchery had been built here in the late nineteenth century and much of the ground was boggy. It looked as if the ground behind the hatchery site would be wet as well. However, when we looked, we found a dry, level, tree-covered area measuring roughly 220 square metres (Area E). A brook had once run along the northern edge of Area E but at some point, most likely during the construction of the hatchery, a holding tank had been dug farther east to collect the water the brook had been diverted by digging a ditch across the middle of the dry ground and on to the hatchery site. A total of eight square metres were excavated in Area E in 2007. Two of these were located north of the ditch and the other six were located south of it. These revealed a large concentration of grey-chert flakes and fire-cracked rock. Artifacts recovered included several Little Passage-type linear flakes and the base of what appears to be a corner-notched Little Passage projectile point.

The 2008 Excavations

In 2008 we returned to Dildo Island and spent six weeks digging in Area E between June 2 and July 11. When we arrived on the island Area E was extremely wet as a result of all the rain that had fallen over the previous few weeks. One of our first jobs was to clean out the original brook and divert the flow of water away from the man-made ditch and back into the brook. Once this was accomplished the ground dried out fairly quickly and we were able to begin excavations within a few days.

Figure 2: The Recent Indian Hearth in Area E (Gilbert)

In total 26 square metres were open and partially excavated in the area south of the ditch. The stratigraphy in Area E consists of a deposit of forest humus, averaging 7 cm thick, above a grey-brown clay cultural deposit extending down to as much as 35 cm below surface in some places. Below this is a sterile, grey-clay matrix. Immediately south of the ditch, we uncovered a Recent Indian hearth consisting of a large concentration of fire-cracked rock. Unfortunately, the ditch had cut across the northwestern portion of this feature making it impossible to determine its original size but what remains measures 3m long (north to south) and 1.5m wide. Because the hearth was found towards the end of the season, we did not have sufficient time to excavate it. However, it was fully exposed, mapped and photographed.

Figure 3: Blue glass bead from the hearth in Area E (Gilbert)

Only a small amount of cultural material, consisting mostly of grey-chert flakes and pieces of ochre, were recovered from immediately above the hearth but one artifact deserves special mention: along the northern edge of the hearth we uncovered a tiny blue glass bead measuring only 2.5mm across. This bead appears to be similar to the white and blue seed beads found by Pastore at Boyd's Cove in the 1980s (Pastore 1992:35).

Excavations also opened up an area extending east from the hearth for seven metres. Here we uncovered a large number of fire-cracked rocks, numerous flakes, stone tools and tool fragments, pieces of ochre, grease stains, and occasional fragments of charcoal and calcined bone. While this was clearly an activity area, the fire-cracked rocks and other materials here seemed to have been randomly scattered and no obvious features have yet been uncovered.

The vast majority of the lithic material recovered from Area E to date consists of grey chert similar to that used by the Beothuk and their ancestors at Russell's Point. However, other types of chert and some fragments of rhyolite have also been recovered. Bifaces and biface fragments are by far the most common type of tool uncovered in this area to date although a number of scrapers and linear flakes have also be found. A

detailed analysis of the lithics from the site has yet to be completed but it would appear that the artifacts cover a fairly long time range from early Recent Indian through to Little Passage/Beothuk.

Quite a few fragments of ochre were recovered from Area E but, somewhat surprisingly, although some red ochre was found, most of the fragments were of yellow ochre. The presence of a large amount of yellow ochre at a Recent Indian site at the bottom of Trinity Bay may help to explain something that has puzzled historians for many years. When John Guy's party met a group of Beothuk in Bull Arm about 35km (22 miles) northwest of Dildo Island on November 6, 1612, Guy reported that some of them had yellow hair (Cell 1982:75). Some writers have used this statement to make some pretty extraordinary claims about the ethnic origins of the Beothuk. However, by far the most likely explanation is simply that some of these people were using yellow ochre to colour their hair.

What had at first seemed an unlikely location for an archaeological site has instead proved to be highly productive. For a long time we had discounted Area E because it appeared to be mostly wet. However, closer inspection revealed a dry, level area just east of the wet ground. Located just east of the beach at Barry's Cove and with a brook running along its northern edge, Area E would actually have been an ideal location for a camp. The diverted brook helps explain another puzzle. Aboriginal people have utilized Dildo Island, and especially the area around Barry's Cove, since at least the time of the Groswater Eskimo (circa 800-200 BC) and both the Dorset Eskimo and early Recent Indian occupations in this area were clearly quite intensive. Yet, there appeared to be no obvious source of fresh water. It now seems clear that this brook originally flowed along the north side of Area E and on to the beach but that the construction and later dismantling of the cod hatchery in the late nineteenth century impeded its flow, diverted its course and blocked its mouth creating the wet ground just behind the beach where the hatchery once stood.

None of the areas opened in 2008 were completely excavated. As mentioned above, the hearth was uncovered and recorded but remains undisturbed. The area to the east of the hearth was taken down to an average depth below surface of 16cm but there is still more digging to be done. In 2009 we plan to return to the island and excavate the hearth. Hopefully it will produce artifacts, faunal material, and charcoal samples that will help us to better understand the occupation of Area E.

Cupids

Background

Cupids is the site of the first English settlement in Canada. It was established by the London and Bristol Company of Merchant Ventures in 1610 and the first governor was a Bristol merchant named John Guy. In 1995 the Baccalieu Trail Heritage Corporation conducted a survey of Cupids and discovered the remains of the colony. Excavations have been ongoing at the site every year since then and over that time the remains of four early seventeenth-century buildings, the enclosure erected around these buildings, numerous related features, and over 134,000 artifacts have been uncovered. Two of the buildings found so far are almost certainly the dwelling house and storehouse erected by Guy's party in the autumn of 1610. Archaeological evidence indicates that the dwelling house and storehouse were destroyed by fire in the 1660s and that another of the buildings was still standing in the 1690s (Gilbert 1996b, 1997, 2003b, 2003c, 2006b, 2007).

The 2008 Season

In 2008 excavations at Cupids began on July 15 and continued until November 14. During this time we focussed on three main areas: the cemetery south of the 1610 enclosure, the north wall of the enclosure, and an area just south of the north wall where evidence of iron working was uncovered.

The Cemetery

A unexpected discovery was made at Cupids on November 15, 2007. While conducting some end of the season clean-up work at the site, we uncovered a headstone on the edge of our back-dirt pile about 15m (50ft) south of the 1610 enclosure. According to Gerald Pocius at Memorial University's Centre for Material Culture Studies, the stone probably dates to the early eighteenth century. Consultations with Treceven Haysom of Purbeck Stone in Dorset, England, who visited the Cupids site in July 2008, confirmed that it was carved from Portland Stone quarried just south of Weymouth in Dorset. Two lines of a weather-worn inscription are visible on the stone but have yet to be deciphered. Unfortunately it snowed just two days af-

Figure 4: Digging in the cemetery at Cupids. Note the backdirt pile to the left (Gilbert)

ter the stone was discovered and we were unable to do any more work that year.

In 2008 we returned to the place where the headstone had been uncovered to determine if there was a grave associated with the stone and, if so, if there were more graves in this area. Initially we opened two 2m x 3m units. The first was established just east of the headstone in an attempt to locate the grave marked by it and the second was located two metres to the west to see if there were any graves in this area. We soon discovered that we were not dealing with a solitary grave. The western unit revealed a single, unmarked grave pit and in the eastern unit we uncovered not only the grave associated with the first headstone but a second headstone just north of the first and three stone grave markers.

Our progress was slow due to the fact that much of this area lies beneath thirteen years accumulation of back dirt. However, we removed a portion of the back-dirt pile using picks and shovels, opened up a total of 78 square metres, and uncovered a total of nine graves. Two of these are marked by the headstones mentioned above, five by crude, stone grave markers and two are unmarked. The second headstone is carved from slate and, although it is badly shattered, the distinctive urn and willow design is clearly visible suggesting a date of around 1780 or somewhat later. At this point it is impossible to determine the date of the other seven graves. However, three of them are extremely narrow, measuring only 19 inches (48cm) or less across. Narrow graves such as these are often found in early seventeenth-century cemeteries.

Although it is too early to say for sure, this may be the cemetery first established by John Guy's party in 1610. If so, it is the oldest English cemetery in Canada. The first colonist to be buried at Cupids was Thomas Percy who died, according to John Guy, "of thought having slaine a man in Rochester" before

coming to Newfoundland. He was buried on December 11, 1610 (Quinn 1979:148). Although we do not have a complete list, we know of eleven other colonists who were buried at Cupids between December 1610 and March 1613 (Quinn 1979:146-149; 157-178). It would only make sense that these people would have been buried near the original plantation and that, once established, the cemetery would have continued to be used.

Although we don't know when the first Anglican priest arrived in Cupids, John Slany, the colony's treasurer, states in a letter dated July 17, 1612 that a service was held there on June 14 of that year, "to the great rejoicing of the people", according to Slany, "200 persons being present"(Mi X 1/8). If the graves of the colonists had not been consecrated before this, they almost certainly would have been by the priest who performed this service. If this is the oldest English cemetery in Canada, the presence of the urn and willow headstone indicates that it continued in use for roughly 180 years.

There are almost certainly more graves in this area but it will be necessary to remove at least a portion of the remaining back dirt before they can be located. At present we have no plans to excavate these graves. Instead, we have focused our attention on determining the location of the grave markers and pits. Before the start of the 400th anniversary celebrations in 2010 we plan to straighten up any existing stones, mark any unmarked graves with crosses, and reestablish this cemetery as part of the plantation site.

The North Wall of the Enclosure

In early September the Provincial Government acquired a piece of property immediately west of and adjoining our excavations in Cupids. Survey work conducted in 1995 and 1999 indicated that the site continued west on to this property for at least another 28 metres and several features uncovered in the extreme west of our excavation obviously extended on to it as well. The most prominent of these features was the base of a stone wall located at the north end of the site that ran west from the nineteenth-century Spracklin cellar pit. Fifteen feet (4.6m) of this wall had been exposed in 2003 and both documentary and archaeological evidence indicated that it was probably part of the original enclosure wall constructed around the plantation. On September 15 we were given permission from the Province to begin excavations on the newly acquired property.

Our first objective was to determine how far west this stone wall extended. To achieve this, we opened up a series of excavation units running from north to south to the west of perpendicular to the line established by exposed section of wall. This revealed a further 36 ft (11m) of stone wall running west almost to the edge of the terrace. The wall is 2 ft 8 inch

Figure 5: Uncovering the north wall of the enclosure at Cupids (Gilbert)

Figure 6: Uncovering the slag pile south of the enclosure wall (Gilbert)

(81cm) wide at its base and what remains of it is 51 ft (15.6m) long from east to west. It originally extended farther east but a large section was destroyed when the pit for the Spracklin cellar was dug. No trace of it has been found east of the Spracklin cellar pit but an 8 inch (20cm) wide, seventeenth-century builders' trench that runs from east to west in this area indicates that at some point the stone construction ended and that the easternmost part of the wall was probably a wooden palisade.

Since it faces the harbour, it makes sense that the north wall of John Guy's enclosure would have been of substantial construction. However, one obvious question that arises is, why was not the entire north wall built of stone? We may never know the answer but it could be that the original wall constructed in 1610 was built entirely of wood and that the stonework was an improvement that began sometime over the next few years but was never completed. We know that in 1612 the colonists were involved in upgrading the defences of the colony and this may have included rebuilding a portion of the north wall of the enclosure in stone (Mi X 1/15, 1/18).

Evidence of Iron Working

Excavations conducted to the south of the enclosure wall in late October and early November uncovered evidence of iron working in the form of blacksmith's slag. A deposit of slag and charcoal measuring about 1.5 m (5 ft) across was found just inside the north wall of the enclosure in good seventeenth-century context. Although this feature has not yet been completely excavated, so far 64 lb (29 kilos) of slag has been recovered. Scattered pieces of slag have also been uncovered extending south away from the pile. Since excavations have not been completed in this area, we do not know what we may uncover deeper down. It may be that this slag pile is inside what was once a blacksmiths' shop or it could be that it was dumped

here from a smithy located somewhere nearby.

A smithy would have been an essential part of any seventeenth-century settlement. Blacksmiths made and repaired many of the iron tools and other items necessary for everyday life. We know that a smithy was one of the first things set up at the Cupids site. In his second letter, written on May 16, 1611, John Guy recorded that over the previous winter some of the colonists had been busy "in working at the Smiths Forge iron works for all needful uses", and that they were making charcoal from birch, pine, spruce and fir which "is used by our Smith"(Quinn 1979:148). A list of provisions left at Cupids at the end of August 1611 includes, among other things, "the tools belonging to a smyth, ...one paire of bloomer's bellows, ...half a ton of iron & one C [hundredweight] of steel"(Cell 1982:66).

While we expected to find evidence of a forge somewhere on the site, we had speculated that it might have been located closer to the water and away from the living area. However, the discovery of this deposit is clear evidence that the forge was located inside the enclosure. Even if this slag was dumped here from somewhere else, it is highly unlikely that waste from a forge located outside the enclosure would have been brought into the enclosure to be discarded.

Testing Farther West

In addition to our main excavations, three 1m x 1m test units were dug farther west on the newly acquired property below the terrace on which the enclosure was located. The western most of these units was located 25m west of the eastern boundary of the new property and 3m south of the southwest corner of the Dawe house. All three units produced a combination of seventeenth, nineteenth and twentieth century artifacts.

Excavations this year concluded on November 14. However, mapping and site improvement work continued at the site until December 15 and cataloguing and artifact analysis will continue at the lab in Cupids until March 27, 2009.

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NULLIAK COVE, LANDSCAPE AND TRADITION

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The site of Nulliak Cove 1 marks one of largest expressions of Labrador Archaic culture found thus far. The site stretches over an extended bar of land that separates Nulliak Pond from the Labrador Sea. The site is distinguished by the presence of multiple large linear structures that have been interpreted as long houses constructed from collections of large or small skin tents. The area also contains components of both Paleo and Neo Eskimo culture, evident from house structures common to both. Originally discovered in 1968 by a field crew associated with William Fitzhugh, the site has quickly become one of the most heavily referenced sites in Northern Labrador. Its strategic placement within the zone of Pre-Dorset occupations as well as its relative proximity to Ramah Chert sources have made it the lynchpin in much of what has been written of Archaic cultural evolution. Despite this importance, the site itself is still poorly understood. To this end, I traveled to the site in the summer of 2008 with the intention of creating a highly detailed map and investigating the importance of landscape at the site with a focus of suggesting reasons for the site's development as well as its place in the greater region.

The 2008 field season started on August 15, with a flight to Nain to meet with the boat that would

Figure 1: Nulliak Cove (IbCp-20) Newly identified Longhouse, Structure 8 in background (Hutchings)

take us to the actual site. The ship the "Down North" captained by Randy Cahill, met us with our gear that we had sent earlier. Due to adverse weather conditions, we were unable to depart Nain until a week later. This delay gave us time to speak to the Nunatsiavut Archaeology Office and the support and extra information provided by Jamie Brake was invaluable to the remainder of the summer. After departing Nain on the 20th finally arrived at the site on the 21st of August.

We immediately went ashore and began trying to locate previously identified features. This task was greatly complicated due to the fact that there is no current map of the site, with the only published map only showing half of the reported features. Despite this, a variety of new information came to light during this visit. Though still an undeveloped theory, there does appear to be evidence of an extended cultural tradition of long houses among the Labrador Archaic at the site. This is demonstrated by clear differences in construction patterns between structures at different locations at the site. The higher situated structures to the east, which have been suggested to represent the oldest features at the site, demonstrate a more expedient construction while the lower structures in the west show a more labour intensive and planned structure. Additionally, during my mapping of the site, I identified two previously unmapped longhouses and found a third structure with associated debitage that seems to suggest that a portion of the site may actually be at least seasonally submerged by the intermittent shoreline of Nulliak Pond.

In addition to this new archaeological evidence this trip was also informative for future trips to the area. The late arrival in the season and resultant heavy vegetation made the surface identification of features more difficult than in previous visits. The presence of relatively unknown feature types also complicated mapping and the establishment of cultural affiliations. For example, the previously reported caribou runs bear a striking resemblance to rectangular structures at the site of an unknown cultural origin. This confusion over the cultural affiliation of features is enhanced by the fact that diverse cultures that have reused the site are not separated by elevation as would be expected.

Figure 2: Nulliak Cove (IbCp-20) (Hutchings)

The fine grain elevation data, gained by the mapping, revealed that some of the Pre-Dorset and Archaic structures are nearly identical in height above sea level, with at least one Archaic longhouse being on a beach ridge over four meters below a clearly identified Pre-Dorset structure. The inability to use elevation as a defining factor of cultural affiliation meant that many of the more ambiguous features such as caches were not able to be securely grouped to any one culture.

My work at Nulliak Cove has highlighted that our understanding of the cultural phenomenon of the longhouse is at best poorly understood. This has led to Nulliak Cove being described in ways that seem to run counter to what is observable at the site. I believe that the time spent at the site this summer will lead to a greater understanding of the site as well as the ideological and geographical development of the Labrador Archaic as a whole. I would like to thank Randy Cahill, Jason Burt, and Andrea Wilson for all their help during the summer, as well as Dr. Lisa Rankin for her guidance, supervision and support.

MICROMORPHOLOGICAL INVESTIGATIONS OF THE OCCUPATION SURFACE AT SITE FkBg-24: A 19TH CENTURY MULTI-ETHNIC (MÉTIS?) SOD HOUSE FLOOR, NORTH RIVER, LABRADOR.

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Introduction

In August 2007, micromorphological samples were collected across the occupation surface at site FkBg-24, a 19th century multi-ethnic (Métis?) sod house along North River, near the town of Cartwright, Labrador (Beaudoin 2008). Nine thin sections were prepared from these samples and examined by Dr. Richard L. Josephs. Micromorphology is the study of intact, oriented samples of soil or sediment at the microscopic level. Thin sections – 30 micron-thick translucent slices prepared from the sampled material – are examined with the aid of a petrographic (polarized-light) microscope (Courty et al. 1989). Descriptions of the thin sections focus on sample composition (mineral and organic), texture (particle size, shape, and degree of sorting) and fabric (the geometric relationships among the constituents) (Bullock et al. 1985; Stoops 2003). As a geoarchaeological tool, micromorphology's principal objective is to evaluate, and differentiate among, anthropogenic, geogenic, and biologic processes that impact archaeological sites (Courty et al. 1989; French 2003; Goldberg 1992).

Site FkBg-24 consists of a sod house structure with exterior walls measuring one to two meters in thickness. The interior of the structure measured 10 x 4 m with its shorter axis oriented north-south. The entrance to the house, in the center of the east-west (long axis) wall, opened to the south, toward the mouth of North River. The structure appears to have had a wooden floor and glass windows (Beaudoin 2008).

Over 3000 artifacts were collected during the summer 2007 excavations. These included ceramics, eating utensils, clay pipes, gunflints, inkwells, bone buttons, and numerous faunal remains. Stratigraphic and material evidence suggest that the east end of the structure collapsed first, possibly the result of a fire, allowing the west end of the structure to fill with windblown sand (Beaudoin 2008).

Summary and Conclusions

A total of nine thin sections, horizontally and vertically spanning the occupation surface of site FkBg-24, were examined in this study. All nine thin sections contained a combination of natural and cultural, organic and inorganic, material. The naturally-occurring, or non-anthropogenic, material consisted of organic-rich (peaty) soil and fine sand-size to pebble-size rock and mineral grains. The rock and mineral grains were consistent with derivation from local orthogneissic (metagranodioritic) parent material. The cultural, or anthropogenic, remains consisted of burned wood fragments (coniferous species) associated with dwelling construction, charcoal fragments, and skeletal material - the remains of terrestrial and marine animals acquired for nutritional and commercial (fur trading) purposes. Human trampling would also have introduced organic and inorganic material into the structure. Trampling produces a palimpsest of anthropogenic activities and natural processes.

The occupation layer is described as a dense or-

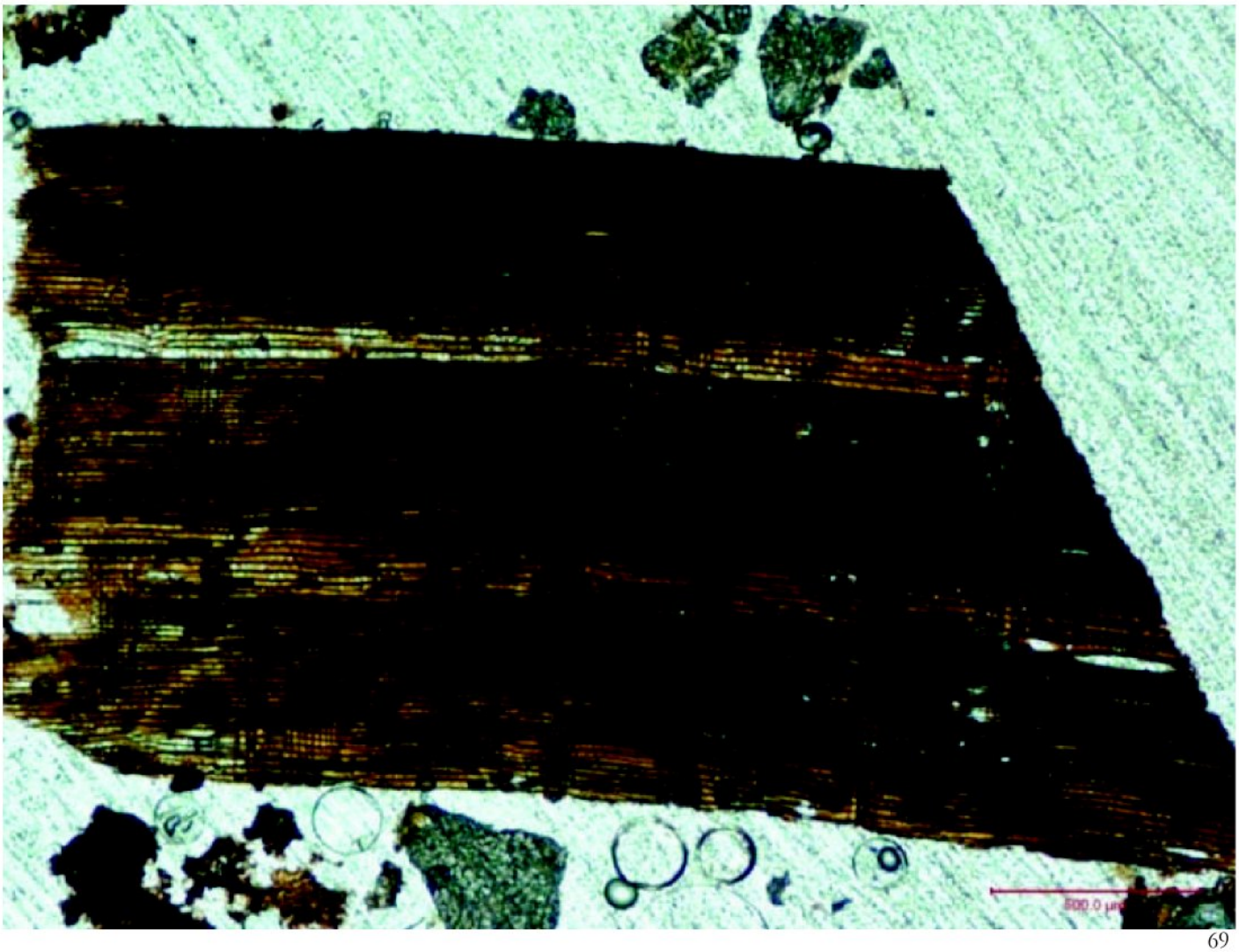
ganic soil that includes a thin, uppermost layer of highly decomposed wood (Beaudoin 2008). The occupation surface is buried by sterile layers of aeolian sand and an incipient soil (an Orthic Regosol). The high percentage of medium to coarse sand-size grains comprising the sterile deposits – those particles between 0.25 and 1.00 millimeters in size – combined with the high degree of particle sorting (moderately to well sorted) attest to aeolian transport and deposition of the material, most likely by strong, prevailing winds coming off the Labrador Sea (Ahlbrandt 1979; Leigh 2001). The most probable source for the sand is a terrace to the east of the site (Beaudoin 2008).

One of the primary characteristics displayed by occupation surfaces at the microscopic level is compaction of the matrix and preferred orientation of its constituents (Gebhardt and Langohr 1999; Simpson et al. 2005). Organic remains (plant residues) within the occupation layer are compacted and display a preferred, horizontally-elongated (north-south), orientation. The incorporation of the wood fragments within this horizon suggests that the floor was constructed directly on top of the pre-existing, peaty Regosol. Greater concentrations of burned wood observed in samples collected from the east end of the site support field observations that this area of the house suffered fire damage.

The micromorphological investigation of the occupation surface at site FkBg-24 yielded the following conclusions:

1) The concentration of moderately to well sorted, medium to coarse sand-size grains comprising the

Figure 1: Burned wood fragment (coniferous species) from the east end of the structure, measuring roughly 3 x 2 mm (Plane-polarized light; scale in lower-right corner is 500 microns) (Josephs & Beaudoin)



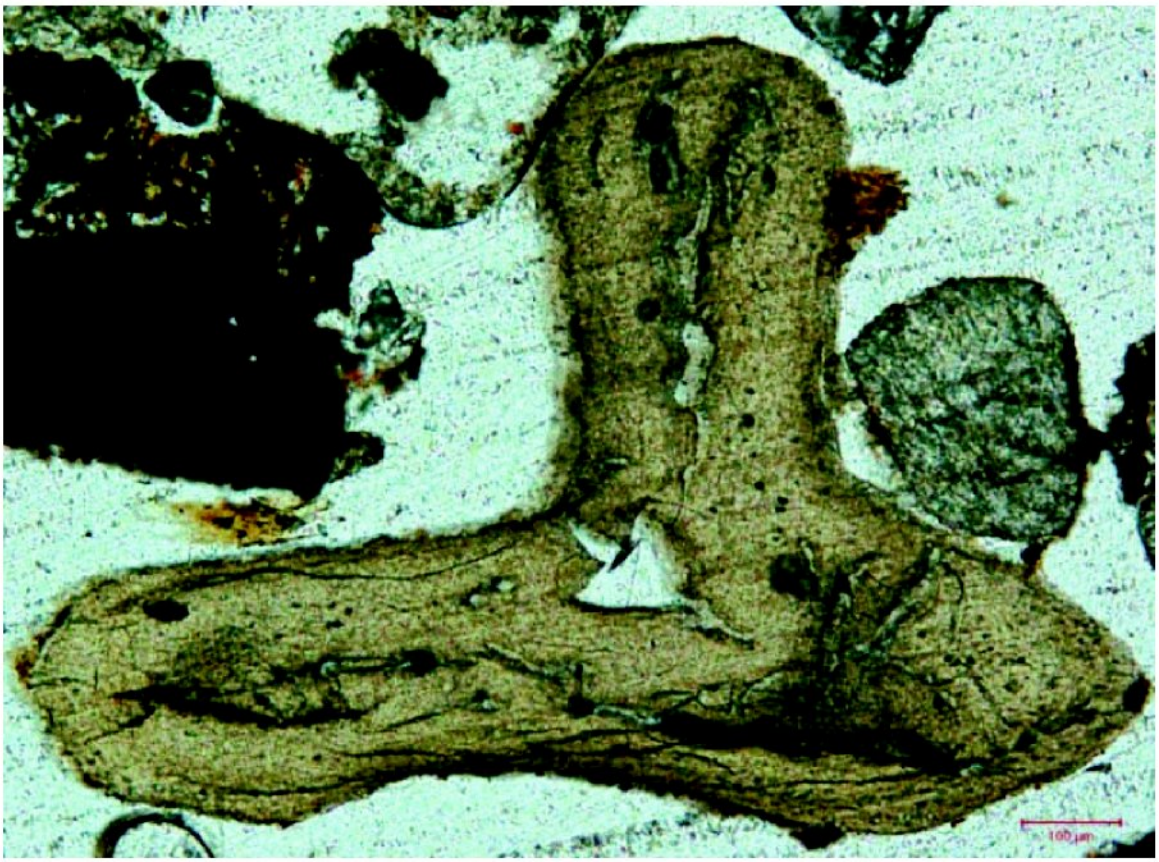


Figure 2: Unidentified t-shaped bone fragment, measuring roughly 1 x 0.8 mm (Plane-polarized light; scale in lower-right corner is 100 microns.) (Josephs & Beaudoin)

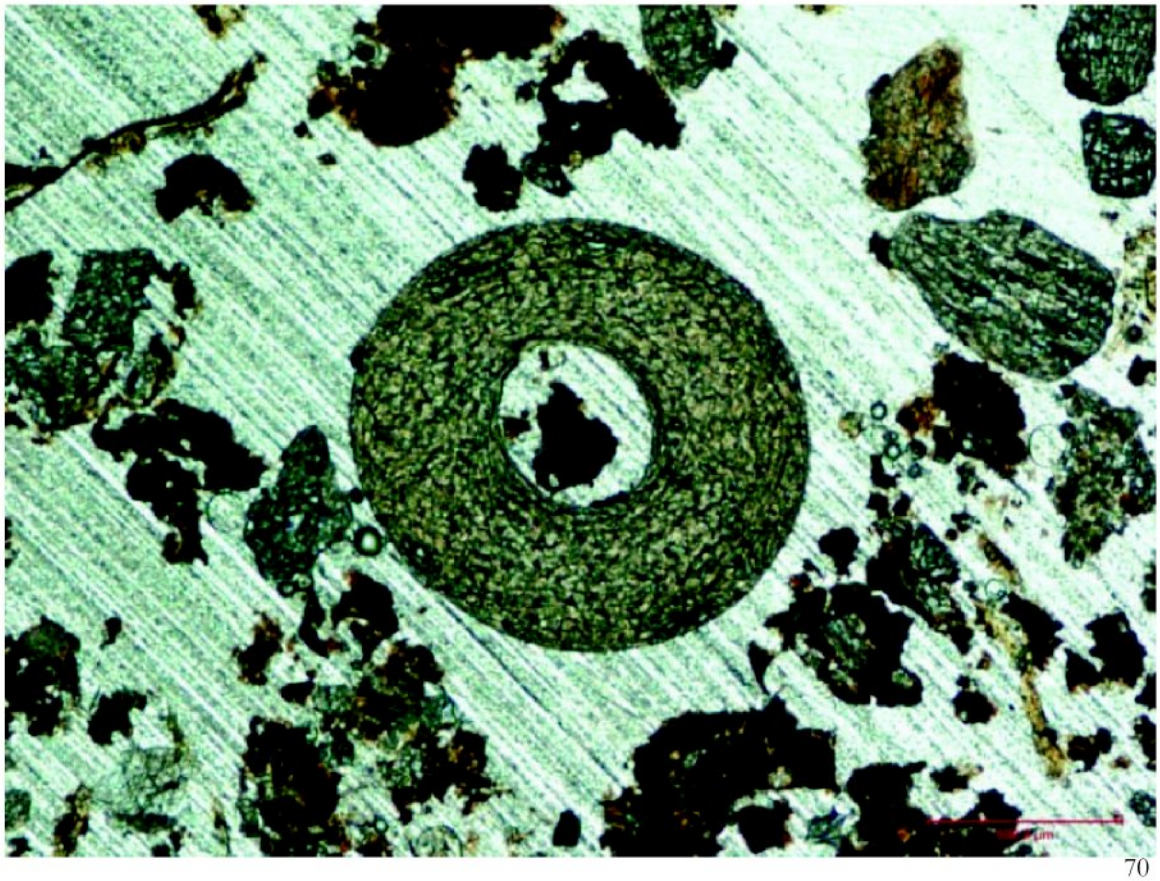


Figure 3: "Inorganic residue of biological origin," most likely a skeletal element from a marine invertebrate, the outside diameter is slightly greater than 1 mm (Plane-polarized light; scale in the lower-right corner is 500 microns) (Josephs & Beaudoin)

sterile, post-occupation layers suggests aeolian transport and deposition of this material, its most likely source being a sparsely-vegetated terrace to the east of the site,

2) Compaction and orientation of the organic remains within the occupation layer are consistent with micromorphological evidence indicative of occupation surfaces at other sites,

3) The incorporation of wood fragments within the occupation layer supports the presence of a wood floor constructed directly on top of the pre-existing soil, and

4) The high concentration of burned wood observed in thin sections from the east end of the site suggests that this area of the structure suffered fire damage.

In the case of this study, micromorphology supported interpretations that were based on macroscopic-scale field and laboratory investigations. It did not reveal any new or contradictory evidence. Its most limiting factor was the small sample size: only nine thin sections.

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ARCHAEOLOGICAL SURVEY AND EXCAVATIONS AT L'ANSE AUX MEADOWS NATIONAL HISTORIC SITE OF CANADA

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Memorial University [1 & 3] and Parks Canada [2]

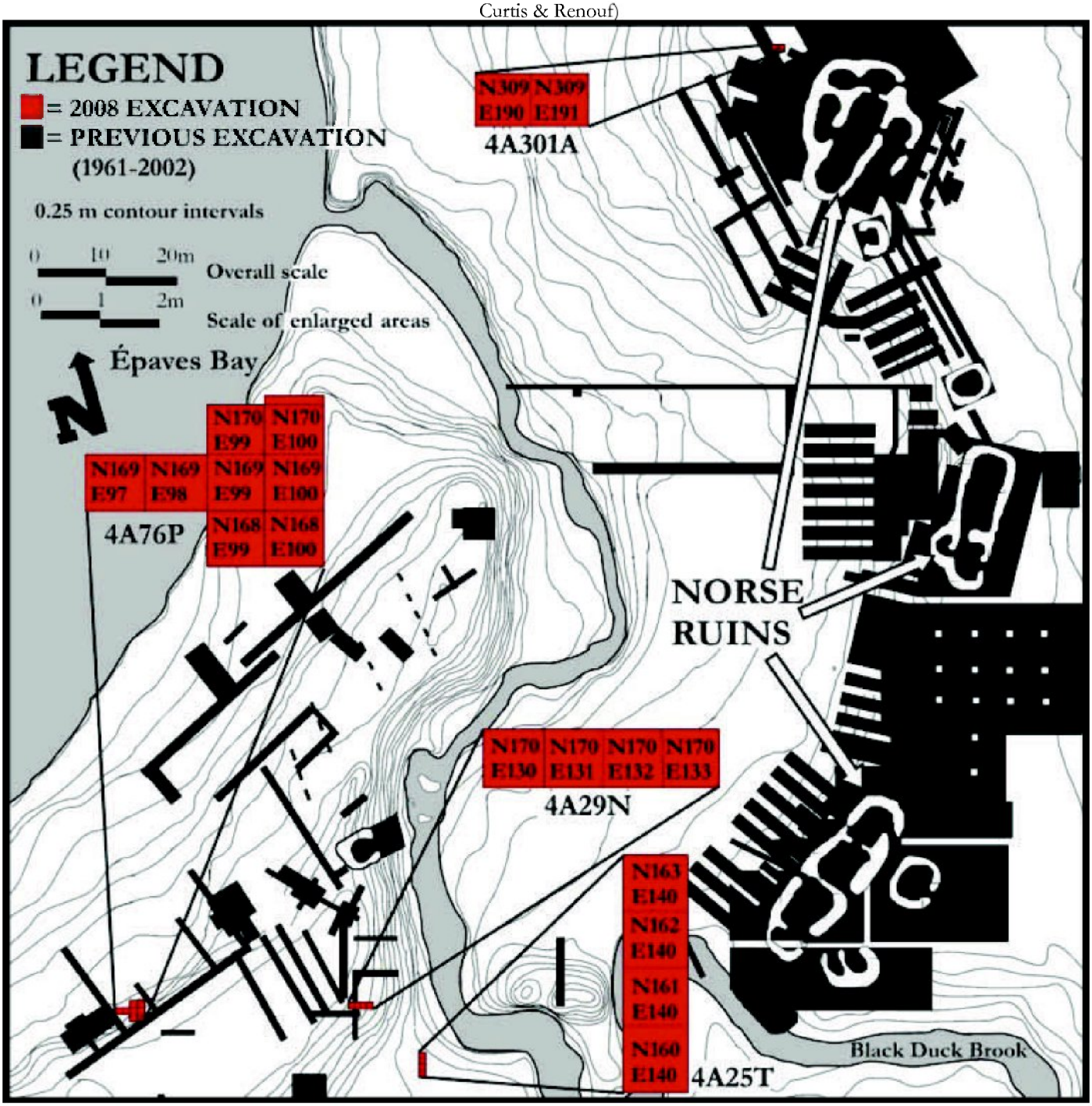
Memorial University and Parks Canada conducted the second field season of a multi-year archaeological excavation and survey program directed at the Aboriginal occupations of L'Anse aux Meadows National Historic Site of Canada, on Newfoundland's Northern Peninsula (Kristensen and Curtis 2008). Four weeks of fieldwork in September and October were dedicated to three main components: the excavation of an Aboriginal hearth adjacent to the Norse site, retrieval of sediment samples and cores for insect and mite analysis, and shovel testing along the coast west of Épaves Bay to identify previously unrecorded Aboriginal sites.

A Recent Indian hearth was identified through test pit excavations and a shovel testing strategy based on local topography and previous excavation areas (Wallace 1989, Wallace 2006). The hearth is 35 m southwest of a Norse smithy (area 4A76P in Figure 1) and consists of fire cracked rock, charcoal, and a cobble concentration (Figures 2 and 3). Calibrated radio-

carbon dates suggest the hearth was used between 960 and 910 BP. Artifacts from two cultural components were associated with the hearth: a European nail (Figure 4) 1 m southeast of the hearth, and a cluster of prehistoric stone flakes (Figure 5) 1 m west of the hearth.

During the initial round of testing to identify Aboriginal activity areas, a shovel test on the upper terrace of L'Anse aux Meadows yielded one piece of red jasper (Figure 6) and five chert flakes. The jasper is similar to Norse specimens from L'Anse aux Meadows that have been geochemically sourced to Greenland and Iceland (Smith 2000). Two 1 m by 1 m excavation units (area 4A301A in Figure 1) were opened to ex-

Figure 1: Excavation plan adapted from Parks Canada map with 2008 excavation areas indicated in red and enlarged (Kristensen, Curtis & Renouf)



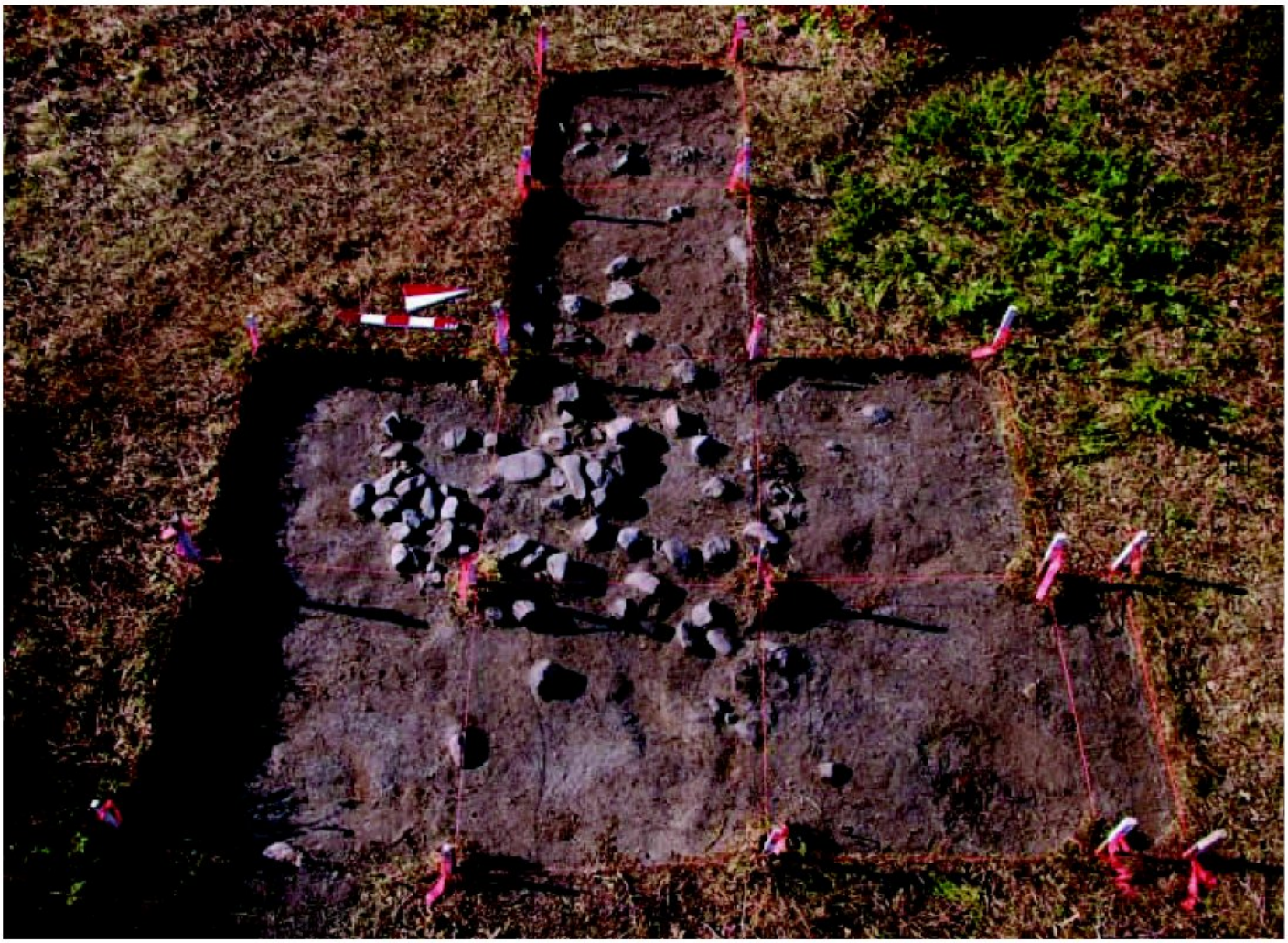


Figure 2: Hearth feature on lower terrace in excavation area 4A76P (Kristensen, Curtis & Renouf)

plore this area's potential for future excavations. A total of three chert flakes were recovered and the context appears undisturbed suggesting that this area could yield additional information on Aboriginal occupations at L'Anse aux Meadows.

Twelve 1 L sediment samples were collected from the Recent Indian activity area. The samples will be analysed for bird parasites (insects and mites) using a kerosene flotation method. In the absence of poorly preserved bird bones, more durable bird parasites would indicate prehistoric bird exploitation. The presence of these faunal remains will help address questions pertaining to the role of L'Anse aux Meadows in prehistoric Aboriginal cultures. This archaeoentomological study will test the hypothesis that Recent Indian complexes utilized the area as a task-specific bird hunting and egg collecting locale.

Three sediment cores were collected from Little Sacred Island, 2 km north of the L'Anse aux Meadows Norse site. These sediment cores will also be analysed for seabird parasites. A small pond on Little Sacred Island (Figure 7) was chosen for coring due to the appropriate sediment for organic preservation and a ring of feathers that lined the shore. One of the two sediment cores extracted from this pond is shown in Figure 8. A well preserved stratigraphic column of seabird parasites would serve as a proxy indicator of seabird population dynamics through time. This record of seabird demography over the past thousand years will then be compared to human patterns of occupation and abandonment at nearby L'Anse aux Meadows. Preliminary analysis of sediment samples from the archaeological site have yielded oribatid soil mites. Though these are not indicative of the resources ex-

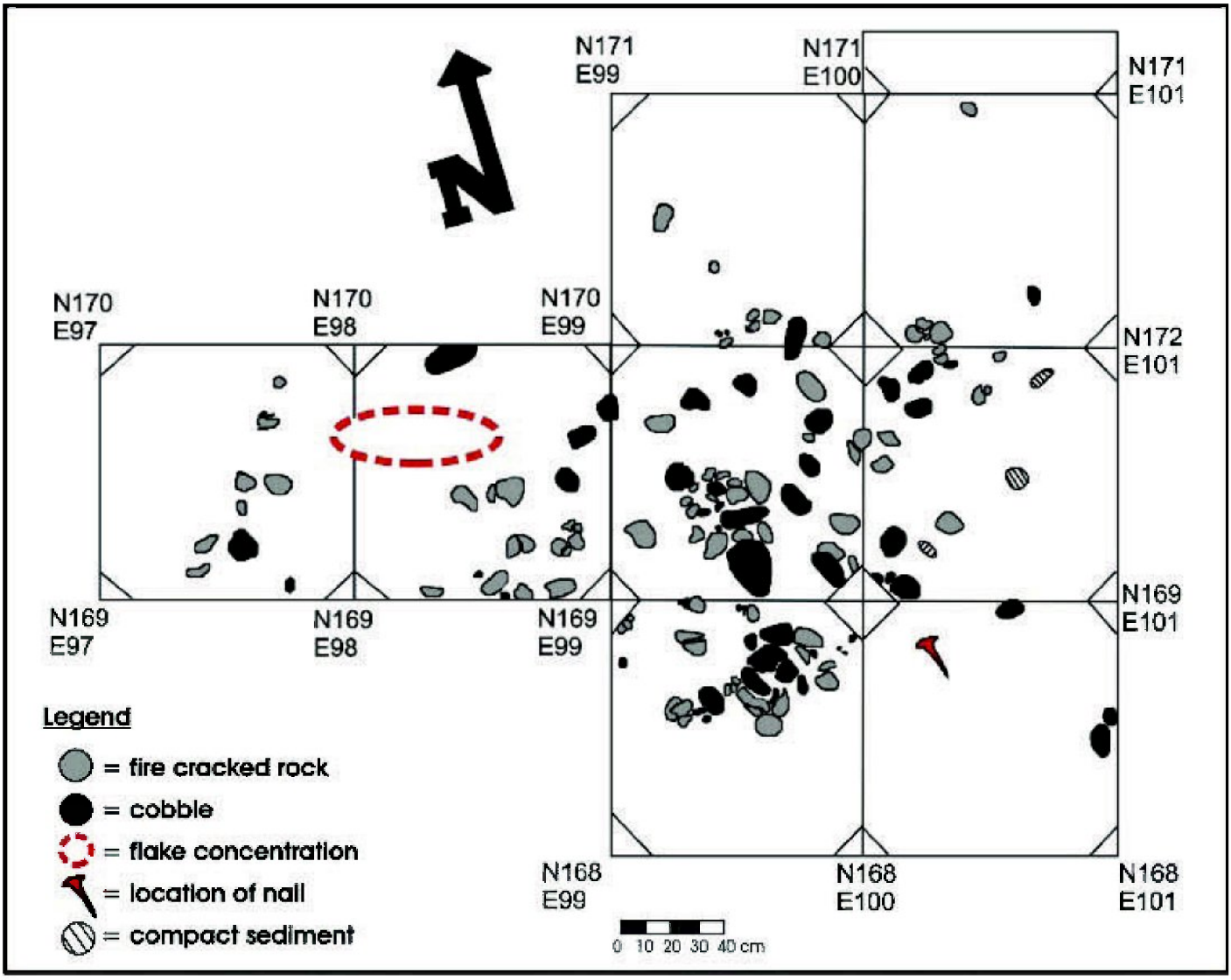


Figure 3: Hearth feature in excavation area 4A76P (Kristensen, Curtis & Renouf)

Figure 4: Iron nail found in excavation area 4A76P (Kristensen, Curtis & Renouf)

Figure 5: Chert flakes found in excavation area 4A76P (Kristensen, Curtis & Renouf)

Figure 6: Red jasper found in shovel test on upper terrace of L'Anse aux Meadows (Kristensen, Curtis & Renouf)

ploited at L'Anse aux Meadows, they indicate good preservation potential.

The 2008 survey focused on Upper Quarterdeck Cove, the second cove to the west of Épaves Bay and the Norse site. The survey consisted of shovel test-pitting along random transects and in areas of high archaeological potential (on or near geographic features such as raised terraces and freshwater brooks). Although no Aboriginal cultural material was found, indirect evidence of past human activity was observed. The landscape here today is very open, with low ground cover and occasional patches of tuckamore. Many of the test pits, however, encountered tree stumps and roots suggesting that this area was more extensively forested in the past. Today's landscape may thus be partly a result of wood-cutting activities over the last two hundred years, following the establishment of the nearby communities.

Exploration further to the west documented a small historic site in New Harbour Cove. The site consists of at least one stone house foundation measuring approximately 6 m by 4 m and a scatter of ceramic sherds along the beach (Figure 9). A sample of

Figure 7: Small pond on Little Sacred Island from which two sediment cores were extracted (Kristensen, Curtis & Renouf)

Figure 9: Overgrown house foundation at New Harbour Cove (Kristensen, Curtis & Renouf)

Figure 8: Crew member Mike Donnelly holding sediment core prior to incremental dissection (Kristensen, Curtis & Renouf)

Figure 10: Ceramics from New Harbour Cove (Kristensen, Curtis & Renouf)

the ceramics was collected to provide information regarding the age of the site (Figure 10). This sample is consistent with an occupation between the mid-19th and early 20th century as it includes a variety of refined white earthenware fragments along with a coarser, buff-coloured earthenware.

Future Research

Parks Canada survey work west of Épaves Bay will continue in an effort to expand the Aboriginal site inventory of L'Anse aux Meadows National Historic Site and surrounding area. Future excavations at the site and current research by M.A. student Todd Kristensen will explore the nature of Recent Indian occupations at L'Anse aux Meadows and on the Northern Peninsula.

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ST. PAUL'S ARCHAEOLOGY PROJECT: ST. PAUL'S BAY-2 (DlBk-6) SUMMARY OF 2008 FIELDWORK

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The 2008 field season was conducted over a six week period during the months of July and August and included a survey of the area and a 43m^2 excavation. Information and data gathered from this excavation will form the basis of my M.A. research and thesis (Lavers 2009). The overall purpose of this research is to connect Recent Indian sites on the Northern Peninsula of Newfoundland through the examination of lithic resource-use. This will be achieved through the description and analysis of lithics from St. Paul's Bay-2 to which a comparison will be made to other Recent Indian lithics from Spearbank (DlBk-1), Gould (EeBi-42), Spence (EeBi-36), Peat Garden (EgBf-6) and L'Anse aux Meadows (EjAv-1). This research seeks to explain the lithic resource use and mobility patterns of the Recent Indian occupation throughout the Northern Peninsula.

Gerry Penney discovered this site in 1989 when testing the area for Newfoundland and Labrador Hydro (Penney 1989). In addition to Penney's (1989) work, visits by members of the Provincial Archaeology Office (2006), Dr. M.A.P Renouf (2005) and myself (2007) were made to the site. The primary purpose of these visits was to assess damage to the site caused by a mechanically dug trench, as well as to collect any artifacts or debitage present on the surface. In assessing damage to the site Renouf (2005) noted a large hearth feature, identified on the basis of large quantities of fire-cracked rock scattered in the trench and profile. Renouf collected a carbon sample from this feature that dated to 1390+/-70 BP (Beta 21132).

The strategies for the 2008 field season were to first survey and test-pit the site and then open a small excavation. The primary objectives were: 1) to determine the function and occupation of the site, and 2) to determine if the site was associated with the nearby source of Cow Head chert (Figure 1).

Penney (1989) identified the site as being affiliated with Recent Indian and Palaeoeskimo occupations. The excavation of the site further confirmed this. Diagnostic artifacts associated with the Groswater Palaeoeskimo and both the Recent Indian Cow Head and Beaches complexes were recovered. In total, 936 artifacts and 52,907 flakes were collected from the site. Based on the large quantity of flakes and artifacts, primarily cores and preforms, found at this site it is postulated that the site is a quarry site associated with the nearby source of Cow Head chert. As well, seven features were identified, including six ovate hearths and a semi-circular structure (Figure 2).

The Groswater Palaeoeskimo artifacts recovered were of "typical" Groswater Palaeoeskimo tools and of the "Salmon Net" variant (Melnik 2007) (Figure 3). "Typical" tools consisted of burin-like tools, endscrapers, microblades, and sideblades. The endblades

Figure 1: Location of site (highlighted in yellow) and source of Cow Head chert (highlighted in red) Photo: Town of St. Paul's (Lavers)

recovered have been identified as the Salmon Net variant. The Recent Indian artifacts found characteristically belong to the Cow Head and Beaches Complexes (Figure 4). Large stemmed and ovate bifaces, large endscrapers, and stemmed and ovate projectile points were found.

Overall, the 2008 field season was very successful. The information gathered from this work will contribute greatly to our understanding of both the Recent Indian and Groswater Palaeoeskimo cultures. Although St. Paul's Bay-2 and St. Paul's Bay-1 (DlBk-5) are the only sites identified in the Inlet, there is an opportunity for further archaeological activity in this area because of the richness of its many marine and terrestrial resources, in addition to the nearby outcrops of Cow Head chert.

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Figure 2: Four ovate hearths (highlighted by yellow string) (Lavers)

Figure 3: Groswater Palaeoeskimo "Typical" and "Salmon Net" variant artifacts (Lavers)

Figure 4: Recent Indian artifacts (Lavers)

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View to WNW across the narrows of the beginning of the Adlatok River as it leaves Ashuapun Lake. This is a regular caribou-crossing place during the fall migration. A series of small ancient Innu loci (GhCs-02) are situated on the kame terrace just to the left of the prominent rocky knoll. A large stone cache and the Ashuapun Mounds are obscured by the knoll. (The Border Beacon landing strip is 6kms away just out of sight in the upper left corner of the photograph.) October 2008, photograph by Stephen Loring. (Loring & Jenkinson)

THE TRAIL TO THE CARIBOU HOUSE: A TSHIKAPISK ARCHAEOLOGICAL AND CULTURAL HERITAGE INITIATIVE. FIELDWORK IN THE VICINITY OF BORDER BEACON AT THE LABRADOR-QUEBEC BOUNDARY IN NITASSINAN

Stephen Loring
Smithsonian Institution and
Anthony Jenkinson
Tshikapisk Foundation, Sheshatshit/Natuashish

Introduction

For almost a decade now a Smithsonian (Arctic Studies Center)-Tshikapisk Foundation partnership has conducted a series of informal archaeological and cultural heritage awareness and training programs at Kamestastin. Building on an earlier Pathways Program the partnership has paired the archaeological and cultural-historical expertise of Smithsonian anthropologist Stephen Loring with the social and intellectual authority of the Tshikapisk Foundation. Tshikapisk is a registered non-profit Innu organization composed of members from the two Innu communities in Labrador. The Foundation was launched with a mandate to initiate a number of country-based (*nutshimit*) projects as a means to combat widespread cultural erosion and to reinvigorate traditional aspects of the Innu way of life. Since the dramatic collapse in the health and well being of the Innu is directly associated with the demoralizing conditions of life in the villages and the separation from the country, the Foundation believes that new and creative approaches to boost Innu identity are required. At Kamestastin, training in archaeology and cultural-heritage management has been a core-component of a learning environment to promote,

support and encourage participation in their own culture by Innu youth and Innu families. The project celebrates Innu culture and history and works towards restoring the Innu way of life in the country as an honored and valid part of Innu society in the new millennium.

2008 Smithsonian-Tshikapisk Fieldwork:

2008 Smithsonian ASC-Tshikapisk fieldwork planned for late-September through early-October was centered about the abandoned weather station and runway at Border Beacon (55°19'56"N/63°12'59"W) in the north central interior of Labrador immediately adjacent to the Quebec-Labrador border. Using Border Beacon as a jumping off spot we hoped to travel by canoe to the George River in Quebec following an old Innu route centered on the vast shoreline of Kauashekutakepenants (Lac aux Goélands). Organized by the Tshikapisk Foundation with the support of the Natuashish Band Council the canoe trip was envisioned as an opportunity to provide country experiences for a small number of Innu youth. As part of teaching an awareness and appreciation of Innu history and heritage we planned to conduct a thorough and systematic survey of all archaeological and cultural features found along the traditional Innu travel route from the Border Beacon area to the George River via River via Shaputuau (Lac Chapiteau), Lac Rochereau and Kauashekutakepenants (Lac aux Goélands). All sites (archaeological and historical) and all cultural features (including hunting blinds, caches, hearths, structures, etc.) would be systematically documented (described, photographed, mapped and GPS recorded). The Tshikapisk Foundation has always promoted a strict cultural preservation policy that believes that "the country is the best museum" such that most archaeological materials would be measured and photographed and left in situ. Limited collections of diagnostic materials found on the surface would be collected if it was thought that they might be subsequently lost to erosion or to souvenir collecting by fishermen, hunters or wilderness travelers. Permits to conduct archaeological research in Nitassinan were received from the Innu Nation, the Newfoundland-Labrador Provincial Archaeology Office and the Ministère de la Culture et des Communications in Quebec City.

Previous Tshikapisk-Smithsonian research at Border Beacon and at the headwaters of the Adlatok River in 2001/2004 revealed that some small archaeological sites with ancient Innu pre-Contact components were present in the vicinity. The Smithsonian-Tshikapisk survey work in interior Nitassinan builds on the earlier research of Gilles Samson (1975, 1978, 1983) and Jean-Luc Pilon (1982) at Indian House Lake, Québec and our work at Kamestastin (Loring 2007, 2008a, 2008b, *in preparation*). By working with Innu elders and young people the research is firmly grounded in a "community archaeology" approach that seeks to situate knowledge about their past with the Innu themselves.

The basic research problem addressed by this work is to develop a more elaborate and detailed understanding of the culture history and land-use of the northern interior of the Quebec-Labrador peninsula. While previous research has demonstrated that Amerindian and Paleoeskimo sites are present in the region there have not been enough sites (with the exception of 19th-century Innu sites) recorded to enable more than a cursory culture-history of the region to be developed. Based on Tshikapisk-ASC research at Kamestastin we hoped to locate and document sites that might contribute to some of the following research questions:

1. What role did interior resources and interior adaptations play in the initial human occupation of the Quebec-Labrador peninsula following deglaciation? Research at Kamestastin has identified sites that are older than 7000 years and lack any Ramah chert making them candidates for the earliest sites in northern Quebec-Labrador. Specifically, what is the relationship between deglaciation, climate and vegetation models, the appearance of caribou and early human societies in the Far North? Can evidence from interior Québec-Labrador challenge the pervasive assumption that the earliest sites have a strong maritime component?
2. While research at Indian House Lake and Kamestastin demonstrate the presence of Amerindian hunters in the interior between about 3500 years ago and about 1400AD and Dorset Paleoeskimos sites ca. 500 AD these sites are few and sparse. Documenting any sites from this period would be a significant research accomplishment.
3. Unquestionably the most significant cultural manifestation in the interior of the Quebec-Labrador

peninsula is the extraordinary presence and visibility of late-19th early-20th century ancestral Innu habitation sites –typically clusters of raised earthen-wall tent-rings—that are a ubiquitous feature of the historical landscape at Indian House Lake, Kamestastin, Fort Chimo/Kuujjuaq (Lee 1966, 1967) and the central coast of Labrador (Loring 1992). How are 19th century Innu sites distributed across the landscape? Are they concentrated at Indian House Lake or do they have a wider distribution (as we suspect) to maximize chances of intercepting caribou herds during their seasonal migrations? Although caribou drive systems are documented for the Innu in ethnohistorical accounts (Turner 1894, Leacock and Rothschild 1994, Loring 1997) they have never been identified on the land and remain a significant research opportunity and goal.

The Tshikapisk-ASC initiative provides Innu young people with an opportunity to learn about their cultural heritage and participate in carefully managed survey and excavation projects. In an effort to get a clearer picture about the extent of ancestral Innu and pre-contact Amerindian occupation and utilization of the region, the proposed 2008 fieldwork sought to expand the archaeological and cultural historical knowledge base, currently limited to the immediate region about Mushuau Nipi/Indian House Lake, to the large lakes that are just east and parallel to the George River. Fieldwork was conducted between 5 September and the 1st of October. Joining project co-directors Loring and Jenkinson were George Gregoire Jr, Penute Pokue Jr, Punas Rich and Charles-Joseph Pasteen from Natuashish. It had been hoped that the field project would create an opportunity for Innu collaboration and participation but conflicts over food and scheduling led to an early departure by the young men.

Survey Results

Border Beacon-Ashuapun Region

Prior to the departure of the Innu students the research team spent 8 days at the north-eastern end of the Ashuapun Lake adjacent to the source of the Adlatok River. The place where the river leaves the lake, Ashuapun Ekupitats, is a significant caribou crossing place and several ancient small hunting and butchering activity areas (GhCs-02) had been discovered here, on the north side of the river, when the area was previously visited in 2001 and 2004. While no diagnostic tools had been discovered it was assumed, based on the predominance of Ramah chert and quartz debitage, and their similarity to the Archaic Period suite of sites at Kamestastin that these sites were probably all associated with an Early-Middle Maritime Archaic manifestation.

The Ashuapun site loci, despite the apparent paucity of artifacts and lack of architectural features, are significant in that they appear to represent small discrete caribou hunting and butchering activity loci. Situated at a prominent caribou crossing place the site is interesting as much for what it isn't as for what it is. If indeed the interior of Nitassinan had been densely occupied in the past one might expect to find large sites with multiple reoccupations at prominent caribou interception places. The fact that the site loci at Ashuapun Ekupitats are few and discrete suggests that the site was occupied briefly, perhaps only once, by small family groups or hunting parties. The site contributes to our emerging perception that the initial occupation of Nitassinan by Early-Middle Maritime Archaic people was both brief and fleeting.

In addition to the cluster of four activity loci on the north side of the river that had been previously recorded, a new concentration of similar activity loci, two of which were partially excavated, were located on the south side. These south-side sites were discovered when Ramah chert debitage and battered pieces of quartz were found exposed in caribou trails and stream-eroded banks. Doubtless other loci exist hidden beneath the thick carpet of caribou moss and lichen vegetation that blankets the shore on the south side. On both sides of the river these activity areas consist of a small discrete scattering of Ramah chert debitage approximately five-six meters in diameter. No architectural remains–neither hearths, nor structures—were apparent at any of the site loci and it is suggested that they represent separate killing/butchering activity loci resulting from the successful ambushing of caribou herds crossing the river narrows. Whether they all result from the success of a single large hunt or are separated over time is not readily apparent. It is interesting to note that quartz debitage is either absent or present in very small amounts at the loci on the north side of the river (which may be a clue that the site dates after about 6500 B.P.), while on the south side

Figure 1: Ovate biface, Ramah chert, Locus III at Ashuapun Ekupitats-01. Found by Stephen Loring, October 2008 (Loring & Jenkinson)

the loci had conspicuous amounts of quartz debitage. These differences in lithic raw material composition suggest that perhaps there are differences in time between the different loci. We should comment also that Punus Rich, while partridge hunting, found evidence of a place in the hills above the lake where a quartz boulder had been broken apart presumably to extract suitable pieces for tool manufacture. Interestingly no complete formal tools were recovered in any of the test-excavations on either side of the river. At Ashuapun Ekupitats, on the north side, a very fine large ovate biface was recovered from a caribou trail near the giant split-boulder that serves as a prominent landmark on the edge of the rocky knoll (Figure 1). Another biface fragment and a celt-like mitshikuan fragment, both of Ramah chert, were found on the surface near-by. The boulders are a significant feature of the site and may have figured in the orchestration of the hunt.

Test excavations were conducted at several of the Ashuapun activity loci, most significantly at Locus-1 where a 5m^2 excavation unit was opened (Figure 2). The Locus-1 excavation represented more than 50% of the area of the activity loci as evidenced by the distribution of Ramah chert debitage on the surface. The recovered assemblage consisted of four artifacts (2 utilized flakes and 2 small biface fragments), nearly a

Figure 2: Excavation unit, Locus-1 at Ashuapun Ekupitats (GhCs-02). Tape extends 25 meters to the north to Locus-2. View across the river narrows at the caribou-crossing place. October 2008 photograph by Stephen Loring (Loring & Jenkinson)

Figure 3: Opened and abandoned boulder cache feature (presumably Maritime Archaic) at Ashuapun Ekupitats (GhCs-02). View to east and the prominent knoll over-looking the Adlatok River and the cluster of prehistoric activity areas (Loring & Jenkinson)

thousand small Ramah chert flakes and several flakes of a banded grey chert. The assemblage seems to support the interpretation of the distinct loci as caribou butchering and processing areas where stone tools were being resharpened and modified. The presence of several small flakes of banded grey ("Mugford") chert serve to support our belief that these are early Maritime Archaic sites. The Early Maritime Archaic sites at Kamestastin include nipple-based points of Ramah chert and small triangular/diagonal-edge thumb-scrapers of banded grey chert. For us, a debitage assemblage that includes large amounts of Ramah chert, mixed with small amounts of quartz and very small amounts of banded grey chert is diagnostic of the early Maritime Archaic in the interior.

There is a small but prominent rocky knoll that borders the east side of this site complex and forms a great vantage point to see all the site localities. From east-to-west the Archaic site complex includes the cluster of four small activity areas or loci adjacent to and just above the shore of the river. Each of these small activity areas, quite likely caribou killing and butchering stations as none exhibit hearth or house features, are characterized by a small restricted area of Ramah chert debitage and an occasional tool (several pieces of a small ground slate ulu were collected by Tshikapisk researchers in 2004. About 400-500 meters west of these activity areas on the side of a boulder-strewn hill that borders the north side of the kame terrace we discovered a significant boulder cache structure (Figure 3). This feature consists of two large boulders that are joined by a ring of substantial rocks that have been thrown aside creating a central depression.

Further west still, about 700 meters from the Adlatok River but only 300 meters or so north of a shallow hook-shaped bay on the northeast shore of Ashuapun there is a prominent kame terrace on which

Figure 4: Tony Jenkinson stands next to the stone feature ("Mound A") at Ashuapun prior to excavation. View to SW over hook-shaped pond with Lake Ashuapun in background (Loring & Jenkinson)

three stone features were discovered.

The largest of these features, Feature A, was an approximately 3 by 3.5 meters in diameter circular pavement of boulders (Figure 4). Situated near the center of the terrace it was about 12 meters northwest of a pair of similar, although smaller and less formal boulder piles situated at the eastern-edge of the terrace. All three features, especially the eastern pair –Features B and C—were thought to be possibly natural features. Although no flakes or cultural materials were found on the terrace adjacent to the stone structures two small ancient activity loci were located, one about 30 meters north-west of Feature A on the western edge of the terrace overlooking a small pond at the head of the hook-shaped bay, and the other about 45 meters east of Feature A at the bottom of a shallow swale between two sandy terraces. Both of these activity areas were characterized by a scatter of Ramah chert flakes and quartz debitage. The Ramah debitage includes both large 2-3cm in diameter biface thinning flakes as well as smaller retouch/sharpening flakes. No recognizable chipped stone tools were apparent and it appears that these two loci, like those next to the river (GhCs-02) are places where tools were repaired and resharpened, probably associated with caribou butchering and processing.

In an attempt to determine whether or not the Ashuapun "mounds" were cultural features or not it was decided to map and excavate the most prominent of the three. Mound A was mapped, a grid established, and excavated. With the removal of the surface rocks we discovered a stone-lined conical pit, filled with rocks, that was about 80 cms deep. A small discrete deposit of red ocher was found just below the surface but nothing else was found in the pit. In many ways the feature was analogous to Mound 1, an early Maritime Archaic mortuary feature, at Ballybrack (HeCi-11) on South Aulatsivik Island just north of

Figure 5: One of the discrete collection loci at Shaputuau -01 with pieces of quartz and flakes of Ramah chert laying exposed next to a caribou trail. The extreme eastern end of the lake is just to the right of the photograph. During the eight days we were in the vicinity numerous small companies of caribou were observed swimming across the narrows at this spot (Loring & Jenkinson)

Nain, that had been excavated by a Smithsonian team in 1977 (Fitzhugh 2006). The Ballybrack mound, like the Ashuapun feature, was almost completely devoid of artifacts and also had prominent deposits of powdered red ocher placed in the pit fill. The dates from Ballybrack are problematical, they range between 5000 and 7770 B.P., but the presence of small triangular end-scrapers of banded grey chert, "pencil-shaped" celts, and nipple-base points support an Early Maritime Archaic attribution around 7000 B.P. (Fitzhugh 1978b, 2006). Based on the similarity of the Ashuapun complex of sites and features with similar sites at Kamestastin and the Early Maritime Archaic sites on the Labrador coast we believe them to be of similar age.

Across the Height-of-Land: Border Beacon to the George River drainage

On the 13th of September we turned our back on Ashuapun and started west through a cleft in the hills following the principal northern tributary to a series of small lakes at the Quebec-Labrador boundary which is also the divide between waters draining east to the Atlantic from those draining north, via the George River, to Ungava. Crossing over the divide it was our intention to follow an Innu travel route to the George River via Shaputuau (Lac Chapiteau) Lac Rochereau, and Kauashekutakepenants (Lac aux Goélands,) a distance of approximately 90kms. As it turned out the weather conspired to curtail our efforts and expectations.

Immediately west of the Border Beacon runway the small river entering Ashuapun from the northwest passes over a series of boulder-strewn rapids and ledges that necessitate a kilometer long portage. Portaging affords an excellent opportunity to inspect the surface over which one carries. With a canoe over

Figure 6: What a difference a day makes. It is hard to locate quartz debitage in the snow! (Loring & Jenkinson)

your head, or tumping a heavy load, one's gaze (and mind) is concentrated on the trail at your feet. Passing back-and-forth along the north bank of the river several find-spots were encountered where stone knapping had taken place in the past. Walking on eskers and kame deltas, with little if any vegetation, it was readily apparent that there were no features or more expansive arrays of debitage associated with these stone-tool flaking events, as such they don't really seem to qualify as sites being only a shade more tangible than foot-prints. The interior of northern Labrador is almost universally perceived of as a wilderness, a place without people or structures. Yet in chance finds, like a few discarded flakes on a portage trail, or the occasional cartridge case on a high hillside, axe-cut stumps, or the cast-off plastic lube container from a winter snow-machine journey, one realizes that this corner of Nitassinan has witnessed the passing of many Innu and Innu ancestors over the years.

Above the portage one can canoe west up Kauinapeshekat, a long sinuous linear lake with imposing sandy eskers alternating on one bank or the other almost twenty kilometers to a lake near the height-of-land. Turning north the travel route crosses over to another small pond from which there is a short drag across a low muskeg bog to reach water flowing west into the George River. While the landscape imposed a real boundary, water flowing east from water flowing west and north, this was also an invisible political boundary passing from the portion of Nitassinan claimed by the province of Newfoundland-Labrador to that claimed by Quebec. We spent six days covering this relatively short distance which allowed for an intensive inspection of the countryside adjacent the river as well as excursions back from the river to look at potential caribou interception points and to higher elevations that might have served as lookout and reconnaissance places in the landscape. We located a number of mid-20th century Innu winter camps, one late-19th century/early 20th century Innu fishing camp, a few scattered hearths (with no associated artifacts), a pair of stone caches, and several "quartz bashing events" (QBE's) where quartz expedient tools may (or may-not) have been fabricated.

Crossing the height-of-land we proceeded west through a series of small shallow ponds connected by

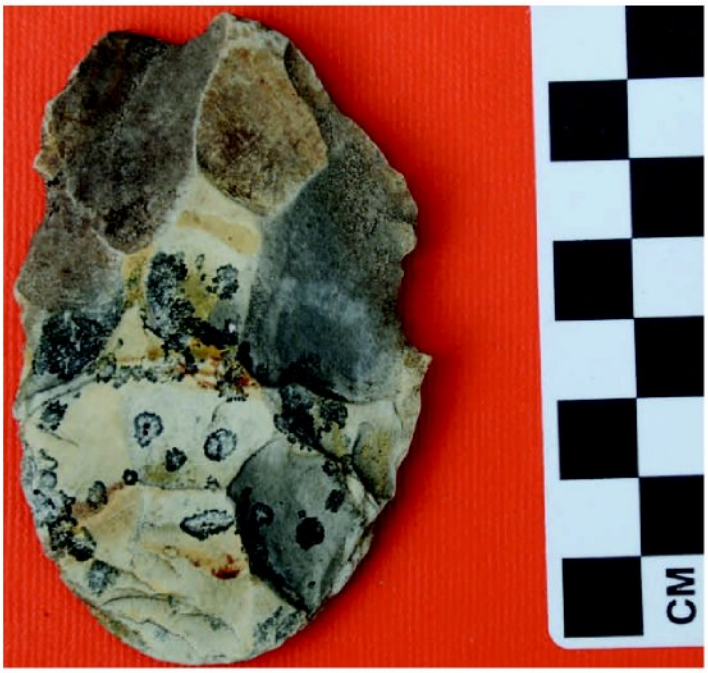

Figure 7: Maritime Archaic chipped slate celt, Locus-2 North, Shaputuau -01 (Loring & Jenkinson)

rocky brooks. We came upon a porcupine that was swimming across one pond having become confused in clambering around the maze of rocks and boulders that extended off from shore. The low water, to be expected so late in the year, was problematic for us as well as necessitating several portages which might have been runnable during higher spring levels. Arriving at Shaputuau (Lac Chapiteau) we set up our camp in a sheltered grove of trees on the north side of the small river that entered at the extreme eastern-end of the lake. The deep water pool at the mouth of the river where it entered the lake promised good fishing and we were not disappointed. The combination of reliable fishing, the beginning (or ending, depending on which way you were traveling) of the portage trail, a protective stand of trees and the convergence of several major caribou trails conspired to have us believe that this was a promising locality to find evidence of previous occupations. We settled into our sleeping bags eager for the morning and a chance to investigate our surroundings. During the night the weather changed and it commenced to blow and blow and blow.

In the morning when we looked out from our camp the lake had been transformed into a churning mass of waves. The wind was out of the west-northwest which gave it a free run of over ten kilometers down the lake to our camp. The wind built through the day and continued through the night and all the

Figure 8. Cached tent-poles at the Innu camp at the eastern-end of Shaputuau (Loring & Jenkinson)

Figure 9: Cached tent-poles at the Innu camp at the eastern-end of Shaputuau (Loring & Jenkinson)

Figure 10: Charles-Joseph Pasteen and George Gregoire contemplate archaeology, archaeologists and the future of the past at Ashuapun Ekupitats, near Border Beacon, Nitassinan, September 2008 (Loring & Jenkinson)

Figure 11: A classic caribou crossing place. Overlooking the beginning of the Adlatok River as it leaves the Ashuapun Lake. Small Maritime Archaic (and perhaps others) caribou hunting and butchering loci are found on both sides of the river (Loring & Jenkinson)

next day. Ocean-sized rollers crashed ceaselessly on the shore. Hail preceded rain which was followed by snow. There was never a thought to try and launch the canoe into the turbulence of the lake. Exactly 105 years previously another canoe party attempting to reach the George River was stymied by mid-September's treacherous weather. Aficionados of Labrador history will recall how in 1903 Leoniadas Hubbard and his companions were windbound for nearly two weeks while trying to cross a modest sized lake much like Shaputuau (Wallace 1905). For the Hubbard party being windbound had fatal consequences, for us it severely curtailed the extent of our intended survey, for we feared that even if the wind was to let up so we might get across Shaputuau we might then encounter far more difficult conditions when getting to the much larger lakes further west. As the weather allowed we conducted an intensive survey of the eastern-end of Shaputuau. It was apparent both by the numbers of caribou that we encountered, in fact we were almost never not in sight of caribou during the seven days we spent at Shaputuau, and by the convergence of numerous, deeply-incised caribou paths, that the eastern-end of the lake formed a prominent choke-point for caribou moving through the countryside.

The only indisputable trace of ancient hunters found at Shaputuau was a small site situated on a level terrace 500 meters to the west of the river's debouchment on the south side of the lake (An apparent deflated hearth upon a sandy terrace beside a brook on the north shore may qualify as another.). Several prominent caribou trails converged at this spot and led down to the water. Adjacent to the caribou paths we found several small activity loci, quite similar to the ones at Ashuapun Ekupitats, two of which we excavated (Figures 5-6). Both of the excavated loci at Shaputuau consisted of a discrete distribution of debitage approximately 2-3 meters in diameter. Locus-1

produced an assemblage that included 1 flake each of Ramah chert and a weathered grey chert, 24 flakes of a purple-grey quartzite and 64 pieces of battered quartz; Locus-2 produced 72 pieces of quartz, a possible quartz end-scraper, and a little distance off, a complete chipped slate celt (Figure 7). As at Ashuapun Ekupitats there was nowhere on the exposed terrace any obvious trace of habitation structures or hearths.

Approximately 500 meters further on the lake shore, to the west from the archaeological site, we found, nestled into a protective cove, the ruins of a substantial Innu winter camp that contained the remains of at least four (possibly six) tents as evidenced by cached tent poles and standing tin stove supports (Figures 8-9). The relative small amount of garbage and the ruined chassis of an old Ski-Do Elan suggested the site was occupied in the early 1970's perhaps by Innu from Kauauatshikamatsh.

Conclusions

Life in the interior appears tenuous, even at the best of times. After almost a decade of research situated between Border Beacon and Kamestastin the relative paucity of sites and their small size suggest that there never was an ancient occupation of the interior of Nitassinan on par with that of the Mushuaunnuat (the Barrenground Innu) during the 18th and 19th centuries. It also appears that the land was never completely abandoned, that ancient Innu ancestors –the people archaeologists call Maritime Archaic—must have arrived while parts of the country were still covered with glacial ice and they and their descendants (including cultures that archaeologists refer to as Intermediate Indians and Pt. Revenge Indians –the immediate antecedents of the Innu) left a fleeting and ephemeral trail that is only just now beginning to be perceived. It should not be so surprising that archaeological traces of the Innu ancestors should be at the threshold of visibility when considering several aspects of Mushuauinnu culture. Mobility and the skill to travel far and fast has long been a measure of Innu pride. Self-sufficiency and an ability to fabricate needed tools and clothing from skins, bone and wood, all invisible in the archaeology record, further a mistaken impression of an impoverished life-style. The extraordinary nuances of myth, memory and language that irrevocably link Innu with their ancestors and their land is a challenge to perceive and to imagine. The exceptionally modest assemblages that were recovered in the course of our fieldwork contribute significantly to the construction of an Innu past that is more eloquent than their unpretentious nature suggests. This is a direction of our research that we plan to explore more fully in a summary of Tshikapisk research that is currently under preparation.

One final caveat about the nature of archaeological survey in the interior of Nitassinan. No matter how diligent and thorough a survey might be we would be wary about professing our omniscience in recognizing the complete litany of traces of past land use in the country we traverse. Like an Innu elder whose life time of country experiences allows him to see and know about animals of which we are oblivious, our knowledge about the past continues to evolve as we learn to "see" better. Nitassinan is a dynamic landscape and the sudden appearance of a stone tool in a path, or along a beach that one has walked a dozen times or more in the last few years has us wondering if such objects are the gift of the porcupines or caribou whose trail we follow.

While the Tshikapisk-Smithsonian fieldwork in Nitassinan in September-October 2008 produced only modest results it was successful in several respects and proved an important primer in learning how to address the needs and interests of both Innu and *akaneshaut* participants (Figure 10). For almost a decade now the Tshikapisk initiative has sought to provide an opportunity for Innu leaders and young people to actively participate in the construction of knowledge about their history and heritage. The decade past has also seen a devastating winnowing of the last generation of Innu elders who were born and brought up in the country, and who lived an autonomous lifestyle that garnered meaning and respect from the intimacy that the land and the animals provided. For Tshikapisk, archaeology is seen as a means to engage young people in country-based experiences that are both meaningful and challenging and which, most of all, celebrate Innu identity within and ownership of Nitassinan (Figure 11).

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"The porcupine giveith and the porcupine takeith away." His (Her?) majesty *Erethizon dorsatum,* an integral member of the 2008 field-crew was present, in one guise or another, nearly every day of the project (Loring & Jenkinson)

2008 FIELD SEASON FOR ARCHAEOLOGICAL CONSERVATION AT MEMORIAL UNIVERSITY

Cathy Mathias
Memorial University

The 2008 field season for Memorial University (MUN) saw some changes to the organization of the field archaeology component of research and instruction. Over the past 20 some years the archaeological conservation laboratory at Memorial University has been providing extensive outreach in terms of conservation to field projects. This extension of the Archaeology Unit's facilities and staff to community projects could only be realized through the partnership of instruction, student assistance and Federal and Provincial funding. The Heritage Resource Diploma Program, at MUN, has, through its varied instructional program, fostered a dedicated group of students interested in heritage preservation. Many of these students have gone on to further their education in the fields of conservation and museum studies. Students who went beyond the introductory courses to be qualified as a conservators or collections managers, have returned to live in Newfoundland and Labrador. In a giving back to the Province ideology, Memorial University decided to provide some field employment to those students who have returned. Therefore 2008 marked the first full year for which MUN's conservator did not participate in a lengthy field season but instead began working in the upper administration area. Alumni of MUN who had both taken the heritage conservation courses offered at MUN and were graduates of an artefact conservation diploma or degree granting program were selected to assist researchers on-site at a variety of locations within Newfoundland. Thus far this situation has worked well and will continue to be supported by

the President of Memorial University. In addition the MUN archaeological conservator continues to oversee the field conservation by assisting with funding, providing advice and visiting archaeological sites within the Province. Projects and people involved in this pilot project for conservation include: Danielle Rundquist working with Dr. Pope (Conche Archaeological Project), Paula French working with Amanda Crompton (Signal Hill Archaeology Project under Parks Canada) and Donna Smith working with Dr. Barry Gaulton (Ferryland Project under the Colony of Avalon Foundation).

Research, conducted over the summer by Cathy Mathias, MUN archaeological conservator, included creating an Archaeological Composite Objects Risk Analysis Model and a joint project with the Canadian Conservation Institute (CCI) examining dye stuffs on embroidered threads uncovered at the 17th century English Plantation site in Ferryland.

A Risk Assessment Model for Composite Artefacts is being designed to help archaeologists make the right choice in terms of treatment for these problematic objects. A summary of the former research is included below. As this modelling is in its early stages I am asking for comments from any researchers on their experience with the excavation, conservation and storage of composite materials.

The model proposed here will be based on work conducted in Risk Analysis Modelling by Jonathan Ashley-Smith, Robert Waller, PhD, Stefan Michalski and Season Two. The above researchers have inspired me personally to do this sort of research but collectively the following institutions have supported this work: The Canadian Conservation Institute, Getty Conservation Institute and the Netherlands Institute of Conservation are pioneers in this area of conservation research and are leading the profession in new directions.

Waller's model was designed to evaluate Natural History Collections. Though somewhat different from archaeological collections both collection types are large, composed of both inorganic and organic material and serve as a valuable resource for scientific investigation and display purposes. From an educational perspective these artefact types serve largely to educate through the museum sector, thus reaching large audiences. Sampling for scientific analysis must be done in such a way that the object can be display quality after research. Likewise the integrity of the object can not be compromised when conserving the object. This latter issue could mean that chemicals used as adhesives or to consolidate friable sections must not interfere with scientific analysis.

For both the Natural History collections and Archaeological collections the conservation process is usually lengthy and it is not practical to treat individual objects. We must do bulk treatments. In addition storage is massive and challenging to both monitor changes in environment within the storage and changes of objects within that environment. Therefore it is best to both treat, store and evaluate objects in bulk. For a few special objects they can be isolated and given extra protection. For those doing archaeology in Newfoundland and Labrador individual artefact treatment is generally not practical. It is therefore by default that conservation of this material is done as a bulk treatment. Because these materials are difficult to understand and treat, treatment almost always requires intervention. In this way archaeological objects and works of art are similar. They are both made with a variety of organic and inorganic materials often built up in layers. Unlike a painting, however, the archaeological object has been exposed to heavy use and the deteriorating agents of burial. Also it is not easy to isolate one material type from another as it can be with paintings. It is the exception for one type of treatment to be sufficient for all components of the composite object. Here at MUN we have conducted experiments working with Hostacor/PEG; Hostacor/Rhoplex; Hostacor/NaOH/Rhoplex. None of the treatments are ideal to date. Therefore development of a Risk Assessment Model for Composites would examine the risk of conducting or not conducting a conservation treatment to the culturally significant component of the object that is deemed important for the researcher and governing body that owns the resource.

The areas of conservation that will be examined with this model are: passive treatment (document, remove dirt and air dry), passive treatment with anoxic storage (document, remove dirt and air dry), active treatment (separate object components and treat individually) and active treatment (do not separate object and treat as one object). Phase 1 of this project will involve a survey of research being conducted and

treatments for composite archaeological artefacts. Phase 2 will involve working with Season Tse of CCI who has created a Cultural Property Risk Analysis Model for paper objects. Phase 3 will identify the treatments that will be examined for the Risk Assessment Model and Phase 4 will be to create the Model. Once complete, archaeological conservators and archaeologists can use this model to help them decide what will be the best approach in terms of conservation for the problematic composite object.

If archaeologists would like to contribute to this project please contact Cathy Mathias at Memorial University.

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2008 AT THE ROOMS PROVINCIAL MUSEUM

Kevin McAleese
The Rooms

At The Rooms it was another successful year in the Archaeology and Ethnology section of The Rooms Provincial Museum. Both Kevin McAleese, Curator of Archaeology and Ethnology, and Elaine Anton, the Collections Manager for the unit were involved in a variety of projects.

Exhibits

McAleese helped to mount a short exhibit of two newly acquired painted caribou skin coats in the Rooms Provincial Museum Ethnology Collection. The coats are about 150 years old and are jointly curated with the Innu Nation. They were first exhibited at the Labrador Interpretation Centre (LIC), NorthWest River for about 4 weeks in February, then in Natuashish in May for a few days and in St. John's for the last 6 months of 2008.

McAleese continued to curate a new Metis heritage exhibit at the Labrador Interpretation Centre and contributed to two Provincial Museum Art Gallery exhibits:

Visions of Utopia (which displayed a replica of the Ferryland cross)

And

Mary March -1819 (which included a spoon attributed to Mary March)

In conjunction with the Rooms Provincial Art Gallery's exhibit *Defiant Beauty*, which featured William Hind's art, McAleese gave a public lecture at the Provincial Museum of New Brunswick, St. John.

That same trip was part of a study tour made to a few museums in preparation for the upcoming exhibition entitled *Slicing the Waves* on boats in The Rooms Museum's collections (opening February 5, 2009). Research for this exhibit also took place at the ROM, the Canadian Canoe Museum in Peterborough, ON. and the Maritime Museum of the Atlantic in Halifax.

In anticipation of the 400 anniversary of Cupids in 2010, McAleese also met with Bill Gilbert, Principal Investigator at Cupids, and discussed plans for curating a small exhibit on Cupids archaeology and history in 2010 at The Rooms Provincial Museum.

Research

McAleese conducted a brief study of a stone tool artifact collection deposited with the Provincial Museum of New Brunswick, St. John. Some of the tools resemble Recent Indian styles from elsewhere in Labrador. More study of this collection is ongoing. The collection was obtained by Henry Hind, one of the Hind brothers who journeyed through western Labrador in the 1860s. His brother William was an accomplished painter who recorded aspects of Innu life in the region.

McAleese also advised a team of Icelandic archaeologists who did a brief survey near Gambo and Sop's Arm White Bay. This work was very general and involved interviews with local informants as much as it did an actual ground survey. Near the latter community they noted some cultural depressions which on first glance appear Aboriginal. Future survey/testing will be required to determine the cultural affiliation, if any, of these features.

The Icelanders and McAleese also discussed/assessed the potential for future Norse research on the Northern Peninsula. This research may be included in a future archaeology and environment exhibit dealing with Norse and "skraeling" (Recent Indian) culture interactions.

Collections

The Archaeology & Ethnology unit received over 180 requests for information, loans, research vis-

its, and photograph use. Anton worked with several student researchers in the lab while they reviewed collections for thesis work.

The Rooms Museum's Community Museum Loans Program continued with a total of 23 loans being processed this year. The community of Rigolet will soon be added to the Museum's list with their new heritage interpretation centre planned to be open in 2009

Anton also supervised a number of volunteers and summer interns who worked in the archaeology area improving the housing of collections and increasing our access to them. This included working on processing some of the approximately 80,000 artifacts that came into The Rooms in 2008 from 26 submissions of collections from 115 sites.

Anton was able to attend an international symposium at UCLA Preservation and Access to Archaeological Materials in June and had the opportunity to review several museums' storage facilities for ideas that could be implemented here.

Operations

McAleese and Anton both continued to work on Land Claims issue related to jurisdiction over parts of the Rooms Provincial Museum collection. A major task for Anton was to chair a committee to develop a new Rooms-wide Collections Policy. This Policy will have a bearing on future, long term curation of The Rooms Museum's collections.

ARCHAEOLOGICAL ASSESSMENT OF BRIDGE HOUSE, BONAVISTA

Stephen Mills
Aardvark Archaeology Ltd.

In May 2008, an archaeological assessment was commissioned for Bridge House by the Bonavista Historic Society in association with the Bonavista Historic Townscape Foundation. Bridge House is located in the heart of downtown Bonavista (Figures 1 & 2). Also known as the William Alexander House, for the man who had it built, Bridge House was constructed between 1811 and 1814. It is the oldest residential structure in the province for which documentation is known. It was designated as a Registered Heritage Structure by the Newfoundland and Labrador Heritage Foundation in 1986 (www.heritagefoundation.ca/property-search/property-details.aspx?id=182). The property consists of 1615 square metres, or about .4 of an acre and is situated on sloping ground leading to a small boat basin at the east end of Bonavista harbour. The house was last occupied in 1967 (Gordon Bradley pers com. 2008). The Bonavista Historic Society acquired the house and property from the Swyers family of Bonavista in 1980.

By comparing the changes in Figures 3 and 4, it is obvious the charm and elegance of Bridge House has been ravaged through neglect and alterations. The west wing, two chimneys, dormers and front veranda have been removed as were two outbuildings. The interior is also heavily water-damaged and rotted.

The archaeological assessment of the Bridge House property involved the excavation of 41 test pits in a controlled 5m grid pattern. Areas of obvious recent disturbance were excluded from the survey. Each test pit measured a minimum of 50cm square and all units were dug to sterile subsoil or bedrock. The basement of Bridge House was also investigated where it was discovered that subsoil lies within a few centimetres of the surface. The absence of a cultural layer beneath the house suggests this area was excavated before the house was constructed. Three areas were investigated further to explore structural features uncovered during the initial testing.

Sixty-four artifacts were recovered from 28 of 41 test pits dug during the assessment. Test units to the east of the house produced the most cultural material and also the oldest ceramics: English White Salt-Glazed stoneware (circa 1720-1770), creamware (1760s – 1820s) and pearlware (circa 1770s – 1830s). The ceramic and glass assemblage also featured sherds from the second half of the nineteenth century to the early twentieth century. Artifacts associated with food storage, preparation and consumption dominate the assemblage. Ceramics include standard tablewares: mainly plates and either serving or mixing bowls. Several ceramic and glass storage containers are also represented including one fragment from a stoneware bottle or jug. Stoneware bottles were used to store liquids such as ink, shoe polish and alcohol. Glass bottles,

Figure 1: Bridge House (center right) on Jubilee Day (1901). Note the stable or carriage house to the right. Photograph courtesy of the Bonavista Heritage Townscape Foundation (BHTF) (Mills)

Figure 2: Bridge House in 2006 (Mills)

including wine and/or beer bottles were represented in the collection. A number of tobacco pipe fragments were also recovered, including several stems with bore diameters commonly found in cultural deposits dating to the second half of the seventeenth century.

The archaeological assessment of the Bridge House property has produced a small, yet meaningful collection of artifacts from the occupants of the house dating back to the early nineteenth century and beyond. Although, the assemblage date spans over three

Figure 3: Undated photograph of Bridge House. Note the long veranda and wrought iron railing. Photograph courtesy of the BHTF (Mills)

Figure 4: Bridge House in 2006 looking north. It is missing the west wing, dormers, chimneys and veranda. The pitch to the roof on the well house (right side of the house) has also changed (Mills)

centuries, from the seventeenth century to modern times, most of the specimens were made in the early to mid nineteenth century and are therefore most likely associated with the family of William Alexander.

What is surprising from the collection of ceramic and glass artifacts is the absence of high quality items. Considering the relatively high economic status of the Alexander family, the initial occupants of the house, it might be expected to find pieces from more expensive plates and other high-end items made from porcelain or similar materials. Artifacts from the Bridge House site represent what can be best described as a middle class nineteenth-century domestic site. Although the limited nature of the testing may have been a contributing factor in the recovery process, it is somewhat surprising that the ceramics from this site would be comparable to one occupied by families of lesser economic means than the Alexanders. Photographs of the house, dating well into the twentieth century, show a home that was certainly well maintained, suggesting its occupants had the financial resources to afford at least some of life's more expensive things. Perhaps the Alexander family spent their money on items made from more durable materials, or on less tangible expenditures such as travel.

The oldest ceramic sherds, dating to the mid- to late-eighteenth century were the fragments from English White Salt-Glazed stoneware dishes. These were probably family heirlooms. There were too few eighteenth-century artifacts to suggest substantial occupation of the property prior to the construction of the Bridge House. The assessment did, however, uncover evidence that the site was visited in the mid-to late- seventeenth century as is evidenced by the recovery of four tobacco pipe stem fragments with bore diameters of 7/64" and 8/64" of an inch. As Bonavista was settled by that time it is not surprising to find artifacts from the seventeenth century, particularly near the water's edge. Archaeological investigations at the nearby Mockbeggar Premises Provincial Historic Site also uncovered seventeenth-century artifacts (Aardvark Archaeology 2007a & b).

Evidence of the former cultural landscape was also noted, particularly in the central part of the back yard where 60cm-thick deposits of rich organic soils, virtually free from stones, were recorded in several test pits. No doubt this is evidence of vegetable gardens. Historic photographs confirm the presence of vegetable gardens in this area. Traces of two outbuildings were also recorded, one of which is the stable or carriage house visible in early photographs (Figure 1). The substantial masonry foundation for the second outbuilding was discovered adjacent to the rear door of the house. Its function is unknown.

The artifacts, structural remnants and evidence of gardening activity recorded during this assessment provide tangible insights into the early nineteenth-century family life of William Alexander. Bridge House and the associated property are important heritage resources both for Bonavista and the province of Newfoundland and Labrador. Rarely does a residence of this period survive in Canada, yet alone one with such a well-documented history, together with numerous archival photographs and now, a collection of artifacts from its occupants.

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BURNSIDE HERITAGE FOUNDATION INC. 2008 ARCHAEOLOGICAL SUMMARY

Laurie McLean
Burnside Heritage Foundation Incorporated

The Burnside Heritage Foundation Inc.'s (BHF) 19th archaeological field season was a busy one. BHF archaeologist Laurie McLean was awarded three permits to survey and carry out excavations in Bonavista Bay. Permit 08.19 was granted to survey Trinity Bay, including its islands, and Bonavista Bay. In addition, time was allotted to draw a profile of DhAi-14, a new locality identified at Cape Freels and assess the condition of the latter area. Sam Horwood was archaeological assistant during this project and Gerald Howse, a fisherman from Hare Bay, was hired as boat operator. Funding was provided by Newfoundland and Labrador's Provincial Archaeology Office.

The Trinity Bay survey identified 16 new sites, including 13 of aboriginal affiliation, two historic sawmills and one mixed locality. Nine of these occupations were found on islands while seven are located on the mainland. There are five Paleoeskimo occupations. Most of the rest of the sample consists of flakes of unknown aboriginal origin. Three of the Paleoeskimo sites occur along the southern shore of Black Duck Island, a small landmass slightly northwest from the much larger Lewis Island. Drake Island, which is connected to Black Duck Island by a rocky strand, contains another new aboriginal site of unknown cultural affiliation. These two islands are located close to the town of Trinity which would facilitate further research there. Five of the new aboriginal sites lie on Lewis Island's south coast which, considering the island was not completely surveyed, means this was also an important area during prehistory.

Following the pattern manifest throughout Bonavista Bay, most of the sites have suffered erosion damage. Two localities were identified by artifacts lying in the tidal zone, no *in situ* material could be found. Seven of the other sites occupy 1 - 10 m^2. Many of the respective artifact assemblages also were small. Six sites yielded samples of under 10 lithic items while one, the largest, contained over 200. A total of 675 lithic artifacts were collected. Typical of Bonavista Bay assemblages, most (n = 523/77.5%) of the objects were made on Bloody Bay Cove rhyolite. 113 chert items constitute the next most common raw material.

The two historic sawmills occur in the bottom of Trinity Bay. One of the mill sites was the first to be built in Trinity in 1894 and the descendants of the original Brown family still occupy the property. A family member was very helpful during the survey and probably would contribute to further research there.

A day and a half were spent at Cape Freels. Even in June this was not a pleasant place to work, raising questions about the inducement for 10 archaeological sites occurring there. Two Bloody Bay Cove rhyolite flakes were found while profiling DhAi-14 and excavating slumped bank in front of it. 99 stone artifacts, mostly flakes of patinated non-Bloody Bay Cove rhyolite (53.5%) and Bloody Bay Cove rhyolite (33.7%), were collected from the eroding dunes that characterize much of the cape. The area is suffering damage from ATV and pedestrian traffic. A program of archaeological monitoring, including salvage excavations and public education, is severely required at Cape Freels.

Burnside Area Excavations

Permit 08.20 was issued to Laurie McLean to conduct archaeological excavations and surveys for the Burnside Heritage Foundation Inc. in the Burnside area. The primary BHF concern for 2008 was to implement salvage excavations and build a retaining wall in front of an eroding bank at the Beaches (DeAk-1). Rising sea level has destroyed 90% of this locality since 1872. Storm surges and winter ice wash away the gravel substrate supporting the culture layer and surface leaving these strata hanging unsupported above the beach. Consequently, the Beaches' 150 metre long southern bank presents an uneven, ragged vertical surface over its unprotected area. Ultimately the unsupported cultural soil falls to the beach where tidal action disperses artifacts throughout the surface.

The BHF built a 90 metre long retaining wall at the Beaches in 1995 that is now succumbing to the ocean's power. The BHF has been conducting salvage excavations along the bank and building sections of a more efficient wall each year since 2004. Thirty-one metres of wooden breakwater were erected during 2004-2007 and thousands of stone artifacts have been collected from provenience about to be lost. The most severely eroded unprotected section of the Beaches southern bank was selected for excavation and break-

water construction this year. A five metre long portion, 35 - 80 cm wide, depending on how much sterile gravel had disappeared, was excavated from S15 W28 to S15 W33. The bank was excavated northwards to the S14 line. A total 2.33 m^2 were excavated.

Fire-cracked rocks were present throughout the units with numerous levels mapped and photographed. These items did not present an integrated hearth as was found 20 metres to the west in 2005, meaning that the original hearth was somewhat dispersed or the 2008 excavation uncovered the edge of a former fireplace. 658 stone artifacts were collected. Three microblades and one endblade indicated that this is part of a Paleoeskimo deposit. Previous research had identified the bank north and westwards from 2008's focus as Area B which contains early Recent Indian and Paleoeskimo material.

A nine metre long retaining wall was installed tight to the finished profile in November, bringing the total new wall to 40 metres. Unfortunately, erosion continues along another 110 metres. The good news is that the new version of retaining wall, compared to the older more expedient example, adequately conserves the archaeological resources behind it. Thus, continuing this combined salvage-conservation at the Beaches is worthwhile. The BHF will be seeking government and private support to continue this project in 2009.

Figure 1: Sam Horwood excavating slumped bank at DhAi-14 (McLean)

Another 561 stone artifacts were collected from unprotected parts of the eroding bank whose unsupported upper levels were about to collapse to the

Figure 2: Excavation of Beaches (DeAk-1) eroding bank, 2008 (McLean)

tidal zone. In one instance, soil that had fallen to beach level was salvaged. Endangered soil, primarily black culture layer, was shovelled into plastic buckets at the end of each day at the Beaches. Provenience information was recorded and the soil samples were brought to Burnside where they were stored until rain or strong winds prevented the boat trip to the site. The soil samples were then screened. Two microblades, including one retouched example, and an endscraper were collected in this exercise, adding to the Paleoeskimo sample.

The erosion suffered at the Beaches has resulted in a wealth of stone artifacts dispersed over the surface of the gravel beach and tidal zone skirting the site's eastern and southern borders. It is difficult not to continually check these areas for artifacts. Most of the items are waterworn flakes, but more detailed items are present as well. 92 stone artifacts taken from the surface in 2008 include six cores, two bifaces and a macroblade in addition to flakes. 16 items collected from a western portion of the eroding bank include nine cores and seven flakes.

Sailor South (DeAj-05) Excavations

Sailor south (DeAj-05) is a late Dorset Paleoeskimo occupation discovered on the outskirts of the community of Salvage in 2002. It is located 40 metres south of the multi-component Sailor site (DeAj-

Figure 3: Beaches (DeAk-1) 2008 retaining wall (red foreground). 2005, 2007 construction, red background and 1995 wall to the left (McLean)

01), but separated from it by a 10 metre high cliff. Sailor South lies in an area of former historic settlement, but disturbance appears to be minimal. 4195 stone artifacts and 37 historic items have been collected from 19 m2 excavated from 2002 until 2007. ATVs have negatively impacted the site lately and encroaching house construction poses a further threat. This site warrants salvaging and the BHF has annually excavated parts of it since 2002. This activity is reserved for windy days that do not permit travelling to the Beaches and Bloody Bay Cove sites by boat.

Six m2 were dug in 2008. These squares formed a line on the western edge of a previously excavated trench. Diagnostic artifacts include five end-blade preforms, four endscrapers, 10 microblades, a retouched microblade, a utilized microblade and eight tip flute spalls. A total 1095 stone items were found in the excavation while eight were found on the surface. Six Newfoundland settler artifacts were recovered. Most of the items, n = 626/57.2%, were made on Bloody Bay Cove rhyolite, along with 268/24.5 % chert objects. Nine other types of stone exhibited conchoidal fracture in this collection, suggesting that these Dorset experimented with local shale, slate, rhyolite and quartz among other less popular options.

Well over 1000 people visited the BHF interpretation centre and archaeology sites in 2008. Boat tours to the Beaches and Bloody Bay Cove sites were offered. Funding for the Beaches retaining wall was obtained from the Cultural Economic Development Program and HRSDC/Gander. CEDP Operational Support contributed to BHF operating costs. HRSDC provided funds for hiring adult workers and one summer student. Admission fees, souvenir sales and boat tours also contributed to operating costs. In addition to winning a Manning Award in 2008, the BHF was awarded a 500.00 cash prize by Newfoundland and Labrador's Historic Sites board.

October Survey

Laurie McLean was granted Permit No. 08.48 to survey the Fair Islands, Indian Island, other nearby islands and Indian Bay's outer headland in October, 2008. Harley Brown was assistant archaeologist and Hare Bay fisherman Gerald Howse was boat operator. The survey was funded by Newfoundland and Labrador's Provincial Archaeology Office. BHF staff helped to catalogue artifacts at the end of the exercise. Thirty-three new sites were recorded, including 27 on some of the numerous islands and six on the mainland. BHF surveys since 1989 have now identified 124 archaeological sites throughout Bonavista Bay.

Seventeen of the new sites are classified as unknown aboriginal with another five containing undiagnostic lithics and Newfoundland settler material. There are another seven Newfoundland settler occupations, along with three Dorset Paleoeskimo and one Paleoeskimo/Maritime Archaic locality. A sample of 830 stone artifacts were collected, including 17 from four re-visited sites on Black Duck Island and Drake Island. Bloody Bay Cove rhyolite was the most common raw material, represented by 456 artifacts (54.9%). Quartz crystal makes up the second largest raw material category, totalling 177 artifacts (21.3%). Most of the quartz crystal, 96 items, comes from the Norris Cove Blowout-1 (DfAk-22) which had flakes and a few cores scattered around *in situ* deteriorating granite cobbles suggesting a former hearth.

While 15 other sites contained quartz crystal artifacts, the two most interesting were the Marine Farm (DgAk-07), which is a source of crystal and amethyst, and Sydney Cove-North (DfAk-30) which has veins of quartz crystal running through its bedrock shoreline. Much of the quartz crystal that regularly occurs in small quantities throughout Bonavista Bay possibly originates from these localities.

Like much of Bonavista Bay, many of the new localities are eroding or have suffered from it. Five sites consisted of surface material with no in situ deposits. Another 12 under 6 m^2 in size include six that are actively deteriorating. 481 (53.2%) of the total 904 artifacts were collected on the surface while 423 (46.8%) objects were found in test pits. Twenty sites contained artifacts on their surface while 24 yielded cultural material from test pits. Eleven sites did not have artifacts on their surface while seven produced no cultural objects from their test pits. The obvious negative effects of erosion on the Bonavista Bay archaeological record, combined with the threat of accelerated cabin construction and associated recreational activity require innovative approaches to protecting and researching these cultural resources.

Figure 4: Quartz crystal artifacts scattered around exposed cobbles at Norris Cove Blowout-1 (DfAk-22) (McLean)

INVESTIGATIONS INTO THE ARCHAEOLOGY OF INTERIOR LABRADOR

Scott Neilsen
Memorial University

After an unscheduled hiatus from the field in 2007, the 2008 field season once again saw me back amongst the spruce and sphagnum in interior Labrador. Continuing with my PhD research at Lake Ashuanipi in July and early August, and then moving to North West River in late August, to teach Labrador Society and Culture at the College of North Atlantic/Labrador Institute in Happy Valley-Goose Bay, provided me with an opportunity to sink my shovel into a couple other projects as well. All said and done, I held three separate permits in 2008, and I have summarized each of the projects below.

Archaeology Beyond the Horizon: the final season of fieldwork

Archaeology Beyond the Horizon is the title of my PhD research, which I am conducting through Memorial University, under the supervision of Dr. Lisa Rankin. Despite the fact that there is much more that could be done on Lake Ashuanipi in western Labrador (and I would encourage others to consider projects there) 2008 was the third, and final summer of fieldwork for my PhD. Keeping with my research plan and schedule, myself and my crew (consisting of second year veteran Matt Beaudoin and newcomer Todd Kristensen) focused efforts on excavation at three sites (FfDn-01, FfDn-07, and FeDn-01), which had been located during the 2005 and 2006 field seasons. In ad-

Figure 1: Archaeology Beyond the Horizon, FfDn-01-Area 2, showing what appear to be hearths at two different levels. The one in the foreground was radiocarbon dated in 2005 to ca. 1000 (Neilsen)

dition, test excavations were conducted at a newly discovered site (FfDn-09), which was located during a survey of Pointe du Sable, on the west side of Lake Ashuanipi, across the lake from FfDn-07. This site's assemblage contained numerous large flakes of Labrador Trough chert; however, no tools (i.e. diagnostic artifacts) or charcoal samples were recovered in the test pits or 4 m^2 excavated. There is an ethnographic component to this site as well, consisting of tent poles and a camp fire.

Shovel testing at FfDn-01 in 2005 showed the site had at least four components: two pre-contact components, an historic Innu component and a modern Settler component. In 2006, Jamie Brake excavated portions of the earliest pre-contact component (dated to ca. 1600 BP) and the historic Innu component. Excavation of the later pre-contact component (dated to ca. 1000 BP) was not undertaken due to access issues. With permission from the Crown Lands Branch of the Newfoundland and Labrador government my 2008 excavations focused on this later pre-contact component. Termed FfDn-01-Area 2, Brake's excavation grid from 2006 was extended to encompass this location and 11 m^2 were excavated.

Excavations at Area 2 identified what, upon initial impressions appear to be three separate components. The first, a modern component, contains debris resulting from activities associated with the existing cabin at the location, which is only about 3 m to the south-west of Area 2. Objects in this component are not more than 30 or 40 years old, and include items such as a sneaker and plastic debris. For the most part these were not collected.

The second component, slightly closer to the surface than component 3, but deeper than the modern debris, consists of stones and some lithic debitage. It is located immediately adjacent to the active erosional face of the modern shoreline. At this point very

Figure 3: Archaeology Beyond the Horizon, FeDn-01-Area 1. Showing excavation profile and complex stratigraphy (Neilsen)

little can be said about this component; it could be that it is associated with the historic occupation that Brake encountered in 2006, overlying the earliest pre-contact component, or that it falls in between this historic component and the recent pre-contact component in Area 2. Also, it is possible that its location immediately adjacent to the active shoreline has resulted in a somewhat different depositional history than the further removed portions of Area 2 and it is actually part of the ca. 1000 BP inhabitation. Hopefully, detailed analysis of the gathered data over the following months will answer these questions.

The third component, initially identified through testing in 2005 and radiocarbon dated to ca.1000 BP, was the main target of the 2008 investigations. It was located in all 11 of the units excavated in 2008, and extends beyond this excavated area. The portion uncovered in 2008 contained one hearth feature, filled and surrounded with faunal material, and a significant amount of lithic debitage (including a notched projectile point base). The majority of the recovered lithic assemblage again appears to be Labrador Trough chert, but also includes, what look to be specimens of Ramah chert; and includes a significant number of finishing and/or retouch flakes. Soil samples, charcoal samples and faunal material were also collected, primarily from the hearth feature and vicinity, and have been, and are soon to be analyzed by third parties with more expertise in these fields than myself.

Once the 2008 results at FfDn-01 are studied in detail they will be correlated with Brake's results from 2006, to form a fuller understanding of the inhabitation of this location over the last 1600 years. Interpretation of this important, multi-component site near the centre of the Quebec-Labrador peninsula will be utilized in my PhD dissertation as a jumping off point for a critical examination of Innu archaeology/anthropology and culture-history across the peninsula. However, the conclusions I reach regarding FfDn-01 will have to be cautious ones as there is an

unknown amount of history remaining in the ground at this location. Additional investigations at this location would certainly be worthwhile, and I hope myself, or someone else, has the opportunity to continue work here in the future.

Site FeDn-01 is another multi-component site, located further to the south on Lake Ashuanipi than FfDn-01. This site was first identified in 2005 during the feasibility survey. During that season pedestrian survey and shovel tests identified heritage resources in three locals: lithic debris along the length of a south facing beach; a log cabin and associated activity area on the head of land at the eastern end of the beach; and, a small clearing at the western extremity of the beach where testing identified modern and pre-contact components. Preliminary excavation in this small clearing in 2006 tentatively identified no less than three components, one each dating to the modern, historic and pre-contact periods. Follow-up excavation in 2008 confirmed this suspicion, recovering historic artifacts (1800s) to go along with the modern debris, and the ca. 800 BP radiocarbon date and lithic materials recovered in 2006. Additional lithic artifacts, charcoal samples and modern debris were also recovered in 2008, along with faunal specimens and soil samples. A total 7 m^2 have been excavated at this site, and additional cultural material remains in the ground beyond these boundaries.

The modern component at the site includes Innu tent remains (wooden poles and pegs, a cook stove fuel can, and a stove pipe and door), and associated debris (bread bag clips, food can lids, 22 cal. Bullets, etc.) from the 1980s. The historic component includes a clay pipe bowl, metal knife, hearth feature and possibly some lithic artifacts (i.e. flakes) (this is yet to be confirmed through detailed analysis of the excavation data). A fish hook and line sinker were also recovered, but more analysis/research must be undertaken before either can be definitively assigned to one component or the other. The pre-contact component contains lithic artifacts (flakes, bifaces, and unifaces), another hearth feature and more faunal material. As with other sites on the lake, the majority of the lithic assemblage is Labrador Trough chert, however, FeDn-01 also contains some specimens of quartz, Ramah chert, quartzite and other chert.

With the exception of the inhabitations themselves, the most interesting aspect of FeDn-01 is the dynamic depostional environment, which is evinced by the observed and recorded stratigraphy. The numerous paleosols encountered, some continuous others not, made excavation by natural layer maddening and difficult. The excavation area is located on a levee feature, and field analysis indicates that we have a situation where a portion of the historic component appears deeper than the pre-contact component. It is felt this occurred as a result of occupation on a crested surface, which over time, through changing lake levels and deposition events, expanded into a narrow terrace, burying the former surface of the slope under more soil than the crest. Fortunately, in 2006 micromorphologist Richard Josephs visited the site with me and collected a set of contiguous vertical samples from one of the test profiles. Analysis of these samples should help with interpretation of the excavation stratigraphy and paleoenvironmental setting.

Site FfDn-07 was first discovered in 2006. Pedestrian survey identified foot paths leading to a large clearing containing tent remains, adjacent to three or four smaller clearings. Modern debris was also observed on the surface in the wooded areas around the clearings. Limited shovel testing located a number of subsurface resources (modern debris and lithic flakes) but not in great concentrations. More intensive testing in 2008 recovered a higher concentration of lithic flakes just outside the northwest limit of the larger clearing, on an overgrown path/clearing leading from the clearing to the shore. A 1 x 3 m test excavation in this location recovered a number of lithic artifacts, including: flakes, bifaces and stones, and uncovered a portion of a hearth feature. No faunal material was encountered but a charcoal sample was collected. Lithic material collected here does include Labrador Trough chert, but some of the grey chert collected has a somewhat different appearance than that concentrated at FfDn-01 and FeDn-01. It could be that this material is from a different outcrop in the Trough, or that it is from outside the trough all together. Hopefully further analysis will provide some clarification. Initial impressions of the excavated component at FfDn-07 are that it is an earlier occupation than FfDn-01; however, this is not based on any hard evidence.

All in all the 2008 field season was very successful, especially for the limited amount of funds,

time and personnel. Unfortunately it was the last season of fieldwork for my dissertation, but I have to draw the line somewhere. All the survey and excavation evidence collected over the three seasons of fieldwork will be combined into an encompassing field report which will be on file at the PAO for anyone who is interested, and perhaps looking for some areas to research of their own. Lake Ashuanipi encompasses a HUGE area and there is no shortage of research to undertaken on this very important watershed. I hope I am lucky enough to return at some point in the future. In closing this section I would like to thank everyone who has helped facilitate my research at Lake Ashuanipi, particularly: Ed and Joyce Montague, the Gateway Museum, Daniel and Jodie Ashini, Matt Beaudoin, Jamie Brake, Todd Kristensen, Ainslie Cogswell, Mark and Arlene, the Innu Nation, the Department of Indian and Northern Affairs, Lisa Rankin, the PAO, and Memorial University (i.e. the Archaeology Department, School of Graduate Studies, JR Smallwood Foundation, Institute of Social and Economic Research and Labrador Institute).

The Bloom Lake Railway Project: Stage 2 Archaeological Resource Assessment

In 2008, just prior to heading into the field for Archaeology Beyond the Horizon, I undertook the archaeological fieldwork for a Stage 2 Heritage Resource Impact Assessment associated with the Bloom Lake Iron Mine railway development in western Labrador. The scheduling for this project was particularly timely as it off-set the funding shortfall experienced by Archaeology Beyond the Horizon in 2008.

In 2007, archaeologists Jean-Yeves Pintal and Marianne Stopp completed a Stage I Heritage Resource Assessment for the Bloom lake project. This assessment resulted in the identification of nine locations that exhibited elevated potential for the presence of heritage resources (High Potential Areas (HPAs)), within the railway easement. I was contracted to conduct a survey of the HPAs that were to be crossed by the 30 m wide railway corridor.

To facilitate the fieldwork, the proponent provided a list of GPS co-ordinates for the proposed centreline of the railway route. Points in vicinity of the HPAs were converted from NAD 83 to NAD 27, and plotted on the same 1: 50 000 NTS mapping as the HPAs, to determine if the proposed route passed through any of the HPAs. It was determined that the proposed route passed through sections of four out of nine HPAs. These areas were the focus of the Stage 2 survey.

Each location within a particular HPA was accessed by foot. A truck was used to get a close as possible by road, and then map and compass were followed to the general location. Once in the general area, a GPS was used to locate the points provided by the proponent. Once the centreline was located in each HPA, the 30 m corridor was identified, and a pedestrian survey was conducted over the area. Where warranted, sub-surface investigations were also undertaken (a total of 50 - 40 x 40 cm shovel tests were excavated on a 3 to 5 m grid and screened through ¼`` mesh between the four HPAs). Field notes and photographs were recorded throughout the process.

For the most part, the routing of the railway managed to avoid not only half of the HPAs within the easement, but also the higher potential locations within the HPAs crossed. As a result, no heritage resources were identified within the 30 m railway corridor during the Stage 2 fieldwork.

Sheshatshiu Innu First Nation: test mitigation at FjCa-51

In the fall of 2008 it was brought to my attention by Anthony Jenkison, a resident of Sheshatshiu, that the Sheshatshiu Innu First Nation wanted to recover top soil from a slash pile that is located on an Intermediate period archaeology site within the community. The slash pile resulted from soil grubbing that occurred over the site in the early 2000s, and has sat untouched since that time. An intensive collection effort by Dr. Fred Schwarz at that time showed FjCa-51 to be a significant site, with intact components and significant research potential.

A visual inspection of the slash pile in fall 2008 quickly identified lithic artifacts within it and on the ground in its vicinity. Furthermore, it appeared that the 90 m slash pile sat on top of terrain likely to contain additional *in situ* archaeological material.

Hasty discussions with the Innu Nation and the PAO indicated that both regulators would like to see an attempt made to recover archaeological material from the slash pile, in order to avoid its circulation around the community (a concern that was identified by Dr. Schwarz during his mitigation efforts) and to attempt to limit impacts to intact portions of the site.

Figure 3: Sheshatshiu Innu First Nation test mitigation, showing techniques being tested (Neilsen)

The short work window, in advance of imminent ground freezing, also offered an opportunity to test the SIFNs proposed reclamation method to see if it would allow for the satisfactory recovery of archaeological material from the slash.

Through the in-kind services of a contractor who was working on other projects in the community the SIFN proposed to use an excavator and mechanical screener to sort the organic debris (e.g. sods, branches, logs, tree roots, etc.) from the soil and then truck the soil to housing lots in the community. The Innu Nation and PAO agreed to let this proceed on a temporary basis under the supervision of an archaeological monitor (myself and Anthony Jenkinson). Upon commencement it was immediately apparent that the mesh in the mechanical screener was not large enough to recover any artifacts (unless fist size or larger) from the soil. Realizing this, the next step was to put one bucket at a time in the mechanical screen and use rakes to sift through the soil which shook through the screen. This was somewhat successful and a number of flakes were recovered. In order to test the reliability of this method, the soil which had been raked was put through a hand screen with ¼ inch mesh to see what, if anything was missed. This step resulted in the recovery of additional lithic flakes, but not more than were recovered by raking. The biggest hurdle to the raking of the soil was that it was wet (from frost, rain and snow) and clumped during the process. Had it been dry less material would likely have been recovered from the hand screen. By the end of the day about two half-ton loads of soil had been sifted and the lithic ma-

terial recovered. These loads were delivered to an existing house in the community and spread as topsoil, the location of the house was recorded to be certain that if lithic material was transported from FjCa-51 to the housing lot, it would not be mistake for an intact archaeology site in the future.

The following day the weather turned, the ground began to freeze and then the snow came, and the process was called off.

All in all I think this was a worthwhile experiment, especially since the community intends to reclaim the remainder of the topsoil in the coming summer. From this we learned that more people will be required, that the more wood removed prior to going to the mechanical screen the better, and that it may be worthwhile to skip the raking process all together and go directly to shovels and screens. It is possible to recover all the artifacts from the slash pile; however, given potential time constraints and the heavily disturbed state of the resources, it may also be advisable to consider whether or not the entire slash pile must be screened for archaeological material, or can a certain percentage be let go (assuming its distribution is controlled and tracked within the community)?

GERALD PENNEY ASSOCIATES LIMITED 2008

Gerald Penney And Robert Cuff
Gerald Penney Associates Limited

During 2008, Gerald Penney Associates (GPA) conducted eleven archaeological/ historic resources impact assessments under eight permits issued by the PAO and four by the Nunatsiavut Government: (one investigation involved both jurisdictions). These included six which were related to mineral exploration in Labrador, one for a proposed bypass road around the Island community of Daniel's Harbour, and an investigation of an area for a proposed dwelling in Torbay.

GPA's major project continued to be the St. John's Harbour Interceptor Sewer (HIS), with extensive excavations occurring this past season on three phases of the five-year project. In August we moved our project office from Bishops Cove to 390 Water Street (the former Hempware building), with closer access to active excavations.

Figure 1: Cellar pit at the James Biggin winterhouse area (Penney & Cuff)

Daniel's Harbour (permit #08.06)

On 8 and 9 May, GPA conducted an ethno-

Figure 2: Joseph and Mary Guinchard headstone – parents of fiddler Rufus Guinchard, a native of Daniels Harbour (Penney & Cuff)

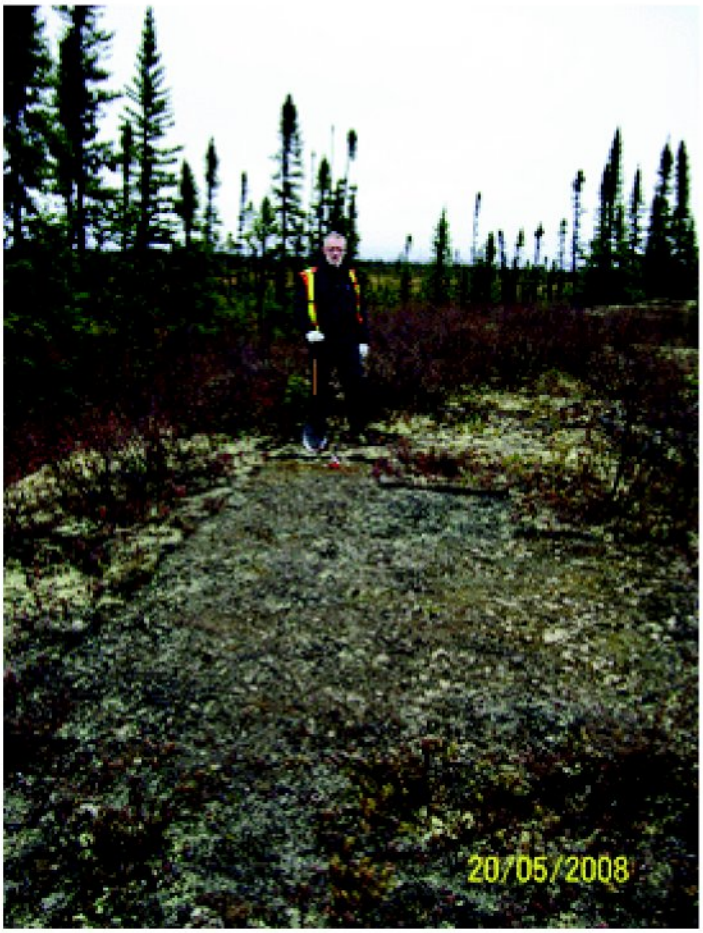

Figure 3: The main site (Scott Neilson's Area 1) at Pmiusiku 1, here significant finds were made in 1998 at surface near the red Hydro survey marker at Mr. Penney's feet (Penney & Cuff)

graphic/historic resources impact assessment of the proposed route of the Daniel's Harbour bypass road (necessitated by a landslide/sinkhole in April 2007).

The proposed route passes two kilometres inland of a disturbed Palaeoeskimo site (Daniels Harbour 1, EbBj-06). Desk-based ethnographic assessment identified the bypass corridor as intersecting a historic (1828-1956) winterhouse area for the community. Fieldwork confirmed the winterhouse area of Daniel's Harbour's first settler, James Biggin, and also located small family burial plots and several forms of winterhouses proximate to the bypass corridor. Two sites were identified and registered: Daniel's Harbour Winterhouses (EbBj-11) and Perry's Spring (EbBj-12).

Valley Stretch, Happy Valley-Goose Bay (permit #08.12)

On 20-22 May GPA conducted a historic resources impact assessment for the town of Happy Valley-Goose Bay, who proposed a 640 ha area for future residential development, north of Happy Valley, known as the Valley Stretch.

An Intermediate Indian site (Pmiusiku 1, FhCc-01) was revisited. The site and an associated terrace/esker are outside the proposed development area but within a designated Environmental Protected Area (EPA) to the north of Valley Stretch. A modern Innu shrine/memorial, found to be within the EPA, was registered as 13F/08 Ethno 12.

Figure 4: Innu shrine/memorial (Penney & Cuff)

Sandy Head, Makkovik (permit # NG 08.02)

Assessment for a sand quarry proposed by the Inuit Community Government of Makkovik was conducted on 10-11 June. Recent (c. 1950/60s) traces of wood-cutting and trapping were the only historic resources encountered. Our Makkovik-area site history (which builds on ten other GPA projects between Kaipokok Bay and Cape Harrison over the past four years) has contributed to re-assessment of early his-

Figure 5: Field assistant John Jararuse, digging a test pit at Sandy Head (Penney & Cuff)

toric Inuit settlement in this area, through previously-unknown documentary, cartographic, and ethnographic materials related to Tessiujaluk, and other Inuit communities resettled to Makkovik.

Huguette Lake, Labrador West (permit #08.27)

Several proposed quarry sites were investigated for H.J. O'Connell Limited in an area proximate to an existing quarry/asphalt plant approximately 15 km west of Labrador City . Huguette Lake was identified as having possible precontact/historic aboriginal site potential during a preliminary survey for the Bloom Lake railway (Pintal and Stopp 2007). The proposed mineral exploration test pits and two proximate identified areas of interest were foot-surveyed and test-pitted on 18-19 June. No historic resources were observed at surface, or uncovered in 38 sub-surface test pits. The only historic resources encountered were wooden mineral exploration/survey markers from the 1950s.

Michelin and Jacques Lake (permit #s 08.35 / NG 08.03)

GPA tested four proposed mineral exploration areas on 14-16 July, for Aurora Energy Resources, relative to ongoing uranium exploration interior of Postville. Again, the only historic resources encountered were evidence of previous (1970s) mineral exploration.

Lake Michael (permit # NG 08.07)

Four proposed mineral exploration camp options and three identified areas of interest elsewhere on Lake Michael (70 km SE of Makkovik) were surveyed on 5 September for Mega Uranium. Historic resources,

Figure: 6 Post/claim stake near Huguette Lake, presumed to date from the 1950s (Penney & Cuff)

observed at surface proximate to option #1, are presumed evidence of a sport-fishing or trapping camp, post 1960s. One feature, a bird-blind of indeterminate age, was registered as Lake Michael Gaze (13J/09 Ethno 1).

Bruce River/Moran Lake (permit # NG 08.08)

Three/four proposed mineral explora-

Figure: 7 Just a few stouts, Michelin Area 1 (Penney & Cuff)

tion/diamond drill locations were investigated on 28 September for Mega Uranium, without result.

St. John's Harbour Interceptor Sewer (HIS) permit # 08.03 [Phase III]

Figure 8: Bird-blind at Lake Michael (Penney & Cuff)

GPA has been involved in historic resources archaeological testing/monitoring for the HIS since 2004. In 2008 significant progress was made on all three phases, two of which continued into December 2008. Final Phase III monitoring, along Water Street from Cochrane Street east to Temperance Street, com-

Figure 9: Warren [Moran] Lake, viewed from the "Moran A" target area (Penney & Cuff)

menced on 22 April and finished on 29 July (66 days). Two sites encountered during the previous year's monitoring were re-visited and six new sites were registered (CjAe 82-87, Water Street East 9-14).

Compared with the previous year's Phase III program, relatively few features were encountered: 25 in total, 17 of which are sewers or otherwise infrastructure-related. Six structural features were investigated along with two wooden features of unknown function.

Our preliminary findings are that the relative dearth of historic material reflects a situation where, on its extreme eastern end, the line of Water Street has changed very little during the 19th century compared with the section of Phase III monitored in 2007. In its east end the streetscape has merely modified a natural landscape due to a very narrow foreshore. The line of Water Street was created by standard hillside cut and fill, and by the grading and filling of hollows. This underscores the importance of GPAs ongoing efforts to model the pre-development natural landscape as well as street alterations, to help identify high-potential areas. In 2008 the oldest material encountered was consistently below "hollows" fill layers.

Figure 10: Ovoid brick sewer, 16 May (Penney & Cuff)

St. John's Harbour Interceptor Sewer (HIS) permit #08.07 [Phase II]

Monitoring for Phase II of the HIS (Harbour Drive) commenced on 3 June and continued to December. As most excavations occurred in made ground, there were few features of interest encountered. At Stewarts Cove 2 (CjAe-106) the major features were sewerage- and drainage-related. At Steers Cove 1 (CjAe-92) wharves and structures associated with an integrated fishery/supply business were unearthed, those of greatest estimated antiquity being a quayside and intact 1850s wharfhead/shoreline at the original course of Steers Cove.

St. John's Harbour Interceptor Sewer (HIS) permit # 08.39 [Phase I].

Phase I of the HIS follows Water Street from Steers Cove/Waldegrave Street west to the Railway Coastal Museum. Monitoring commenced on 28 July and continued to December with 15 new sites registered, and one revisited (Horwood's, CjAe-10).

In this section of the HIS the many building foundations encountered reflect 19th century widening and straightening of Water Street. These features are of

Figure 11: Rock wall in south side profile, base of Hill O'Chips, 19 June (Penney & Cuff)

Figure 12: Wharf pilings, Steers Cove, Phase II (Penney & Cuff)

Figure 13: Phase I excavations, Buchanan Street. A mid-19th century foundation/feature at bottom, right (CjAe-88). A 19th century sewer can be seen at centre, left under the corner of the John Howard Society Building, which was built shortly after the 1846 Great Fire (Penney & Cuff)

Figure 14: Wooden sluice/drain, Springdale Street 1. We hypothesize this feature was constructed to direct "Newmans Brook" [Springdale Street] underground in the late 1700s or early 1800s. A wooden sewer-base of later date rests above this feature at left (Penney & Cuff)

particular interest as the Phase III route was not affected by the Great Fires of 1817 and 1892 (east of Springdale Street this part of Water Street was affected by the 1846 fire). There were, however, significant post-1892 fire fills at the former Municipal Basin area.

Battery Road, Torbay (permit #08.52)

The family property at Battery Road which will be directly affected by excavations for a proposed dwelling and septic field has been disturbed by generations of manuring/cultivation and also by a recent fill event(s). Artifacts were retrieved from these disturbed

Figure 15: Detail of PANL A 31-16, c.1950. The study area is at centre, covered by a fish flake. Field names added (Penney & Cuff)

Figure 16: GPA archaeologist Blair Temple, a participant in the 1998 field school, recovering artifacts from a disturbed context in Test Trench #2 (Penney & Cuff)

contexts. Notwithstanding the toponym "The Battery" for the road, there is no indication in documentary or cartographic sources of a fortification on the west (locally, north) side of Torbay Bight. A 1998 one-day field school/archaeological investigation of the Torbay Waterfront (CjAe-34), investigated the oldest parts of the community, at the Big Beach and north of Tammys Cove (designated Torbay South and Torbay North, respectively). Torbay North testing in 1998 included a part of the Gosse family property (to the left of the "stage" in Figure 15).

FIELD NEWS FROM THE PETIT NORD - SUMMER 2008

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Summer 2008 was the fourth season for the *Archaeology of the Petit Nord* research project on the maritime cultural landscape of the French, seasonal, shore-based, salt-cod fishery in northern Newfoundland, 1510-1904. It also marked the third year of full-scale excavations at the key site of *Dos de Cheval*, EfAx-09, at Long Point, Crouse. This was once the French fishing room known as *Champs paya* and consists of beautiful open terraces, a half hour walk from the French Shore Interpretation Centre in Conche. Memorial University master's students Stéphane Noël and Amy St. John worked in Area C, the waterfront of the site. Noël's M.A. research will examine the zooarchaeology of EfAx-09 and St John will look at the French ceramics from the site; but in terms of field research they worked in cooperation in the waterfront Area C, assisted by Anne-Marie Faucher, Janine Williams and Ryan Anderson. Mélissa Burns, who has just begun her doctoral studies at Memorial, worked on a pavement in the newly-defined Area F hillside terrace. She was assisted by Crouse resident Rita Barrett. Burns also helped St John to excavate the newly-identified Stage area in Area C. Peter Pope was assisted by Janine Williams in opening a few squares next to "the Bookend", the massive boulder which marks the southern limit of Area C and they also recorded vegetation in various areas of the site. Burns, Williams and field assistants Anderson and Barrett also assisted Pope with survey work at three previously-identified

French fishing sites and five newly-identified ones.

Dos de Cheval, EfAx-09 Waterfront, Area C, Hearth and Related Structures

The 2008 excavations in Area C complemented previous years' work on this productive anthropogenic terrace. Stéphane Noël and Amy St. John began excavations in a niche in the Area C hillside. The crew excavated 21 square m units, including a 3m continuation inland of the east/west trench excavated in 2007, a new 6 m north/south trench perpendicular to the 2007 trench, along with adjacent units where finds were promising. While the early components of the site remain elusive, our 2008 excavations in Area C proved once more that it was heavily used during the 18th and 19th-centuries. The higher strata yielded a lot of 19th-century material, including pipe stems and bowls (several of a typical grooved style), buttons of the *Équipage de Haut-Bord*, a shoe buckle and a pendant dedicated to the *Sacrés coeurs de Jésus et de Marie* and *Père François Gaschon*. The underlying older events yielded an abundance of wrought-iron nails, Normandy CSW, CEW including Staffordshire slipwares and many French earthen and tin-glazed wares, some which may be from the Breton kiln of Pabu-Guingamp. In the landward extention of our 2007 E/W trench Amy St John uncovered a deposit of burnt material, nails, iron waste, black greasy charcoal and several bricks, likely evidence of a smithy. The discovery of this smithy detritus so close to the hillside might follow from use of the niche to provide some shelter from the prevailing wind. The presence of boat hardware, for example rigging thimbles, gives us some indication of how such a smithy was being used. The depth of this deposit and the material culture found above it, including fine glass likely from a lamp flute and one of the earlier pipe bowls found at the site, suggests that this deposit is likely of a late 17th or 18th- century date.

In the wider part of the new north/south trench, the team exposed Feature 1233, a dry masonry foundation of tabular rocks, in a U-shape, facing the beach. The hearth feature rests on a massive tabular rock pavement. The hearth structure itself was nicely finished on the inside (facing west) but quite irregular on the outside (facing north, east and south) -- suggesting that the structure was originally dug into the cobble beach and then backfilled with cobble and scrap rock. The north and south wings of the structure were roughly rebuilt at some point after its initial use, indicating that the Feature 1233 hearth had at least two working lives. Inside this structure, Noël and St John excavated two distinct layers of jumbled angular rock, within orange and gray ashy soils. Within the roughly 2m square of this feature, in only 30 cm of soil, they uncovered over 1000 nails of varying sizes, many heavily corroded from heating. Feature 1233 is clearly a hearth, either of a cookroom or a cabin. The many nails inside it can be explained by the burning and collapse of a wooden building on top of the hearth or, perhaps, from burning of discarded materials. The hearth feature itself produced few datable artifacts. However, the fact that it lies directly on (or even in) the natural beach and under 19th-century events points to an 18th-century dating.

In order to determine whether the associated structure continued to the west, Noël and St John opened a 2x2m area in front of the hearth. About 60cm below the surface, they discovered a greasy charcoal layer throughout. This is directly in front of the hearth, at the same level, and is almost certainly contemporaneous. Subsequent excavation by Pope of baulks left near the hearth opening suggests that there were two separate charcoal deposits. These likely each related to a distinct period of use or destruction. In 2006 and 2007, teams working in Area C have uncovered similar greasy charcoal material, over a broad area downhill and west of the 2008 burn event. Mapping the three years of excavation together (as burned Feature 1248), we might estimate the extent of the (possibly overlapping) wooden structures at 6 x 6m. The dimensions suggest a roughly square footprint, like some of the structures photographed on the Petit Nord in 1904. These successive burned structures were probably cookrooms, as suggested by the large 2m-wide hearth at their eastern shore-facing extremity. In certain areas, patches of charred grass or straw were exposed. These might be the remains of straw-filled mattresses, of straw flooring or even of a sod roof. The preservation of such fragile material might indicate that the burned structure was buried under fill after the fire. Under the burnt layer, Noël and Faucher found an event rich in faunal material, just over the natural beach cobble.

The Stage Area

As the excavation of the hearth area was winding down, Mélissa Burns and Amy St. John proceeded to open up a 5m trench in hopes of locating evidence

Figure 1: Feature 1233 Masonry Hearth, EfAx-09, Waterfront Area C, likely part of a late 18th-century cookroom (Pope, Burns, Noël and St. John)

of the fishing stage, the heart of the fish-processing activities on the site. The location of this exploratory trench was based on an interpretation of historical maps of the site and landscape features which include the easiest landing place at the site, the angle of the Feature 23 ramp, which leads from the Area C waterfront to the Area D upper terrace, and some anomalous rocks observed underwater on a very calm day, which might represent the remains of stage ballast. Fishing stages at best leave only ephemeral traces but decomposing organic material and large iron spikes uncovered by our excavation support our impression that this was where French crews normally erected their stage. Pockets of burnt needles and burnt ceramics, earthenware and stoneware, indicate that hearths have been built in or near this area and that it was certainly part of the bustling activities of the Champs Paya waterfront. The Stage area trench proved to be one of the most productive for material culture, on the site. We found clay tobacco pipe stems and bowls, including one late 17th-century mulberry pattern bowl; wrought iron nails; drinking and bottle glass; a drawer pull; buttons and faunal material including bird, mammal and cod remains. The ceramics include REW, and CEW (possibly Breton Pabu-Guingamp) smaller coquemars and larger cook pots. The team also found TGEW, including some Rouen-style brown faïence platters or plates and many sherds of Normandy CSW to add to what has become one of the largest collections of this ware in Canada.

The Bookend Campfires

Peter Pope and Janine Williams opened up

four units against the north face of what we called "the Bookend": the massive exposed bedrock protuberance, which marks the southern limit of Area C. Difficult digging in stony events exposed a cluster of small hearths, indicated by roughly circular patches of burned reddish soil or by deposits of ash. These were situated at different depths, generally in charcoal-laden deposits. Artifacts associated with these simple campfire-style hearths included Normandy CSW, Breton-style CEW, clay pipe stems and bowls, a gun flint, a strike-a-light, worked flint and flint débitage, shoe leather and a lot of nails, of all sizes, most damaged by heating. These finds suggest that this area may have been used by crews not only for relaxing in their off hours but also for work incidental to the fishery but needed for survival, including particularly flint-knapping. These simple hearth features have some time depth, for the hearths are not contemporaneous but reflect continual activity from about 1700 onwards. The dating of artifacts suggests that the natural cobble beach was still open here, as late as 1700. This confirms the impression from excavation elsewhere in Area C that the anthropogenically-induced development of a beach terrace was not under way, to any significant degree much before 1700.

Area F, Rock Pavement

Mélissa Burns spent most of the field season exploring Feature 1043, a rectangular vegetation shadow of nettles recorded in 2007 by Peter Pope. In recording this feature, Pope had noticed a row of tabular rocks along the northern and somewhat downhill edge of what he thought might be the footprint of a cabin or cook room. Feature 1043 sits in a niche, now designated Area F, overlooking the waterfront Area C and somewhat below Area D, the upper beach terrace, which is documented as a place that French crews dried fish. Burns and Pope also recorded Feature 1163, a path descending from Area D, just past the Feature 1043, connecting with the Feature 51 ramp leading uphill from the stage area of Area C.

Fishing crews exploited the local configuration of the landscape in creating a structure here. The west and south edges of Feature 1043 are delimited by ridges of bedrock, the eastern edge is partially made of tabular rocks, which at points connect with the natural bedrock, and the north edge is constructed of a row of tabular rocks. The delineation of Feature 1043 proved it to be an impressive building, about 5 x 10m. Mélissa and her dynamic field assistant, Crouse resident Rita Barrett, soon uncovered Feature 1156, a well-made, level, rock pavement within Feature 1043. They also identified a worn linear rock, about 1.2 x 0.7m, likely the door sill of the Feature 1043 structure, as well as an array of large flagstones which seem to make up a doorstep or porch area, just outside the main structure. This presumed entrance faces north, which makes sense, since the prevailing winds in Crouse Harbour come from the southwest. The doorstep entrance to Feature 1043 thus adjoins the Feature 1163 path. Recovery of an iron stake and wood fragments along the east and west edges of Feature 1043, in a pebbly soil layer, suggested a simple construction. The structure seems to have had a perimeter consisting of a compact layer of pebbles on top of which logs or large timbers could be laid, to support in turn a few posts and plates that supported a simple roof structure. The roof could have been simply large sails from the French ships –and even the walls may have been simply covered with the sails. The sails could have been attached with ropes to iron stakes, like the one recovered. In effect, the structure would have been a tent with a paved floor. Only 40 or so large or medium nails were uncovered during excavation, which supports the idea of a simple structure covered with sails rather than a building made of wood. Such buildings were documented by 19th-century visitors to the Petit Nord, Julien Thoulet and the photographer Paul-Emile Miot.

The material culture recovered from Feature 1043 is late 18th- or early 19th-century and includes clay tobacco pipe stems, pipe heels, a musket ball, Normandy CSW, Creamware and Pearlware REW. Feature 1043 does not appear on Georges Cloué's mid 19th-century map of Champs Paya, and he has proved to be thorough in his depictions of sites. So the assemblage and the historic maps suggest that Feature 1043 would date between the late 18th and the mid-19th century. After 1769, fishing rooms on the Petit Nord were supposed to be assigned to French fishing crews for five years at a time, through a kind of draw (de la Morandière 1962). Although this rule was applied consistently only after the end of the Napoleonic wars in 1814, the development of more proprietarial attitudes to fishing rooms may explain the presence of a

Figure 2: The partially-excavated Feature 1156 rock pavement, set in the Feature 1043 niche, at EfAx-09, Area F, likely the floor of a 19th-century tent-covered dormitory or cookroom (Pope, Burns, Noël and St. John)

well-made rock pavement inside Feature 1043. A French fishing crew must have thought it worthwhile to invest the time and labour in flooring that would last for more than one season.

The large size of the building and the artifacts associated with it suggest that Feature 1043 was used as a cook room. In 1832, about 125 men fished at Champs Paya, so a large cook room was certainly needed to feed such a number of workers. Like the bread oven Feature 22, excavated in 2007, the Feature 1043 cook room would have been easily accessible to everyone but out of the way of fish processing activities. It is perhaps significant that like the Feature 22 bread oven, the Feature 1043 cook room also dates from the late 18th to the mid 19th-century, for its place in the taskscape of the fishing station resembles the situation of that later bread oven more than the situation of the possible earlier cookroom structure or structures (Feature 1248) identified by Noël and St John, closer to the waterfront in Area C. The fact that the Feature 1043 and the Feature 1248 cookrooms are very differently situated raises interesting questions about the evolution of the taskscape of the fishing station we are excavating at Dos de Cheval. We hope to be able to fill this picture in, with further research.

Vegetation

Peter Pope spent a morning mapping the extent of the senescent alder/dogberry forest that occupies about half of the Area D upper terrace. This forest might be about 100 years old and with the remain-

ing open area may delineate the area that the French crews had denuded of tress as of 1904. Over the field season, Janine Williams photographed and collected plants from various parts of the Dos de Cheval site. The samples where recorded on a specially prepared plant sample form, which should simplify identification by species, which is now an on-going project.

Survey

Over the season Peter Pope led a number of surveys, both to sites previously identified and to new sites. The EhAv sites were van-based surveys, in the area just south of St Anthony. The rest of the surveys were conducted from the longliner *Bromley's Adventure*, with the capable assistance of Captain Paul Bromley in getting us to our destinations and safely home. Mélissa Burns did most of the recording of tests and features, Janine Williams did most of the survey photography and we were ably assisted on the Canada Harbour and Boutitou surveys by Rita Barrett.

EeBa-04, Canada Harbour (Canaries)

Peter Pope, Mélissa Burns, Janine Williams, Rita Barrett and Geneviève Duguay began their survey along beautiful beaches of angular white marble, on the east side of this harbour, known to the French as the fishing station of Canaries. We proceeded clockwise from the south east, identifying at least seven French fishing rooms, with finds of Ligurian and possible Saintonge CEW, Normandy and Anglo-American CSW, TGEW brown faïence, porcelain RSW, wine bottle glass, brick, tile, ballast flint, lead sinkers and so on. Just south of the main wharf, we recorded artifacts collected by Hubert Dempsey from his garden, including several French and English pipe bowls, a reworked pipe stem mouthpiece and an orange-glazed pipe stem, a large lead sinker, a bottle mouth in a caramel brown CSW, the base of a Normandy CSW pot, a sharpening stone with wear marks suggesting use for sharpening fish hooks, a large hand-forged hammer head, part of a flint-lock musket strike mechanism, and a French lead jigger which Mr Dempsey distinguished from similar Newfoundland models by its length and because the tail fins are separated by grooves rather than notches. Farther to the south Christina Compton of Roddicton showed us some of the artifacts she has collected and gave us quite a bit of information about the site, including a previous French bread oven where Mrs Compton's father built a root cellar. We also recorded some French wells in adjacent Fahey's Cove.

A mid-19th century French map records *Le calvaire* at the approximately 50 m asl summit of the hill behind Canada White Point. Here we recorded a deposit of large angular gravel, near the highest point on this hill, within a shallow dished area that has the feel of an open sanctuary. Burns and Pope explored one of the relatively larger spruce trees for signs of a plinth. Williams trowelled the gravel area, because it is so unusual, in this rocky location and seemed to overlie a dark peaty soil. Burns joined her to expose several angular rocks about 20-30 cm diameter, surrounding a void roughly 20 cm square and, in turn surrounded by the angular gravel. They thought the angular rocks might have surrounded the base of a cross, the support reinforced by a cone of gravel heaped around. While discussing this, Williams dug a little more and recovered a rosary, with crude ground glass beads and an ornate medallion, of a late 18th-century style, according to Duguay. This confirmed our hunch about the site of *Le calvaire* at Canaries.

EeBa-07, Boutitout

Boutitout was identified as a French fishing station and Anglo-Irish livyer settlement by Priscilla Renouf, Patty Wells and Peter Pope, in a 2003 survey. Since we were in the area again, we thought it was worth revisiting, to examine the beach area around the stream and the circular rock inscription known locally as the sundial. Making way across the shoreline to the beach was difficult, for this harbour is not easy to get around. We first assumed that the beach area around the stream was recorded as *La crévasse, côte de l'est*, in 1680. (In the early French fishery surveys, the word *crévasse* is usually used when there is a stream.) Surface survey of the beach on both sides of the stream produced only a little Normandy CSW and a pipe stem, though we found relatively copious ballast flint and sampled some of that. There might be a wreck near here but the scarcity of other materials suggests that we may have misread the 1680 reference and that *La crevasse, côte de l'est* may in fact be an earlier name for the main fishing room on the northwest side of the inner cove -- a cove which is, after all, towards the east side as you enter the main harbour and adjoins the *crévasse*. This major fishing room on the northwest side of the inner harbour was recorded as *Contigue dans le fond*, in 1832. We tested a number of small beaches without

Figure 3: Late 18th-century cut-glass rosary, recovered from EeBa-04, Area K, the site of a French calvary at Canaries, now Canada Harbour (Pope, Burns, Noël and St. John)

result, though we identified a roughly rectangular depression and two cobbled drying areas for fish.

In the rocky area inland and farther southwest, we revisited Feature 54, an inscribed circle in the bedrock, known locally as a sundial. It shows only one diameter line, with an N at the end pointing exactly true north. This suggests that it is not a sundial but a surveyor's mark, calculated by observation at solar noon, determined from a chronometric table. This would be a 19th-century or late 18th-century procedure at the earliest. We also recorded several other adjacent rock inscriptions, dated 1856 and 1888.

EfAx-11, Northeast Crouse

Over the years we have visited Northeast Crouse many times and it has become, in some ways, an important comparison for our main site at Dos de Cheval, EfAx-09. Peter Pope, Mélissa Burns, Janine Williams and Ryan Anderson arrived at Northeast Crouse by boat, landing at Gilbert Chaytor's new stage.

Area P, Features 501 and 502

These are the mysterious linear mounds noted in 2004 and 2006 (southern and northern, respectively). Pope has wondered whether these might be prehistoric. Williams and Anderson did shovel tests which prove otherwise. Four tests in Feature 501 yielded clay tobacco pipe stem fragments, rim sherds of Ligurian CEW plates and some nails. Feature 501 is clearly historic, probably 18th-century. With Feature 502, to the north, it might be the remains of a structure, sod-walled on its north and south sides: a cook-

room or a dormitory? It lies just inland from Area G, the fishing room *Les craquelins.*

Area H

At lunch, sitting near Burns cliff-top test excavation of 2007, the crew observed Feature 659, a square vegetation shadow of nettles and grass. Burns' subsequent investigation showed it to be a sod foundation. She also noticed a dry area of vegetation on the terrace above the Area H galet, somewhat to the east of the new subdatum, but not as far east as the made galet Feature 605, noted in 2007. The observed feature has the look of a possible large structure. We did not have time to record it, as we were preoccupied with the Area P recording. Later in the afternoon, the crew put in test pits, just east of the cliff at the western end of the main Area H galet, in black soil with fine pebbles and mussel shell, uncovering Breton CEW, flint, coal, a decorated clay tobacco pipe stem, a pipe bowl, nails, cast iron stove parts, and some fragile faunal remains.

EhAv-01, Goose Cove South

Peter Pope, Mélissa Burns and Janine Williams left Conche by van in drizzle and rain to survey the French fishing station of Petites Oies, now Goose Cove. This is a roughly oval harbour, opening at its western end into Hare Bay. We quickly realized that the only historic fishing areas not built over lay near the mouth of the harbour on its north and south sides. We started our survey on the south side, at the end of the road, hiking out the community boardwalk to the documented French fishing room, *Le loup marin.* We could test only the "mainland" side of this fishing room. Cloué (1857) shows a bridge connecting the islet here but we could not investigate the islet without a boat. Surface survey of the beach of small angular stones, around and under a decaying log slipway, yielded Normandy CSW, a clay tobacco pipe stem, ballast flint and a perfect Dorset end scraper. Feature 2, in a plateau inland, is a rock concentration which we interpreted as a possible Dorset house, finding some similarity with features at Phillips Garden, Port-au-Choix. Feature 3 is likely a bread oven mound, though not with the classic donut shape. Feature 4 is an extensive, perhaps natural galet, inland from the beach.

EhAv-02, Goose Cove North

Pope, Burns and Williams followed an access road to the north side of the harbour, onto the peninsula on which the French fishing room *L'amirauté* was documented by Cloué in 1857. Surface survey in disturbed peaty soil, just above the beach, along the middle of a shallow cove facing west into *L'anse de la cigale* produced a lot of Normandy CSW, a lot of nails, TGEW, CEW, REWs and a whole pipe bowl. Surface survey of the pebble and sand beach north and south of the ricketty recent wharf, at the site of the peat disturbance, yielded Normandy CSW and TGEW faïence. Surface survey of beach pockets amongst bedrock somewhat to the southeast yielded Normandy CSW, REWs, ballast flint and TGEW brown faïence.

Area C lies just inland and a bit south. Feature 8 was a subrectangular vegetation shadow of alexanders, about 7.5 x 11.5 m, in a niche bounded by a 3 to 4 m cliff on the southwest and south sides. This proved to contain a roughly square donut of peat surrounding a deep central depression. Shovel tests near and within the central depression in the peat "wall" revealed over 50 cm of black peaty soil with pebbles and angular stones and yielded REW, CEW, bottle glass and nails but also a slightly broken, notched, bifacial point in a black chert, which we found to resemble some Recent Indian points, an identification confirmed by Steve Hull (pers. comm.). A shovel test in the central depression of what seems to be a sod wall house feature uncovered a wooden structure consisting of a plank or planks, about 3 x 18 cm cross section, lying over a log of about 8 cm diameter. From this construction we retrieved a modern galvanized wire nail. We had identified the French fishing room *L'admirauté*, a Recent Indian site of uncertain age and a relatively modern site, all within a stone's throw.

EhAv-03, Three Mountains Harbour

Pope, Burns and Williams drove to the east side of Goose Cove and then followed a marked hiking trail eastwards towards Three Mountain Harbour, a long narrow harbour running inwards east/west from the open Atlantic. Area A lies around a footpath into Three Mountain Harbour, around the point at which the harbour itself becomes visible. Feature 1 was mining debris including ore residue (clearly toxic to the vegetation), rusted industrial buckets, pit props, nails and a sign warning "Open Shaft, Keep Out". Feature 4 is a constructed path leading from Area A towards Area C. Area B surrounds a beach on the south side of the inner harbour. We noted a small cemetery up-

hill and inland from the Area B beach, but we did not have time to visit it. Feature 2 is a constructed path leading up and westwards from Area B, towards Area A. Surface survey of the Area B beach of small subangular stones did not yield any obviously French material, though some Anglo-American CSW and other 19th century material. We did not explore further to the east but assumed that this cove was one of the two locations Cloué indicated in 1857 (an assumption confirmed by observations from the north side).

Area C lies around a small beach on the north side of the harbour, almost directly across from Area B. Feature 5 is an ore deposit, with what look like iron stains and a dead zone in the vegetation, on the hillside, south and west of the Area C beach. Surface survey of the Area C beach of small subangular stones was quite productive of Normandy and Anglo-American CSW and CEW (possibly TGEW). Feature 7 was a vegetation shadow of fire weed and alders on a roughly rectangular rock ledge about 2 m above the wet area, just inland from the Area C beach. A shovel test revealed a dark peaty soil, with angular stones and pebbles, then 15 nails and a nail concretion, as well as a clay tobacco pipe stem and TGEW brown faïence.

We used the last half hour of our work day to hike over the hill to take some photographs of *L'anse à la vièrge*, where Cloué recorded another small French fishing room in 1857. We did not have time to descend the hill into this narrow cove, north and parallel to Three Mountain Harbour. We were therefore unable to test it archaeologically and cannot confirm Cloué's record.

EhAw-01, Fischot

Peter Pope, Mélissa Burns, Janine Williams and field assistant Ryan Anderson headed north to Fischot from Conche with Paul Bromley on the 38 foot long liner *Bromley's Venture*, on a fine clear day. Mr Bromley brought us into the charmed circle of the Fischot Islands and then carried us to our survey locations in his little speedboat. The islands are covered with open taiga, or meadow weeds, with only a very few stunted spruce in two or three locations. Fischot had been settled by Anglo-Irish livyers in the 19th century and was resettled about 1971. Local informant Alice Dower (Mrs Austin Dower), later told Pope about her youth in Fischot, with her family, the Aylwards. She says there are two sources of water on Fischot Island itself, one not too far from the main standing house, near the well-defined inlet on the west side of the inner harbour. There is another water source to the south of the inlet, past the graveyard. Using Burns' copies of the historic 19th-century maps of Captain Letourneur and Georges Cloué, we had prepared a priority list of areas to test.

We began on the main (southern) island, Fischot Island, at its northeast end, the site of the French fishing room *L'anse à l'eau*. Surface survey of the beaches produced Normandy CSW (including an incised sherd), ballast flint (some possibly worked), fragmentary CEW and TGEW and later REWs, wine and case bottle glass, a large bore clay tobacco pipe stem and, water worn brick. Surface survey of beaches farther south on the inner harbour of Fischot were also productive of ballast flint and Normandy CSW, Anglo-American CSW and water worn brick. We collected a lot of what seemed to be partially-worked ballast flint and we will need to assess whether this could be Native activity. Surface survey and trowel scraping of a moist peaty area just northeast of a prominent cliff not far from the standing structures, yielded good bases and rims of Normandy CSW, brick, a pipe stem, brown faience TGEW, some ballast flint (some possibly worked) a large nail and a "Keep Kool" bottle. This test was so productive of Normandy CSW that we dug two shovel tests, uncovering more Normandy CSW as well as French TGEW faïence, a large nail, flint and clear vessel glass. The area near the cliff is extremely productive, for it is a natural shelter. The peaty soil is very easy to dig, although it contains a fair percentage of small shale-like stone fallen from the cliff. Feature 7 is a nearby bread oven mound, just east of the rocky escarpment, with the typical donut shape. Local informant Alice Dower recalls that children played near the cliff in Area B, and that they used to find clay pipes here. This productive area merits further research.

Area C lies around the opening of a deep inlet, running westwards from the centre of the inner harbour of Fischot. Both sides of the inlet are shown with a stage on Cloué's map of 1857. A handsome two storey house still stands here, which was the location of the local post office, according to Paul Bromley, who delivered mail to Fischot by speedboat until about 1971. Surface survey of a pebble/cobble beach

not far north of the inlet produced Normandy CSW rims and other sherds, Anglo-American CSW, wine bottle glass and some REWs. Surface survey of a second beach, to the south, near the standing structures, was also very productive of Normandy CSW, Anglo-American CSW, brown faïence TGEW, wine bottle glass, small colourless bottle glass, and REWs, including transfer print and sponge ware.

Area D lies on the far side of the inner harbour, though still on Fischot Island, at the southeastern limit of the cobble beach. This part of the island is documented as the French rooms *Le petit sud-ouest* (the more eastern part) and *Le grand sud-ouest* (the more western). The area, north of a standing cabin, is a natural cobble galet. Surface survey of the beach east of the small point in Area D produced a few sherds of Normandy CSW and a sherd of TGEW. Surface survey of the longer beach on the west side of the point produced intermittent material: Normandy and Anglo-American CSW, ballast flint and the rim of a brown REW teapot.

The Area E beach on Northeast Island faces westwards, towards two small islets in the inner harbour. Landing proved difficult but we managed, at the very southern end of the beach. The French documents record two rooms, *Le nord-est* on and around the more southerly islet and *L'islot*, on and around the more northerly islet. Both are tidal islets, which can be reached at low tide. Williams surveyed the southern islet but came up empty-handed. Maps of the 19th century show each islet connected to Northeast Island by a bridge and the remains of ballast for a bridge to the southern islet is still visible in the shallows between the islet and Northeast Island. Surface survey of the beach facing the more southerly islet turned up Normandy CSW, brown faience TGEW and some possible CEW, though not in great quantity. Feature 16 is a rectangular vegetation shadow, about 11 x 24 m, with a perimeter of monks hood surrounding a core of alexanders, to the northeast of a low cliff, about where Captain Letourneur shows a cookroom structure, c. 1827. Shovel tests within the peaty soil of Feature 16 showed materials such as nails, a bit of TGEW, a clay tobacco pipe bowl, CEW or brick, REW, a bit of bottle glass and fish bones. Feature 19 was a rectangular, slightly furrowed, vegetation shadow of alexanders about 13 x 16 m, surrounded by a low ridge, interpreted as a lynchet. We saw this as a garden and indeed found some feral rhubarb. Subsequent conversation with local informant Alice Dower confirmed that her uncle had a garden here. (The recent inhabitants of Fischot lived on the main island but had drying space and gardens on Northeast Island.) Surface survey of the beach facing the larger and more northerly of the Area E islets yielded a few sherds of Normandy CSW.

The survey crew then climbed *Le sommet de la croix*, the prominent hill on Northwest Island, to its summit at 54 m asl. At the top of this hill we identified Feature 21, a ring of rocks about 25 cm maximum dimension. Since there were no such rocks elsewhere at this elevation and since they are at the highest point of the hill, we interpret these as the remains of the plinth of a cross. Burns did a little trowelling, revealing that in the centre of the presumed plinth area the soil differed from the stony soil around and was reddish and organic, resembling decomposed wood. She uncovered a 1974 Canadian Bluenose silver dime. Since this was about the time people were moved from Fischot by Joseph Smallwood's policy of resettlement, we interpreted this as a memento left by one of the departing residents and left it where we found it. We took advantage of a low tide to scramble across the landwash to Frommy Island, the most northerly of the Fischot Islands. Surface survey of these Area F beaches produced Normandy CSW, ballast flint and some REW. Since we wanted time to take a crack at finding Petites Ilettes, we called Paul Bromley and he picked us up to take us back to the long liner.

EhAw-02, Petites Ilettes

Following our survey of Fischot, Paul Bromley had anchored his long liner *Bromley's Venture* within sight of the French fishing room Four Harbour, now locally known as *Harbour Devue*, likely a deformation of *Havre du Four*. This was, Mr Bromley told us, the place where Fischot people spent the winter, close to good supplies of wood. Captain James Cook noted this as a place with good trees. We easily made Petites Ilettes, which is a small but well protected gut passing from the bay near Four Harbour into the next bay to the south. Mr Bromley and Alice Dower (née Aylward) recall that there was a place called "Seal It" in this area. It may be that the local name "Seal It" is a deformation of *Les ilettes* modelled on the local pronunciation of *Fischot*, as "Fish It". Using the 19th-century Le-

tourneur and Cloué maps we focused on the French rooms recorded then. Around Area A, the slight promontory shown by Cloué as the French fishing room *Mont-à-regrat*, surface survey gave us a good showing of Normandy CSW, ballast flint, CEW or TGEW, a wine bottle base and some REW. Area B lies to the north and is the place recorded by Cloué as the French fishing room *L'amirauté*. Surface survey of the pebble/cobble beach facing the inner harbour from Area B produced a fine Normandy CSW strap handle, brick, sheet lead, REW and ballast flint. Feature 3 is a large, more or less, rectangular made galet, now very overgrown with vegetation, inland in Area B, shown by Letourneur in 1827 plan of fishing rooms at Petites Ilettes. Feature 4 is a bread oven mound between Feature 3 and the beach. Feature 5 is an alignment of tabular rocks, about 10 m southeast of the Feature 4 bread oven. We interpreted it as one wall of a cookroom. We also noted another alignment of rocks, with the look of the foundation of a cookroom, and either could be the structure shown by Letourneur in Area B. Our finds in the context of the Letourneur and Cloué maps leave no doubt that we have identified the French fishing rooms of Petites Ilettes.

Help and Acknowledgements

Danielle Rundquist ran a tight ship at our field lab, assisted by Kristen Hunt and Scott Carroll. Geneviève Duguay (on leave from Parks Canada in Quebec) lent them a hand and also helped with the Canada Harbour survey. As ever, Joan Simmonds and Colleen MacLean of the French Shore Historical Society helped us out in countless ways, including signing up our popular cook, Angela Chaytor. We gratefully acknowledge financial support by SSHRC, the Provincial Archaeology Office, ISER, the Smallwood Foundation for Newfoundland and Labrador Studies and Young Canada Works.

Abbreviations

asl	above sea level
CEW	Coarse earthenware
CSW	Coarse stoneware
REW	Refined earthenware
TGEW	Tin-glazed earthenware

PROVINCIAL ARCHAEOLOGY OFFICE 2008

Ken Reynolds, Delphina Mercer
And Stephen Hull
Provincial Archaeology Office (PAO)

This was the third and final year under PAO's current budget for directed research in the province and again it was a success as 43 new sites where recorded (see Schwarz and McLean this issue). Depending on the level of funding for the coming years we will be continuing with and hopefully expanding on this program. Research areas under consideration for the coming year include the interior ponds west of Indian Bay, the remaining unsurveyed portions of Bonavista Bay, and sections of eastern Notre Dame Bay among others. The PAO made site condition trips to the early 18th century civilian fort at Fox Island, Trinity Bay, which is in good condition, Loon Bay 3 , and to Pope's Point at Badger. Unfortunately and unbeknownst to the PAO, the latter site was heavily disturbed by the Town of Badger to construct a RV Park during this past summer. A Groswater endblade reminiscent of Phillips Garden West types was recovered, as were over 3 kilograms of what is considered to be shattered caribou leg bones, copper pot fragments and numerous flakes from this multi-component site. At Loon Bay 3 a large house(?) depression was tested and flakes, most likely of Groswater origins, were recovered (Figure 1).

In April Dr. Barry Gaulton of Memorial University was contacted by an individual from Tors Cove about an eroding historic site in an area near Tors Cove known as The Cribbies. The individual had found and photographed several pieces of ceramic, iron nails and numerous clay pipe fragments. The artifacts dated from the 17th- though 19th century. Dr. Gaulton passed the photos and information along to the PAO. The site was visited by the PAO later in the month. While the site location was confirmed there was little artifactual evidence left and it appeared as though someone had been digging into the eroding bank (Figure 2).

Early in September two PAO staff members traveled to the Northern Peninsula and Southern Labrador for several reasons.

1. To attend the archaeology conference "Bird Cove and Beyond: Celebrating A Decade of Regional Archaeology on a Global Scale" in Plum Point/Bird Cove;
2. Investigate a potential Norse site reported to the Provincial Archaeology Office (PAO) at Cas-

Figure 1: Possible Groswater house depression at Loon Bay, Notre Dame Bay (DhAr-6, Loon Bay 3) (PAO)

Figure 2: The eroding bank in the background is the Cribbies site location (PAO)

tor's River;

3. Investigate snowmobile trail crossing of several rivers on the Northern Peninsula;
4. Investigate reported artifacts eroding from the Cowpath site (EjBe-07);
5. Investigate a parcel of land in front of the Spingle house in L'Anse au Clair where the Spingle biface cache site (EiBg-143)was found in 1990;
6. Investigate a potential archaeological site in Red Bay.

For several years the PAO has been in contact with Dr. Kohlsmith who believes an area near Castors River contains a Norse site. Most recently he sent a letter to the PAO with an air photo outlining the exact location of his Norse site. The PAO staff members spent a evening testpitting his Norse features and found no evidence of a human occupation (Figure 3).

Figure 3: Testpitting in the area of one of Dr. Kohlsmith's features (PAO)

The PAO has been consulting with the Newfoundland and Labrador Snowmobile Federation (NLSF) with regard to developing trails across the Northern Peninsula for quite some time. The PAO notified NLSF of a required archaeological assessment to be carried out on several river crossings; the assessment was never conducted. The PAO decided to investigate six of the areas to determine whether historic resources were impacted upon due to snowmobile trail development in those areas. Unfortunately most of the trail system was already in place which included several sizeable bridges. For the most part this trail system has had little impact on archaeological resources; however, this cannot be said for one area. Just southeast of St. Barbe the trail system crosses West River. On the southern shore just opposite the snowmobile trail bridge several flakes and a bifacially worked piece of chert were recovered (Figure 4). The latter may be a crudely worked bifacial preform (Figure 5). It appears as though the trail went through a precontact aboriginal site possibly leaving undisturbed portions to the east and west.

On September 5, 2008 the PAO was contacted by Mr. Miles Oleskiw with regard to cultural material he observed and collected near West. St. Modeste and of which he sent several photos. Mr. Oleskiw also provided the exact site location with GPS derived coordinates. He questioned locals with regard to the material and was told the material came from the Cowpath site. This site was originally found by Elmer Harp in 1949 and formed the basis of Dr. Priscilla Renouf's 1976 MA thesis at MUN. The site is dated as one of the earliest in the province.

We visited the site in the evening of September 7, 2008 and located the area pointed out by Mr. Oleskiw. We found an extensive lithic scatter, ~ 140m in length, consisting of mostly white quartzite flakes and cores; a few brown quartzite flakes were also seen. The site has suffered extensive surface disturbance with several large areas without the covering moss and shrubs, leaving the cultural material exposed.

We also noted five archaeological one-by-one metre test units that were not back filled . Two biface fragments were also surface collected: one is the tip of a white quartzite biface (Figure 7, left). The other is much more interesting in that it is a Pinware Hill form missing its distal tip (Figure 7, right).

In the spring of 1990 Mr. Gordon Spingle was using a gas powered tiller to expand his vegetable garden in L'Anse au Clair, Labrador when he disturbed a cache of eight large Ramah chert bifaces (Figure 9). These were brought to the attention of Dr. Jim Tuck who sent a team to investigate the area. After further testing the team uncovered another biface and a few unrelated flakes. Since that time a biface tip and another flake was found by children playing in the area. There were no artifacts or features associated with the cache. The cultural affiliation of the Ramah bifaces is unknown.

On the 8th of September, 2008 we tested a small parcel of land (Figure 7) adjacent to the Spingle site. Upon our arrival Mr. Spingle pointed out where he found the biface cache which we marked with a

Figure 4: West River site - artifacts were found at the top of the hill in the red circle (PAO)

Figure 5: Bifacially worked chert fragment (PAO)

GPS point. He also pointed out that a large area of land, in excess of 500m^2 of land to the south west of his house, had been cleared by the town for a water/sewer installation. Once on the land the first thing we did was surface inspect the area disturbed by the water/sewer installation and the surface of an ATV trail that runs through the land. We found a brown quartzite flake along the eastern edge of the area disturbed by the water/sewer installation and another smaller brown quartzite flake on the ATV trail. We dug 18 test pits in the area; one brown and one white quartzite flake were found in one of the pits. Other than that all the other test pits were devoid of cultural material. All of the test pits were consistent in stratigraphy; they contained an upper layer of dark brown to black humus/peat followed by a uniform layer of light brown quartzite sand. The peat/humus layer ranged from just a few centimetres thick to more than 50 cm in one test pit. The two flakes were found near the interface of the peat/humus layer and the sand layer. The test pits ranged in depth from 30 to 90 cm.

We spent the morning of September 9th in Red Bay. In the spring of 2008 Cindy Gibbons of Red Bay (Parks Canada) notified the PAO of a sod house foundation behind her house in Red Bay. Local rumors were that the site had been occupied by a hermit during the turn of the 19th century. Cindy led us to the site where we found an ovoid structure ~four to five metres wide and ~ 9 metres wide oriented in an east – west fashion across a walking trail. The structure was outlined by a low earthen wall that ranged from almost nonexistent on the west end to near a metre high on the east side. Inside the structure on the east side there was a considerable lump of earth that may correspond to a collapsed chimney or fireplace. We dug seven test pits inside and outside the structure. None of the test pits were deep, 20-30 cm, and most contained a lot of rocks. There was very little cultural

Figure 6: Cultural material collected by Mr. Oleskiw (PAO)

Figure 7: Biface fragments from Cowpath (PAO)

material found; a small amount came from outside the structure near the south wall. Most of what was found came from what we suspect is the collapsed chimney/fireplace in the east end. There was a mix of material that included green bottle glass, two cut iron nails, and one piece of white ware, one tobacco pipe stem fragment broken from near the bowl, calcined bone fragments, charcoal and a fish (cod?) bone .

Figure 8: Area tested in front of the Spingle house. Red dots are test pits, yellow dots mark the approximate corners of the area to be tested (PAO)

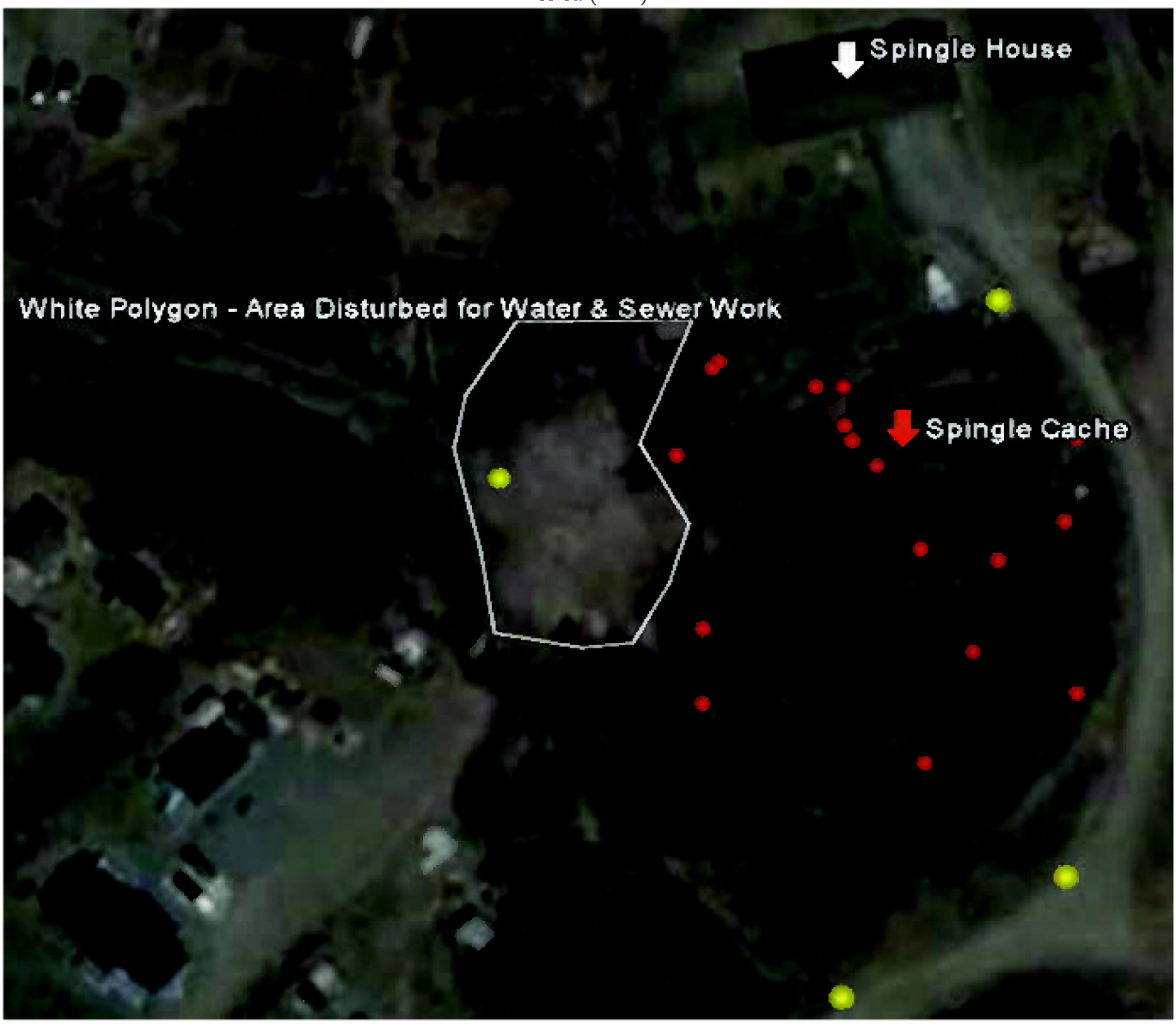

Figure 9: Spingle cache. Single biface to the right is ~19cm long (PAO)

2008 FIELD SEASON AT PHILLIP'S GARDEN, PORT AU CHOIX NATIONAL HISTORIC SITE

M.A.P. Renouf
Memorial University

Introduction

In 2005 and 2006 the Port au Choix Archaeology Project re-excavated Houses 17 and 18, two dwellings originally investigated by Elmer Harp of Dartmouth College (Harp 1976). These re-excavations have led to important new information about the large size and substantial construction of at least some Phillip's Garden dwellings (Cogswell 2006, Renouf 2006, Renouf in press). In addition, investigation of palynological and artefactual data has shown that sealskin working was an important activity at the site and at nearby Bass Pond (Bell et al. 2005, Renouf and Bell 2008, Knapp 2008). Investigations at House 17 included a small area outside the house where we found an extensive area of anomalous mottled soil and other features which we interpreted as evidence of outdoor activities (Renouf 2007).

In the context of these results, the objective of the 2008 field season was to excavate a large area outside House 17 (Fig. 1). Specifically we were interested in identifying where the preliminary stages of sealskin processing might have taken place, assuming that at least the initial stages of this activity occurred outdoors. In addition to recording features and artefacts we did preliminary soil sampling for multi-chemical analysis. We are interested in determining if there are any areas outside House 17 where the soil has an anomalously high marine signature. This was the first of a planned two seasons of excavation to expose and connect the outdoor area between Houses 17 and 18.

Results

We excavated 34 m^2, first removing a significant midden deposit. We excavated part of this deposit in 2007 where it is dated at 1450±40 BP (Beta 238478). A large amount of faunal material and numer-

Figure 1: Excavation areas centred on House 18, one half of House 17, and the area between them (outlined in blue). We excavated 34 m^2 of this 50 m^2 area. The irregular shapes within the three excavation areas are features of various kinds, not described here (Renouf)

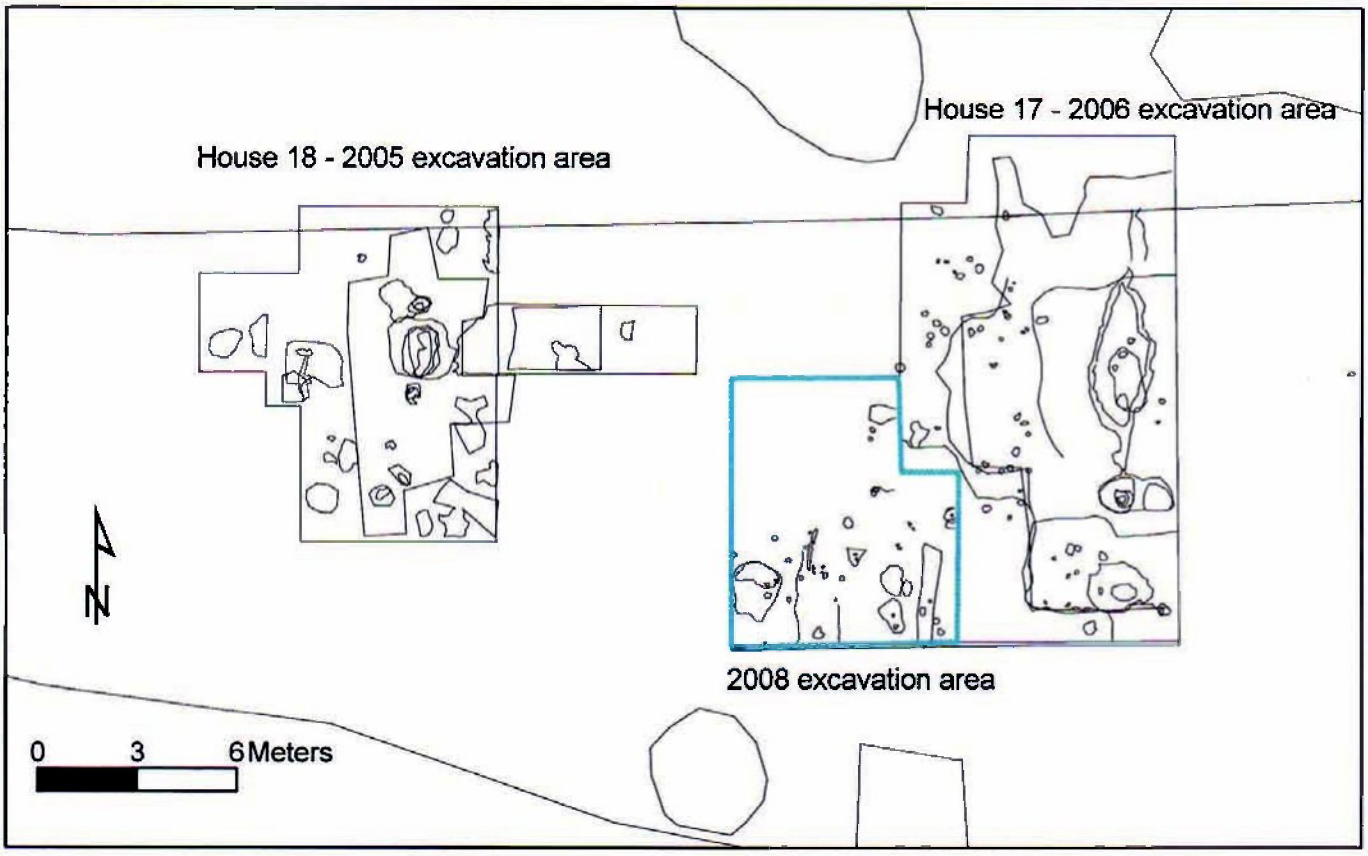

Figure 2: A complete soapstone bowl found in the midden (Renouf)

Figure 3: A series of medium-sized, paired post-holes with possible shape of a structure outlined in red string. Insert shows close-up of one pair of post-holes (Renouf)

ous artefacts were found (Fig. 2).

Beneath the midden there was evidence of cultural activities outside House 17: (1) continuation of the mottled soil mentioned above which has been dated to 1610±40 (Beta 238478) which we hypothesize is sand impregnated with organic material, perhaps seal fat, (2) an outdoor axial feature dated to 1750±40 (Beta 238477), (3) a number of pits and (4) sets of large, medium and small post-holes which we believe outline at least four small structures (Fig. 3). While we have not yet identified the nature of the structures, some might be racks and others might be storage areas.

Soil samples were taken every 50 cm and a subset has been sent off for analysis (Fig. 4)

Conclusions

The results of the 2008 field season indicate that there are a number of outdoor structures associated with at least one large dwelling at Phillip's Garden, House 17. This suggests that there may be similar activity areas outside other Phillip's Garden dwellings. With these preliminary results we continue to fill in the cultural details of this intensively occupied site.

Figure 4: Don Butler processing soil samples (Renouf)

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ARCHAEOLOGICAL INVESTIGATIONS IN INDIAN BAY, NORTHERN BONAVISTA BAY

Fred Schwarz,
Black Spruce Heritage Services

Introduction

In 2007, the Provincial Archaeology Office identified northern Bonavista Bay as an area that has received relatively limited archaeological attention in the past, posing problems for effective cultural resource management (CRM) in the face of ongoing recreational and residential development. The area of concern extended from Greenspond to Gooseberry Islands, extending west as far as the head of Freshwater Bay and including the interior hinterland of Indian Bay

Brook, Traverse Brook and Gander Lake.

Efforts to fill this gap began in early 2007 with an Overview Assessment, including background research and archaeological potential mapping, of the region as a whole (Schwarz and Skanes 2007). This was to be followed with a program of field assessment in multiple stages. Field assessment began in the fall of 2007, with investigation of the Reaches area east of Hare Bay-Dover (McLean 2008a) and continued in 2008 with a survey of Trinity Bay, Bonavista Bay (McLean 2008b).

Field survey of Indian Bay represents the third stage in the field assessment of the northern Bonavista Bay region. On July 7, 2008, the Provincial Archaeology Office (PAO) issued Terms of Reference for a three-day archaeological field assessment of Indian Bay. The workscope included field investigation of the inner Indian Bay region as far east as Cat Cove, and the islands at the entrance of the bay, including Star Gut Island, Gull Island, Northwest Brook Island, Cutman's Island, Cat Island and Brown Fox Island.

Background Research Results

Overview assessment identified Indian Bay as an area with considerable potential to yield both precontact and historic archaeological sites.

Although the only precontact archaeological site previously recorded in the vicinity was the multicomponent site excavated by Reginald Auger at Shamblers Cove near Greenspond (DgAj-01; Auger 1982), background research indicated that the potential for precontact sites in Indian Bay was high.

The headlands and islands at the entrance of the bay offer seasonal access to seals and seabirds, while at the head of the bay, Indian Bay Brook offers the richest run of salmon in northern Bonavista Bay. Moreover, Indian Bay forms a potential nodal point in precontact travel routes, since Indian Bay Brook offers easily-navigable access to and from the interior hinterland, with diverse travel options leading from the headwater lakes of Indian Bay Brook to the Traverse Brook waters and Freshwater Bay, the Strait Shore, and Gander Lake.

The potential for historic archaeological sites is similarly high. By the late seventeenth century, year-round settlements existed at Salvage and Greenspond and similar small seasonal fisheries may have operated from other "outer coastal" locations offering easy access to groundfish resources, potentially including the islands at the entrance to Indian Bay.

The eighteenth century saw increasing European exploitation of inner bay and even interior zones. Among the most important factors initially drawing Europeans to these areas was the development of the salmon fishery, and Indian Bay occupies a singular place in the history of the early English salmon fishery in Newfoundland. By 1705, George Skeffington and James Campbell had salmon fishing premises at Indian Bay, Dog Bay and Freshwater Bay, and Skeffington appears to have been living at Indian Bay in the 1720s. The location of Skeffington's premises is unknown, but if the early salmon fishery followed the pattern evident elsewhere by the late eighteenth century (e.g. see Schwarz 1994), it is likely that a major salmon-fishing station was established at the mouth of Indian Bay Brook, minor stations at the mouths of the other salmon streams in the Bay, such as North West Brook, and a central collector station for shipment to market, located closer to the entrance of the bay, perhaps at Silver Fox or Brown Fox Island.

In the eighteenth century and continuing through to the twentieth century, lumbering, trapping and hunting, both commercially and for subsistence, were increasingly important seasonal activities attracting settlement to the inner reaches of Indian Bay. The nineteenth-century historic and modern inner coastal settlements were in most cases founded by families originating from the outer islands who established seasonal, and eventually, lasting communities on the mainland, primarily for logging. By the end of the century, sawmills were a major sources of employment in many communities, culminating with the advent of commercial logging at Indian Bay in 1921. This industry virtually disappeared following the catastrophic forest fires of 1961.

Field Assessment

The tender for field assessment was awarded to Black Spruce Heritage Services on July 22 2008, and field assessment was conducted August 9–12, 2008 with a stellar crew consisting of the principal investigator, Lynne Schwarz, Jenna Schwarz, Paul Pickett, Ammon Pickett, Lloyd Pickett, Ralph Pickett, and Jillian Pickett. Vehicle-based and pedestrian survey was undertaken at the head of Indian Bay on August 9 and August 12, 2008. On August 10, 2008, boat-based sur-

vey was conducted along the northern shore of Indian Bay as far as Cat Cove, using a converted long-liner operating out of Wareham, supported by a small speedboat. On August 11, 2008, boat-based survey was conducted along the southern shore, extending out to the entrance of the Bay and Little Brown Fox Island.

The Head Of Indian Bay

Vehicle-based and pedestrian assessment at the head of Indian Bay was focused on locating evidence for precontact and historic settlement at the mouth of Indian Bay Brook. Unfortunately, much of the head of the bay has been impacted by residential construction and road-building. Local informants indicated that in the past, artifacts, including clay pipes, have been uncovered during house building and excavation at the local cemetery on the northern side of the mouth of Indian Bay Brook. This is a location with high potential for archaeological remains pertaining to precontact and early-historic salmon fishing. Field assessment in 2008, including surface inspection, testpitting and informant interviews, has yet to verify these reports, or shed new light on the nature and dating of any objects previously recovered in the area. The only other sites recorded at the head of Indian Bay in 2008 were Centreville 1 (DgAl-01), an overgrown steam boiler marking the remains of an historic sawmill site on the shore of Southwest Arm, and Parsons Point 1 (DgAl-03), the site of the principal International Power and Paper Co. (later Bowater's) logging camp between 1921 and 1966, one kilometre east of Parson's Point.

Northern Indian Bay

Boat-based survey along the northern shore of

Figure 1: View west across North West Brook 1 (DgAk-20) (Schwarz)

Indian Bay identified a variety of historic archaeological sites; including two sawmill sites, Fireweed Sawmill (DgAk-17) and North West Brook 2 (DgAk-21). North Arm 2 (DgAk-19) consists of an iron anchor for a log boom used by Bowater to capture logs driven down North West Brook until the fire in 1961.

Four sites included precontact components, mostly of indeterminate cultural affiliation. The Bedrock Shelf Site (DgAk-13) and Fireweed Sawmill (DgAk-17) both yielded stray flakes of Bloody Bay Cove rhyolite on active beaches but two sites contained more substantial remains.

North West Brook 1 (DgAk-20)

A small collection of 35 flakes of rhyolite and patinated chert was recovered from surface scatters and one testpit on the crest of a bedrock outcrop overlooking the mouth of North West Brook; North West Brook supports a small run of salmon.

Cat Cove Brook 1(DgAk-16)

Thirty-one flakes were collected from gravel surface exposures around a shed atop a bedrock outcrop overlooking the bottom of Cat Cove. The assemblage consisted mostly of mottled blue-grey Bloody Bay Cove rhyolite but also included a flake of quartz and five flakes of Ramah chert. Finished artifacts include a core, one microblade and a biface of Cow Head chert. This last is tentatively assigned to the Groswater period, though it is possible that other components are also represented in the collection. An additional flake of rhyolite was found on the beach along with a sherd of creamware, the only pre-twentieth century historic artifact encountered during the survey.

Southern Indian Bay

Boat-based survey of the southern shore of Indian Bay led to the discovery of an interesting group of six precontact sites clustered on the barren, rocky coastline at the entrance to the bay.

Bill Noble's Lookout (DgAk-14)

Two artifacts were found on bedrock outcrops beside a narrow sandy beach on the southern side of Indian Bay. One is a broad triangular point with a deeply concave base and traces of shallow side notches. It appears to be a Dorset knife subsequently reworked to serve as a harpoon endblade. The second is a delicate side-notched biface base likely of Groswater affiliation. No other cultural material was noted.

Juniper Point 1 (DgAk-18)

Literally thousands of flakes and artifacts were found exposed along some 40m of gravel blowouts at Juniper Point, the northernmost point of land on the south side of the entrance to Indian Bay. Forty-six flakes and retouched flakes were collected from these dense lithic scatters. Most pieces were of mottled blue-grey or violet rhyolite, though some were of fine-grained chert and five were Ramah. Finished artifacts included four bifacial knife fragments and five endblades, both triangular and side-notched. The collection appears to include a mixture of Groswater and Dorset diagnostics.

Point of Bay 1 (DgAk-23)

Two rich lithic scatters were noted in gravel exposures between bedrock outcrops on the central point of land on the south side of the entrance to Indian Bay. Twenty-five flakes were collected, most consisting of Bloody Bay Cove rhyolite, but one of Ramah chert. The only diagnostic artifact noted was a Dorset triangular endblade.

Point of Man Rocks 1 (DgAk-24)

Two flakes, one of Cow Head chert, were collected from muddy exposures in barren heath on the southernmost point at the entrance to Indian Bay. Based on the raw material, the site is tentatively assigned to the Groswater period.

Brown Fox Islet (DgAk-04)

Lithic artifacts were observed exposed in six loci over a 1200m^2 area overlooking the tickle between Brown Fox Island and Little Brown Fox Island. Two of these loci appear to be secondary deposits but the remaining four have exposed cultural material *in situ*. Eighty-two flakes and retouched flakes were collected from these loci. Most are of mottled blue or violet rhyolite, but some are fine-grained chert, one is of Ramah, and eight are quartz crystal. The collection also includes three biface fragments and two endblades. Several are clearly Dorset, but some appear to pertain to a Groswater occupation at the site.

Little Brown Fox Island 1 (DgAk-15)

A single flake of unusual violet rhyolite with cream-coloured clasts was collected from a 5m-high bedrock outcrop overlooking the cove between Brown Fox and Little Brown Fox islands. The cultural affiliation is unknown.

Figure 2: View east across gravel exposure at Point of Bay 1 (DgAk-23) (Schwarz)

Figure 3: Survey boat moored at Little Brown Fox Island (Schwarz)

Summary

In all, sixteen sites were recorded (including one ethnographic site). The archaeological sites included ten with precontact components, and seven with historic components, five of the latter pertaining to the later historic logging and sawmilling industries in the bay (Figure 4). As it turned out, survey coverage could not be completed in the time available, but this was because of the abundance of archaeological remains encountered, which must be considered a positive result.

Evidence for precontact and early historic exploitation of the Bay's rich salmon runs remains elusive, largely because of the impacts of residential construction and road building at the head of the bay. The precontact site at North West Brook 1, though of indeterminate cultural affiliation, likely pertains to seasonal exploitation of the small salmon run escaping to that brook in late summer.

In all, ten precontact sites were recorded at the entrance to the Bay. Particularly significant is the group of Early and Late Palaeo-Eskimo occupations concentrated around the Point of the Bay, Little Brown Fox Island, and extending northeast to Cat Cove (Figure 5). Traditionally, the limit of reliable landfast winter ice is said to extend approximately from the point of the bay to Cat Cove. Though this limit varies somewhat year to year, the cluster of Groswater and Dorset sites at the entrance to the bay was almost certainly situated to provide access to the ice edge, and likely represents a focus of outer coastal settlement (*sensu* Pastore 1986) oriented toward harvesting seals at the edge of landfast ice in winter and spring.

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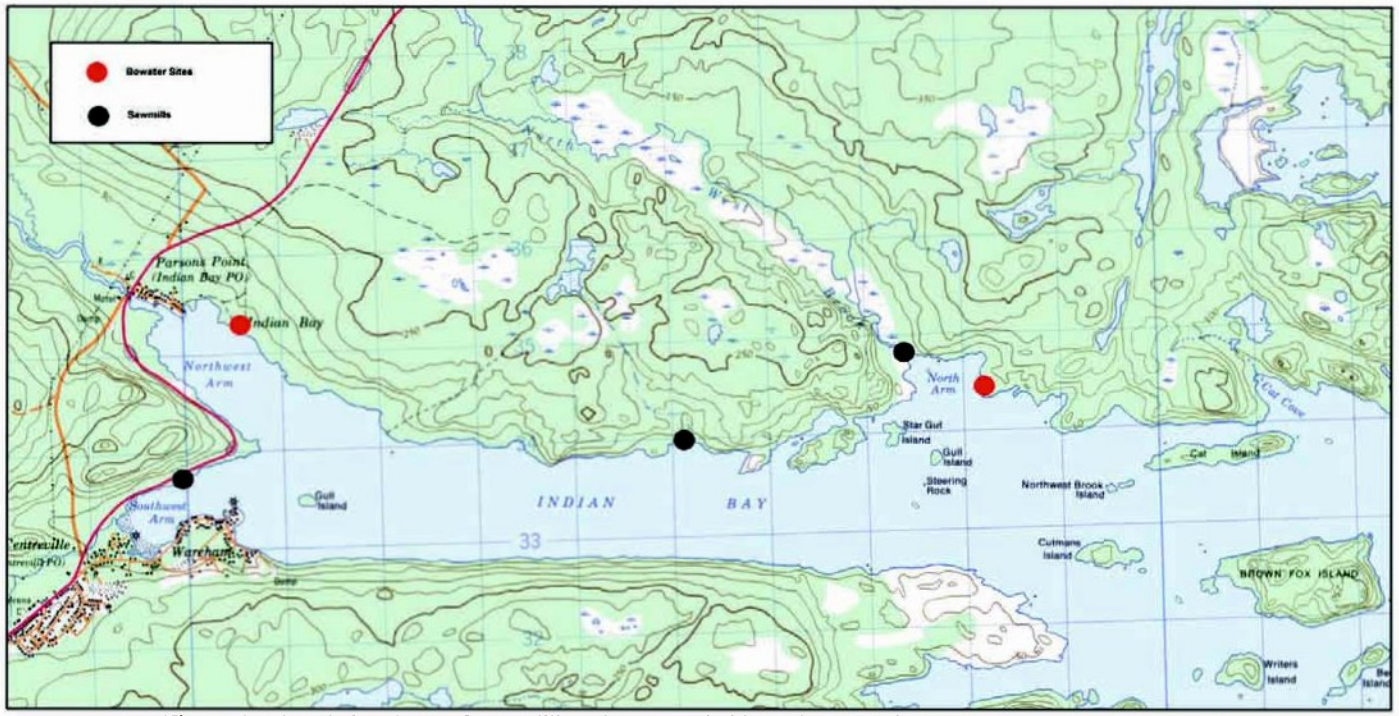

Figure 4: Historic logging and sawmilling sites recorded in Indian Bay during the 2008 survey (Schwarz)

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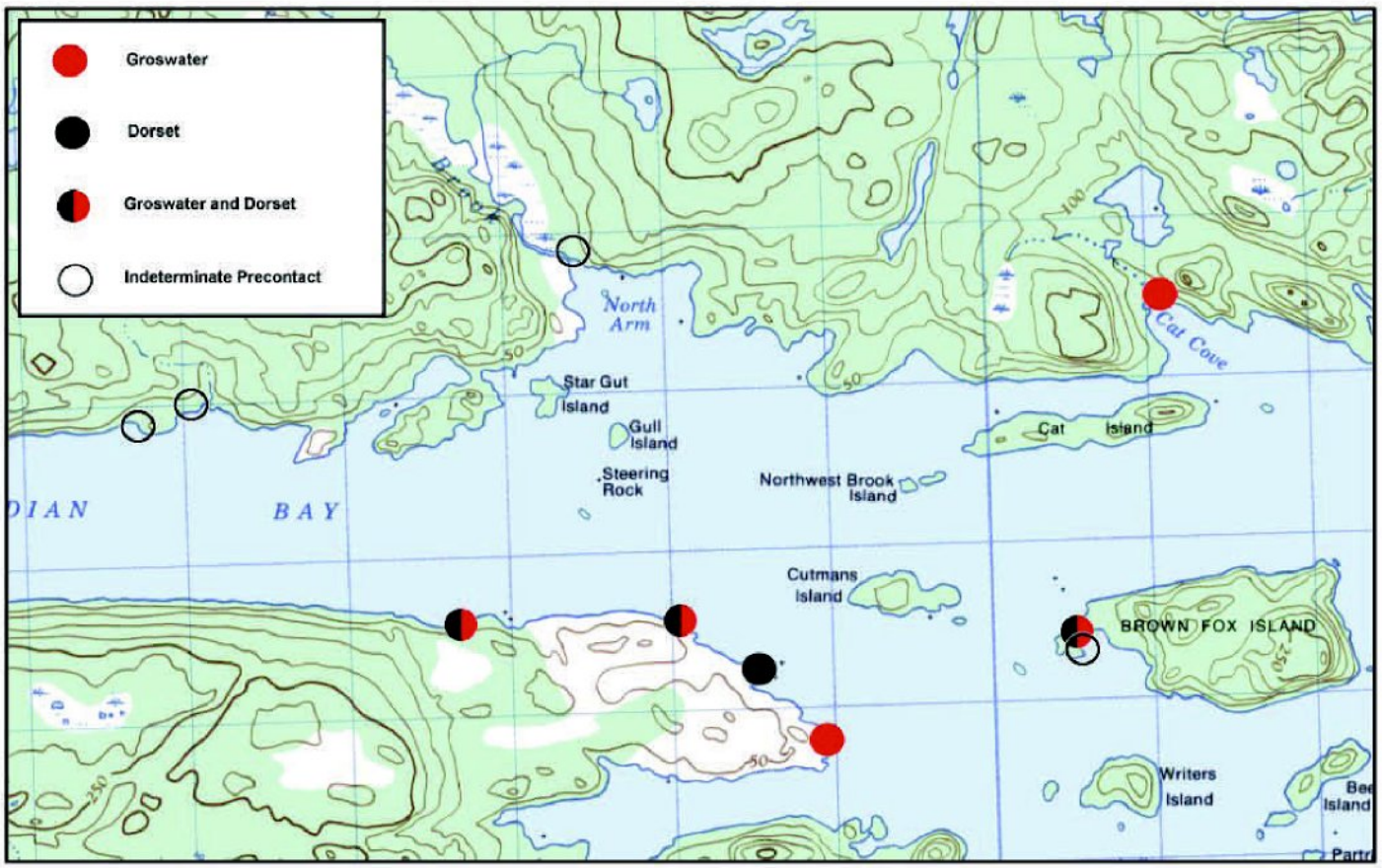

Figure 5: Precontact sites recorded in Indian Bay during the 2008 survey (Schwarz)

SUBMERGED LANDSCAPE INVESTIGATION OFF NORTHEAST NEWFOUNDLAND

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Summer 2008 saw the continuation of an integrated landscape/seabed archaeological survey of NE Newfoundland that was initiated in the summer of 2007. This region has been submerging over the last 9000 years such that its earliest coastal archaeological sites, those of the Maritime Archaic Indians (MAI), are now situated on the seabed or in the intertidal zone. The overall aim of the project is to map and reconstruct these submerged cultural landscapes and subsequently identify and test areas of high archaeological potential (for more information see www.science.ulster.ac.uk/cma/slan).

The previous summer's work involved a land-based survey and a marine survey at Back Harbour, north Twillingate Island. The aim of the former was to determine the spatial extent of known terrestrial prehistoric sites and locate new ones, while the latter aimed to obtain high-resolution multibeam bathymetric data that would allow the production of 3D palaeogeographic reconstructions of the landscape at times of low sea-level.

This summer's fieldwork aimed to investigate the potential existence of submerged archaeological sites in Back Harbour and obtain new offshore data that would ground-truth and enhance the previously collected multibeam data. As in 2007, there were two

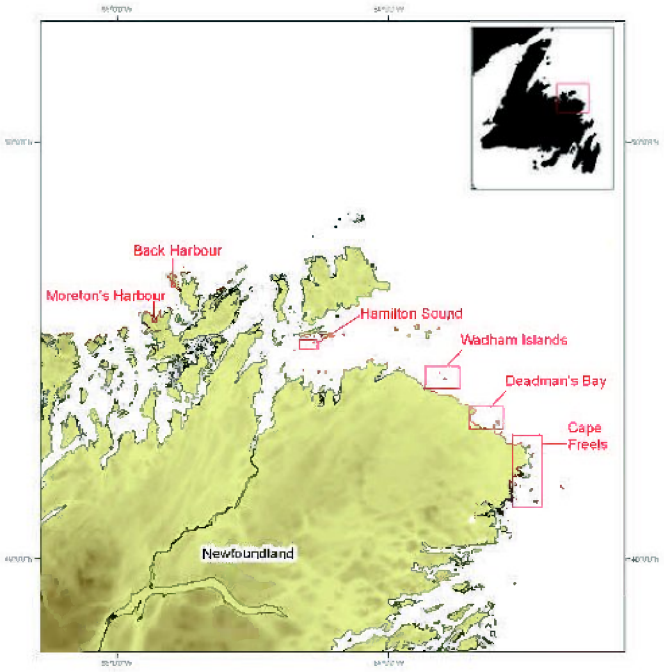

Figure 1: Location of intertidal (Back Harbour) and marine (all others) survey sites off Northeast Newfoundland (Westley et. al.)

components; firstly, a land-based survey of the intertidal zone of Back Harbour and secondly, a marine survey off NE Newfoundland, including Back Harbour.

Intertidal Survey

The terrestrial component of the project was conducted in early June 2008. Back Harbour was selected as a study area because palaeo-geographic reconstructions indicated that it would have been much extended during the postglacial sea-level lowstand (Figure 2). Moreover, a number of MAI artefacts had been collected from the intertidal zone by Jim Anstey, a local resident, implying the presence of archaeological material offshore. The time period for the survey was chosen as tides in Back Harbour would be particularly low, exposing much of the intertidal zone (Figure 3).

The objectives of the survey were to:

1. Locate and map concentrations of prehistoric artefacts in the intertidal zone
2. Observe local patterns of coastal sedimentation and erosion

The first objective aimed to provide a better sense of where intertidal and subtidal sites could be located or were presently being eroded out by wave and tidal action. The second objective allowed assessment of whether local conditions were conducive to the survival or erosion of *in situ* archaeological deposits in the inter- and subtidal zones. The method employed was an on-foot survey, with the two members of the survey team walking closely spaced transects across the intertidal zone, visually searching for surface finds and examining coastal geomorphology. A handheld GPS was used to track their movements and was also used to record the positions of finds which were then photographed and described.

Fifteen findspots were recorded (Figures 3 & 4). Overall, the artefacts themselves are largely non-diagnostic, consisting in the main of flakes, some larger pieces of raw material and two uncertain objects which could have been naturally rather than anthropogenically produced. Some flakes were identified as Palaeoeskimo but no distinctive MAI objects such as net sinkers and heavy woodworking tools were located. More revealing was their distribution. With one exception, all the artefacts were located in the lower half of Back Harbour, south of the Batrix Island isthmus. This observation is also substantiated by the distribution of extant previously collected intertidal finds, of which 20 come from DjAq-20 (south of the isthmus) but only 1 from DjAq-19 (north of the isthmus).

In part, this distribution can be explained by the fact that the area south of the isthmus was a natural extension of the most intensively occupied prehistoric areas at times of low sea-level. It is therefore likely that settlement extended onto these flat, easily accessible areas at lowstands. Further explanation can be provided by observations of coastal geomorphology. The area south of the isthmus shelters behind a series of rock outcrops that form a natural breakwater, and is characterized by extensive areas of shallow water. These two features serve to reduce wave strength and in doing so, minimize erosion. This suggests that remnants of the formerly subaerial palaeo-landscape may be buried and preserved here in the inter- and subtidal zones. By contrast the northern half of Back Harbour is deeper, more open and exposed. This is suggestive of enhanced erosion and reduced preservation potential. Nonetheless, pockets of preservation in localized sheltered areas cannot be ruled out.

An opportunity for future work involves an extension of the archaeological survey in the intertidal

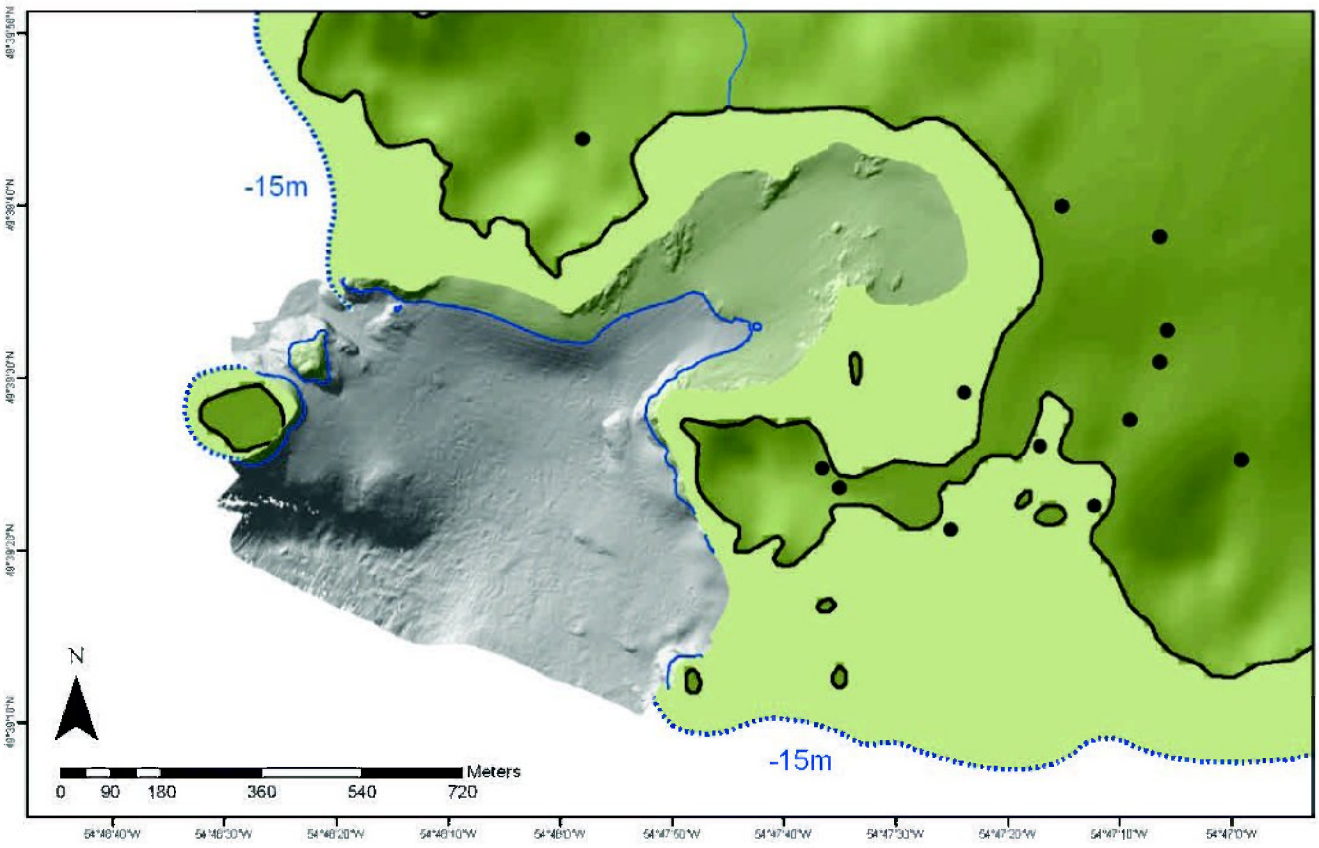

Figure 2: Reconstructed palaeo-geography of Back Harbour assuming a sea-level fall of -15m, such as was probably attained during the potential early MAI occupation between 9000 and 6000 cal BP. Dark green area shows modern topography (from Geobase), black line shows modern shoreline. Grey area shows seabed topography from multibeam bathymetry collected by the Canadian Hydrographic Service in summer 2007 (data courtesy of John Anderson). Solid and dashed blue lines respectively show the palaeo-shoreline as inferred from high resolution multibeam and low resolution hydrographic chart data. Light green areas represent the approximate extension of the palaeo-landscape seaward of the modern shoreline. Black dots show the position of known MAI sites (Westley et. al.)

and subtidal zones of the southern portion of Back Harbour. This would involve test-pitting in the intertidal zone at lowest tide, focusing particularly around the area south of the Batrix Island isthmus, and wading or snorkel surveys of the extensive shallows in this area. Deeper areas closer to the breakwater could be subject to an initial reconnaissance survey using Scuba equipment.

Marine survey

The marine component of the project was conducted in mid-August 2008, using the CCGS *Shamook* as a research platform to survey the waters off NE Newfoundland. The goals of the cruise were to:

1. Document the nature of coastal landforms and sediments associated with submerged shorelines.
2. Investigate the seismic structure of submerged coastal features identified from multibeam bathymetry and published bathymetric charts.
3. Determine the palaeo-sea level elevation associated with submerged features.
4. Retrieve sediment samples and record video imagery of the seabed to ground-truth seabed substrates.

Seismic surveys were conducted in six areas off Northeast Newfoundland: Cape Freels (Bonavista Bay), the Wadham Islands and Deadman's Bay (the Straight Shore), Hamilton Sound (south of Western Indian Island), Back Harbour (Twillingate) and Moreton's Harbour (New World Island) (see Figure 1 for locations). The equipment used consisted of an IKB-SEISTEC™ system for high-resolution sub-bottom profiling, a Van Veen grab for seabed sampling, and a Deep Blue Pro SplashCam system for seabed imaging. All this was deployed off the CCGS *Shamook;* a 23.2 m-long Canadian Coast Guard vessel with a shallow draft of 3.3 m that is operated primarily for coastal fisheries

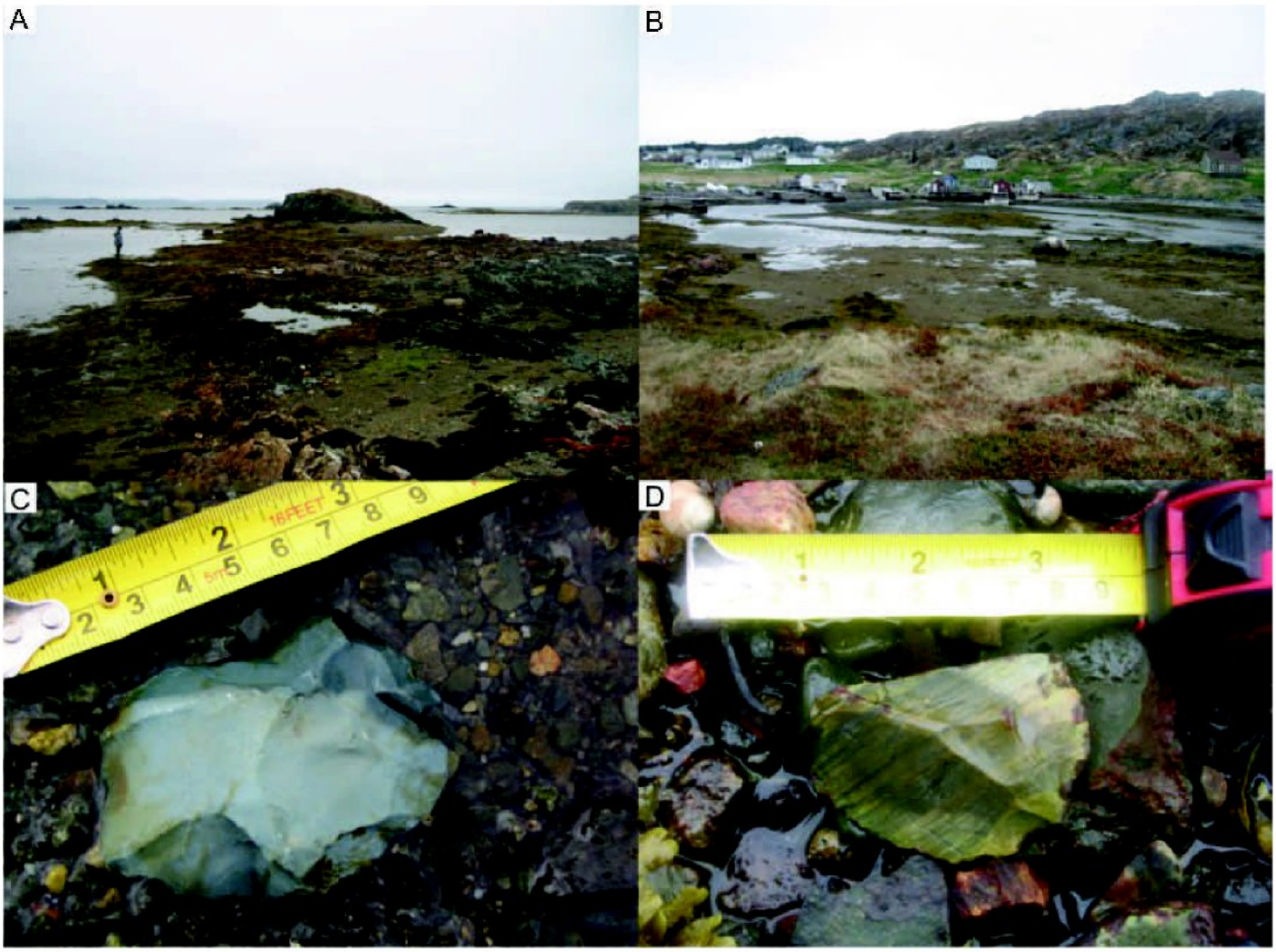

Figure 3: A) Intertidal zone at Back Harbour approximately 2 hours after low tide. The small island (Woody Island) in the centre of the picture is cut off from the mainland at high water. B) View from Woody Island to the mainland showing extensive areas exposed at low tide. C) Block of slate with numerous flake removal scars found in the intertidal zone. D) Chert flake found in the intertidal zone (Westley et. al.)

science (Figure 5). Video and grab samples were also taken from all areas with the exception of Moreton's Harbour. Approximately 165 km of sub-bottom shallow acoustic profiles were collected across 57 km of submerged shoreline. In total, 57 sample stations were imaged with video and 98 grab attempts were made, of which 39 were successful (Figure 6).

The primary target for survey and sampling was the submerged lowstand shoreline, which corresponds approximately to the -18 m bathymetric contour. This is of importance to submerged archaeological landscape reconstruction because if marine-adapted prehistoric hunter-gatherers were present in Newfoundland at 8-9000 years ago this palaeo-shoreline would have been an ideal place for settlement and coastal resource exploitation.

Numerous coastal features associated with lower sea-level positions were tentatively identified from acoustic profiles, including wave-cut benches, beaches, truncated glacial landforms (e.g. drumlins), sea cliffs, and barriers and lagoons. Shallow, sediment-filled depressions located on the landward side of the lowstand shoreline are interpreted to be former lake basins (Figure 7), which potentially preserve proxy records of environmental conditions on the 9000-year-old subaerial landscape. River channels with partial sediment fills were observed at bedrock-controlled topographic lows or pinch-points landward of the sea-

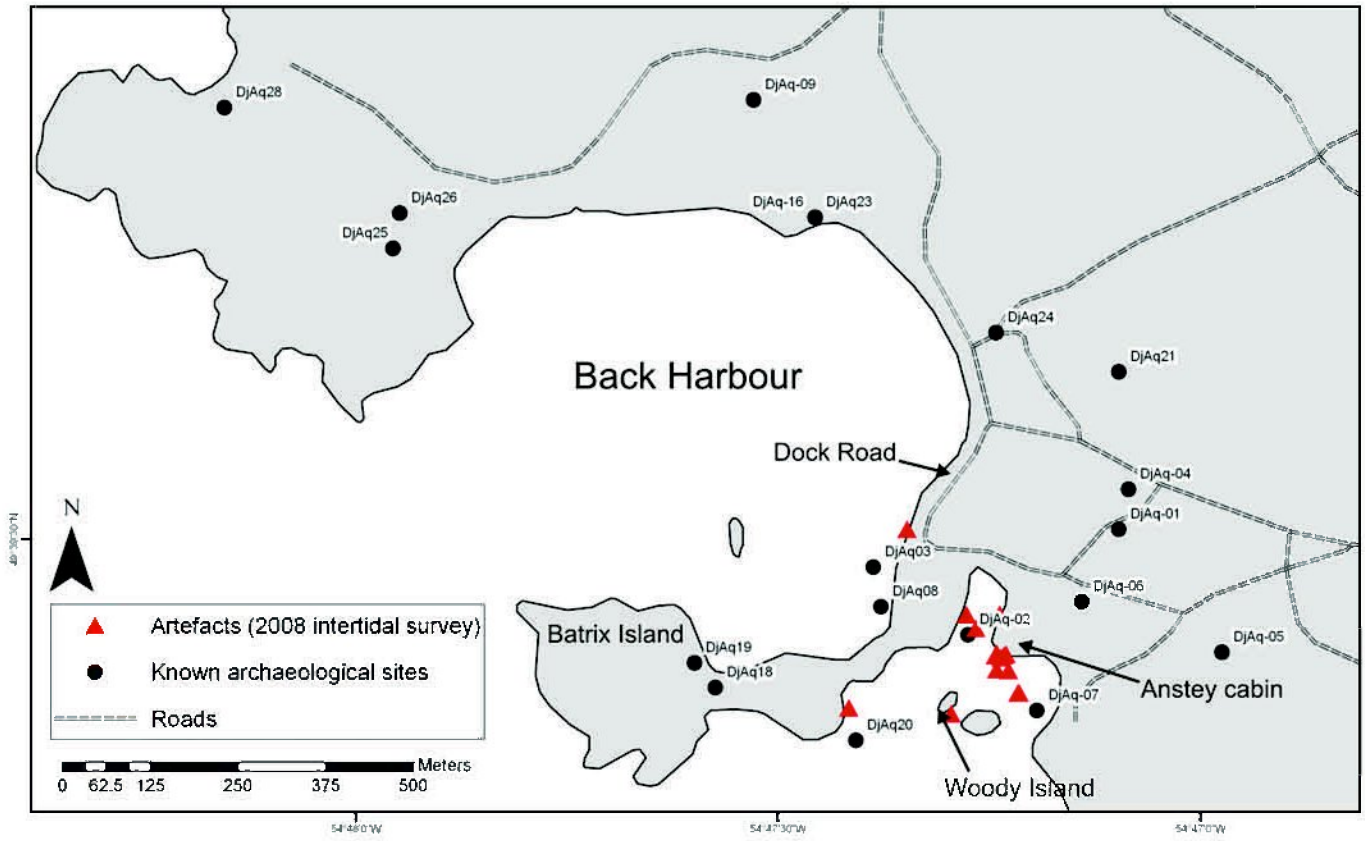

Figure 4: Map showing distribution of finds made by the 2008 intertidal survey (Westley et. al.)

level lowstand. Using seabed bathymetry, they have been roughly traced to river valleys on the modern landscape. Both the former lake basins and river valley fills will be coring targets during future cruises. Finally, truncated glacial landforms, interpreted to be drumlins, were identified on sub-bottom profiles and are regarded as good estimates of the sea-level lowstand depth.

Planned future work will focus on processing, analyzing and integrating this data with extant information to enhance existing records of RSL change, improve our current palaeogeographic reconstructions and identify areas of high archaeological and palaeoenvironmental potential that can be targeted for further survey and testing.

Acknowledgements

Our thanks to the captain and crew of CCGS *Shamook* for their outstanding contribution to the success of the cruise, and to Mr. Curtis Strickland, Fugro Jacques Geosurvey Ltd., St. John's, who operated the geophysical equipment. On the land side, thanks go to Jim Anstey, Alison Anstey, Rob Anstey, Dominique Lavers and Elaine Anton for their help, advice and hospitality. Cruise support was provided by Fisheries and Oceans Canada (Newfoundland and Labrador Region), Coracle Irish-Newfoundland Fellowships, and Natural Science and Engineering Research Council of Canada. Support for the intertidal survey was provided by a Memorial University Faculty of Arts Postdoctoral fellowship and research grant.

Figure 5: A) CCGS Shamook at Twillingate Harbour. B) Deployment of Van Veen grab for seabed sampling. C) Deployment of drop camera for seabed sampling. D) Deployment of IKB Seistec for sub-bottom profiling in Back Harbour (Westley et. al.)

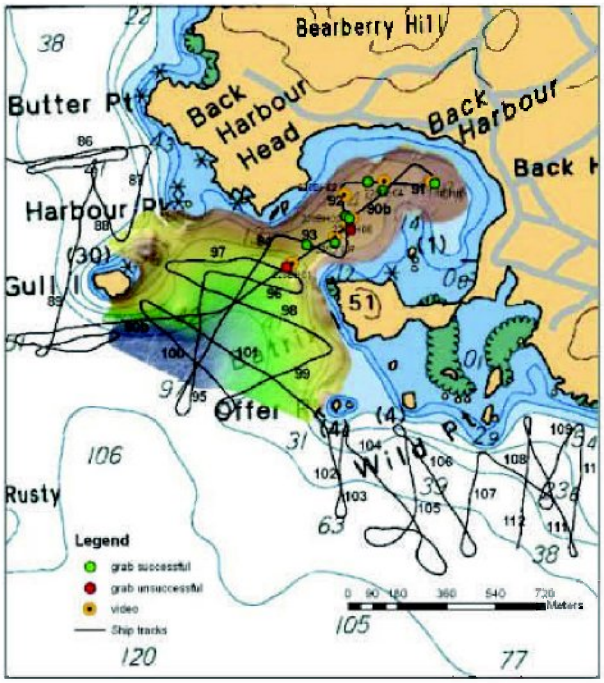

Figure 6: Plot of ship tracks for seismic survey and location of sampling stations overlain on nautical chart and multibeam sonar image of seabed of Back Harbour (Westley et. al.)

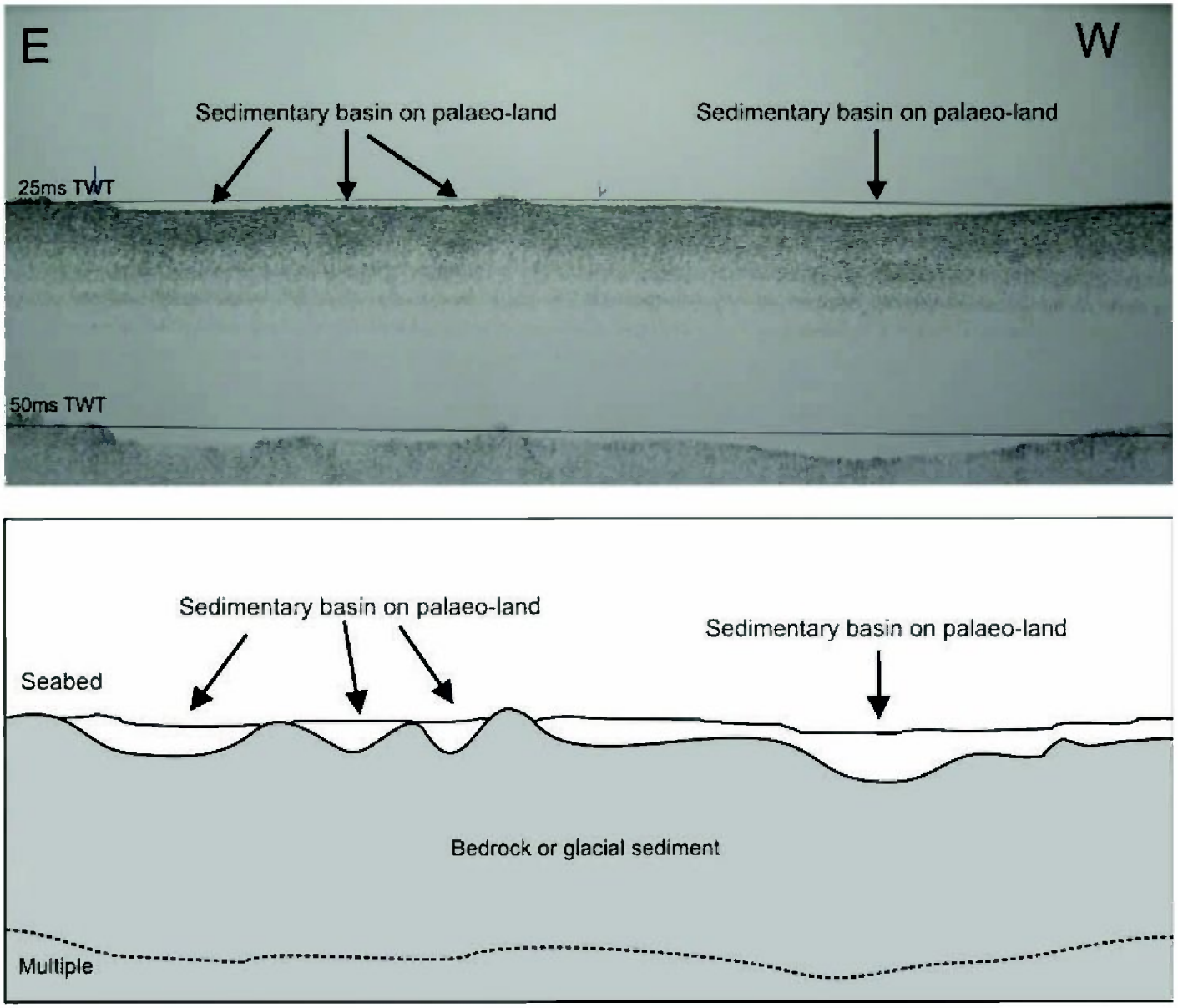

Figure 7: Top) Acoustic profile (unprocessed) from Hamilton Sound showing infilled sedimentary basins on the palaeo-land surface which may represent former freshwater lakes during the lowstand. Bottom) Preliminary interpretation of the acoustic profile highlighting the main features (Westley et. al.)

2008 FIELDWORK AT GREEN ISLAND 6 AND NAPAKTOK BAY 1, NORTHERN LABRADOR

Peter Whitridge, Memorial University and James Woollett, Université Laval

In July and August 2008 Jim Woollett and Peter Whitridge directed survey and excavation of pre-contact and historic Inuit sites at Green Island 6 (HkCk-01) and Napaktok 1 (HlCo-01), northern Labrador. This represented the second and final season of summer field work of a research program focussed on long-term change in Inuit household economies in northern Labrador funded by the International Polar Year initiative. As part of this project Maryse Cloutier-Gélinas (Memorial) conducted MA research on pre-contact Inuit landscapes and and Félix Gagné (Laval) conducted initial work for an MA project regarding faunal resource usage. The field crew was rounded out by Sacha Auclair-Vincent (Laval), Julia Ford (Nain), Kiara Hart (University of Western Ontario), Iky Merkeratsuk (Nain), and Brian Pritchard (Memorial). In 2007 excavations were conducted at Inuit sites on Dog Island, Koliktalik Island and Iglosiatik Island in the

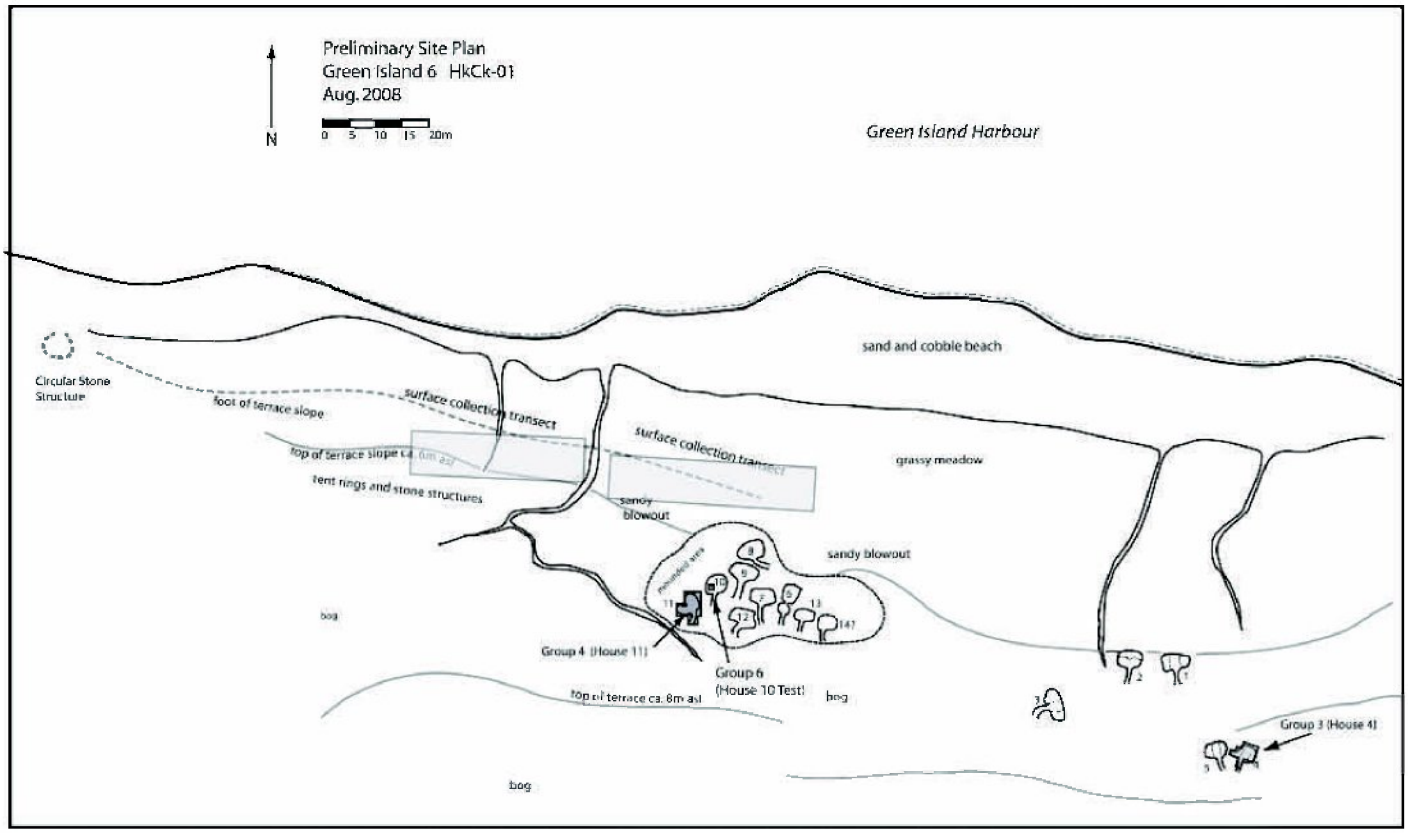

Figure 1: Map of Green Island (Whitridge & Woollett)

Nain region, and at sites in Seven Islands Bay. 2008 field work focussed on the precontact winter village of Green Island 6, briefly investigated by Steve Cox in the mid 1970s and by a Smithsonian Institution survey team in the 1980's. In 2002 Jim Woollett tested House 11, noting the unusual lack (for winter house sites in Labrador) of historic material culture. Those results encouraged us to return to Green Island in 2008, to expand House 11 excavations and excavate an additional winter house.

From July 20 to August 14 we camped a few hundred metres southwest of the winter houses at HkCk-01. We surveyed the site vicinity and mapped features, finds and topography over an area of about 50 hectares with a total station. The mapping recorded both the immediate topographic layout of the site and the wider local environs, as part of Cloutier-Gélinas' investigation of the site in its landscape setting. Although our work was focussed closely on the winter house excavations, we made casual surveys of other parts of the island on several occasions. Besides recent and historic Inuit camps, and Paleoskimo sites and structures, we encountered numerous cairns, including Inuit fox traps, caches, possible burials and "pinnacles". The latter, as also described for this region by Susan Kaplan and in Cloutier-Gélinas' accompanying report, typically consisted of a roughly one metre long slender boulder that was either propped vertically with a small number of blocky pumpkin-sized boulders or wedged in a crevice. Many of these structures are now collapsed. They do not closely resemble Inuit *inukshuit*, which are formally different (though Norman Hallendy describes some analogous features) and usually more substantially built. Several small Dorset lithic scatters next to the winter house village were mapped and collected; two of these consisted predominantly of nephrite flakes that it is hoped will shed light on nephrite manufacturing and trade on the Labrador coast. A 1 x 2 m test pit was excavated in House 9 to provide contextual information on the house group of which House 11 (see below) is a part. Oddly, this small test produced the single piece of a soapstone vessel recovered from Green Island in 2008. This enigmatic thin, charred slab does not correspond to typical Inuit or Paleoeskimo vessel forms.

House 11, explored initially by Woollett in

2002, is the largest house at the site. It is a "clover-leaf" structure comprising two separate chambers sharing an entrance passage. The house was almost completely excavated in 2008, with a 37m^2 area opened focused on the interior, walls and innermost entrance passage. The house proved to have been excavated into a sand dune and then covered by up to 80cm of sediment derived from several cycles of aeolian sand deposition and soil. The entrance *katak*, the floor and other elements of interior furnishings were intact and very clear, nevertheless the walls were ephemeral, as the house itself was dug substantially into the sand bank. The central floor area of the house was completely paved with pavers extending into the two side chambers, each a little less than 3 x 2 m in area and separated by a stone partition. Each compartment had collapsed sleeping platforms, stone-lined storage compartments at the edge of the sleeping platforms, and walls built of stacked stone, upright stone slabs and some wood poles. Two alcoves, lamp stands and storage compartments were built into the southern walls, one to either side of the entrance.

Figure 2: Overview of Green Island 6, facing northeast, July 2008 (Whitridge & Woollett)

Very few artifacts were recovered in the house; those recovered were primarily small flakes of slate found amongst the paving stones, fragmentary (and a few complete) ground slate tools (including knife blades and drilled triangular endblades) and nephrite flakes. A notable find was a small collection of small marble-like round pebbles recovered in a space under a sleeping platform. No European-source material of any sort was recovered in House 11. The comparative lack of artifacts and the very thin semi-organic deposits overlying the paved floor suggest, at least initially, that the house had a single episode of occupation, and that this was of relatively short duration. The sparse accumulation of cultural materials in the house contrasts markedly with the dense and deep midden and floor deposits in 18th century winter settlements elsewhere in Okak Bay. Very few bone or wood fragments were recovered either here or in House 4; the dry, acid and sandy soil provides a context hostile to organic preservation. Nevertheless, a number of charcoal fragments were recovered in both features, affording the possibility of obtaining high-precision radiocarbon dates for the house, aiding the dating of the precontact Inuit presence south of the Torngats.

House 4 was the easternmost winter house at Green Island 6, part of a loose cluster of five houses at this end of the site. With House 11 (the westernmost) it spatially bracketed the village, and given the somewhat higher elevation (and likely earlier occupation) of Houses 1-5 compared to Houses 6-14, may temporally bracket it as well. The house was bilobate, with sleeping platforms to the north and east, and a tunnel opening to the south. Although a southerly tunnel orientation is common (probably typical) for Inuit winter houses, allowing easy refuse disposal away from the house in the face of prevailing northerly or northwesterly winter winds, this meant the dwelling (and most others at Green Island 6) "faced" inland and up slope;

Figure 3: Beginning of House 11 excavations, July 2008, Julia Ford and Sacha Auclair-Vincent (Whitridge & Woollett)

Figure 4: Iky Merkeratsuk mapping House 4, July 2008 (Whitridge & Woollett)

Inuit winter houses more commonly have their tunnel on the seaward and downslope side of the structure. The entire house was mapped and a 14 m^2 area excavated over most of the interior depression.

Excavation revealed a carefully paved flagstone floor in the central part of the house, abutting a northern sleeping platform bordered by vertically placed slabs and cobbles. Trapezoidal compartments, probably for storage, cut into the platform area north and west of the floor, and were roughly paved below floor level. An eastern probable sleeping platform was only partly exposed. A large cobble cooking platform abutted the southwest wall, adjacent to the tunnel mouth.

Figure 6: Men's knife end blade from House 4, August 2008 (Whitridge & Woollett)

A possible second lamp stand was partially exposed along the northeast wall, between the north and east sleeping platforms. Several largely intact slate artifacts (various forms of ulu and men's knife) occurred at the interface of the southern lamp stand and the house floor, and appear to represent intact floor caches.

Although well-made slate artifacts were fairly abundant in House 4, soapstone was entirely absent, a highly unusual situation for an Inuit winter house in Labrador. The house may have been too briefly occupied for soapstone refuse to have accumulated, but this explanation is not consonant with the relative abundance of slate debris. Alternatively, soapstone may not have been available to the site occupants, as

Figure 5: Julia Ford examining find, August 2008 (Whitridge & Woollett)

recent arrivals in an uncharted area. Low-fired clay lamps were used in other parts of the Eastern Arctic by the first Inuit arrivals. Organic preservation was very poor; only a few bone fragments were recovered. Most of these occurred close to the surface and probably postdate the precontact Inuit occupation of the feature, but one badly deteriorated fragment of whale bone was recovered from a precontact context next to the eastern platform.

Napaktok 1 is one of three Inuit sod house villages in the eastern portion of Napaktok Bay, occupied in the late 18th century. The site consists of four substantial sod house ruins on a steep raised beach terrace at 10m asl. The site was mapped and sampled for plant, insect and animal bone remains for analyses of landscape change, site formation, household construction methods, and subsistence patterns, providing a vital point of comparison for recent analyses of similar

Figure 7: Maryse Cloutier-Gélinas examining "pinnacles", Green Island, July 2008 (Whitridge & Woollett)

Figure 7: House 4 after excavation, looking north, August 2008 (Whitridge & Woollett)

Figure 8: House 11 after excavation, looking east, August 2008 (Whitridge & Woollett)

Figure 9: Brian Pritchard mapping nephrite scatter at Green Island 6, August 2008 (Whitridge & Woollett)

Figure 10: Opening test excavations at Napaktok Bay 1, August 2008 (Whitridge & Woollett)

18th century sites at Uivak Point 1, Komaktorvik 1 and in the Dog Island region of Nain. Small sampling trenches were excavated in the interiors of two of these houses, revealing stone floor pavements and sleeping platforms covered in thin deposits of turf and artifact assemblages consisting of traditional Inuit material culture items and European objects. Bulk soil samples were collected for environmental archaeology analyses by Alison Bain (Laval) and Cynthia Zutter (Grant MacEwan College), and the locale was mapped with a total station.

Areas outside of house entrances were probed with a soil core sampler, identifying notable midden deposits containing wood, bone and other refuse, on the steep terrace slope adjacent to the largest houses (1, 2 and 3). Of these, the midden of house 2 appeared to be the deepest and to have the clearest association with a single house (Houses 1 and 3 are more complicated and perhaps comprise multiple superimposed house structures). A 4 m^2 test was excavated in the House 2 midden using 10cm arbitrary levels, revealing 50cm of natural soil, sediment and cultural deposits. Due to the sandiness of the soil and the very steep dip angle, the midden is very well drained and lacked permafrost, which is present in some locations at the site. A substantial collection of moderately well preserved animal bone was recovered, consisting predominately of ringed seal and bearded seal, but including dog, caribou and bear, as well as whale baleen . A very plentiful artifact assemblage was also recovered, which included a great number of pieces of raw or roughly worked soapstone, fragments of finished soapstone pots and lamps, and manufactured ceramic and glass vessels, iron nails, knives and other tools. The quantity of soapstone debitage and finished objects is remarkable in comparison with contemporaneous sites such as Uivak Point 1 and Komaktorvik and may suggest the heavy exploitation of local sources; one possible quarry site was observed adjacent to the sod house village. A Dorset occupation of the locality is also in-

dicated by the small chipped stone assemblage recovered.

In summary, we had an interesting and highly productive season. Although Green Island 6 did not generate faunal material, the mounting evidence that it lacks a significant historic component makes it useful for modelling household and community organization during the precontact exploration of the Labrador coast. Napaktok generated the hoped for faunal samples, as well as a rich early historic artifact assemblage, and so will contribute greatly to our understanding of long term economic change in the region. Laboratory analysis of spatial data, artifacts, faunal material, and botanical and sediment samples is ongoing, with the support of two further years of IPY funding for analysis and communication.

PRELIMINARY INVESTIGATION OF PREDORSET STRUCTURES AT NULLIAK COVE, NORTHERN LABRADOR

Andrea Wilson
Memorial University

From late August to early September 2008, Corey Hutchings and myself carried out archaeological investigations at Nulliak Cove, in Northern Labrador. Arriving at Nulliak Cove by schooner *Down North* on August 19, our crew had just over two weeks to complete our objectives. My aim was to identify and document PreDorset structures at the site, in addition to undertaking targeted excavation of the structures.

Nulliak Cove (IcBp-20) is located at 58°19'38 / 62°38'1, approximately 200 kms north of Nain, Northern Labrador. The site is very large, covering an area approximately 1.5 km². A series of terraces rises from the modern shoreline, and meets a relatively flat expanse between mountainous ridges.

Longhouse vestiges and Ramah chert debitage from Maritime Archaic occupation dominate the upper terraces of the site, and have been the focus of archaeological work at Nulliak (Fitzhugh 1980, 1984, 1985). In summer 2005 Dr. Lisa Rankin identified a substantial PreDorset structural sequence at Nulliak Cove, and suggested that our understanding of the PreDorset presence there is inadequate (Rankin 2006).

The PreDorset were the first human inhabitants of the Eastern Arctic after glacial rebound, with earliest dated material at 4200 BP (CARD 2008). The PreDorset reached Labrador by 4000 BP, which is of special significance; this area was the first time the PreDorset encountered a territory that had supported earlier populations. How the remains of earlier Maritime Archaic activities affected settlements of the colonizing PreDorset in Labrador is undetermined, but at Nulliak Cove, Palaeoeskimo structures are positioned in close proximity to Maritime Archaic longhouse foundations.

Less than a hundred PreDorset dwelling structures have been excavated in the Canadian Low Arctic (Ryan 2003), and only fourteen had been excavated in Labrador prior to this field season (Cox 1977, 1978; Fitzhugh 1976, 2002). The structures chosen for my investigation were those furthest from the modern shoreline, on the highest terraces, and had the least amount of vegetation. The small amount of vegetation on the clear circular foundation remains allowed for fast identification of these structures, unlike the boulder structures with large collapsed walls grouped on lower terraces. All three structures described below measure approximately 5 m².

Owing to time constraints, only certain squares in the grid were excavated. Areas chosen for excavation were those adjacent to structural features, along walls and axial features, in addition to squares in the living spaces on either side of the axial feature.

There are obvious sequences of boulder structures on lower terraces, but their features are obscured by thick vegetation, which impeded investigation; visiting earlier in the season may allow for a better understanding of structures with heavily collapsed walls, which possibly reflect different structural choices based on season of use.

The following section provides brief descriptions of the three PreDorset structures and associated artifacts from Nulliak Cove.

Structure 1 (S1):

Sparse patches of bear berries cover this structure, which is located on a gravel terrace 9 masl. The south end of the structure has the heaviest concentration of large stones, and a possible storage feature in this area. Flat stones are distinctly aligned as an axial feature, positioned toward north. On both sides of the axial feature, small, packed stones covered the floor space. The linear rock feature was fully excavated, but yielded no artifacts.

Figure 1: PreDorset Structure 1, facing northwest (Wilson)

Structure 2 (S2):

There is very little vegetation on this structure, which is located on a long, flat gravel ridge east of S1, at 10 masl. The periphery of the structure is a ring of heavy stones with a dividing rock feature. Lots of flat and rounded pebbles cover the floor space of this feature, as in S1. Facing north, the back half of the structure had a large flake scatter, and a variety of chert flakes were collected from the surface of each side of the axial feature. The axial feature is distinct and raised 15 cm above the pebble floor. The east side of the structure has the largest rocks in the ring, and possible cache features.

Structure 3 (S3):

This structure was located on the same gravel terrace as S2, at 10 masl. The center is devoid of vegetation, while sparse bear berry patches cover the very clearly defined rock periphery. There appears to have been an axial feature dividing the structure, but the alignment of the rocks is much less distinct than in S1 or S2. The heaviest rocks are placed at the south end of the structure, and as in S1 and S2, a cache feature is present.

Artifacts:

All artifacts were located within the bounds of the structures described above. Fortunately, the artifacts recovered form a very typical PreDorset assemblage: the tip of a Mugford chert micropoint, a small Ramah chert harpoon blade, banded chert microblades, and several burin spalls. Additionally, flakes of Ramah chert, Mugford chert, and various types of banded chert were collected.

Considering the number of structures at the site, it is clear that Nulliak held special significance for both Archaic and Palaeoeskimo populations; a more extensive investigation of the early Palaeoeskimo occupation may provide new insight on the PreDorset colonization of Labrador.

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NEW RESEARCH AT STOCK COVE, TRINITY BAY, NEWFOUNDLAND

Christopher B. Wolff, Meghan Negrijn, Lindsay Swinarton, and Eric Tourigny

Introduction

In August of 2008 we began a new research project at the Stock Cove site (CkAl-3), located at the mouth of Bull Arm at the bottom of Trinity Bay in southeastern Newfoundland along the isthmus of the Avalon Peninsula (Figure 1). The focus of the project is to examine human-environment relationships in the region, from its earliest colonization through the historic period. We are taking a historical ecological approach to study how past societies of Newfoundland impacted, and were impacted by, their ecosystem, and how they adapted to changing environmental and climatic conditions at various geographic and chronological scales. The Stock Cove site contains evidence of almost every culture that lived on the island, with the possible exception of the Norse (Robbins 1981, 1985; McLean 2006). Those cultures had to adapt to fluctuating environmental conditions related to climatic events such as the Mid-Holocene Warming (ca. 7000-5000 BP), a late Holocene cooling period (ca. 3500-3000 B), the Medieval Warming Period (ca. 1200-700 BP), and the Little Ice Age (ca. 400-200 BP). All of these periods would have had varying, but significant, impacts on the nature of the landscape and resource structure of the island, and the North Atlantic region more broadly, and must have affected the economic strategies of the peoples who endured them. Moreover, past Newfoundland peoples may have directly or indirectly made significant impacts on their ecosystem, through their subsistence practices.

The adaptive successes, failures, colonization, and extinctions of the various peoples that occupied Newfoundland can provide us with a great deal of information with which to confront new challenges associated with modern climate change and to devise sustainable economic strategies. With that in mind, the record of Stock Cove, along with work being conducted in other parts of the island (see Bell and Renouf 2008; Bell et al. 2005; Deal 2005; Hodgetts 2005; Rosenberg et al. 2005; Wells 2005) may begin to fill in some of the gaps in our knowledge of human-environment interaction and economic and cultural adaptations of Newfoundland.

Site Background

The Stock Cove site spans an area of over 4000 m^2, from the hillside down to its eroding banks where

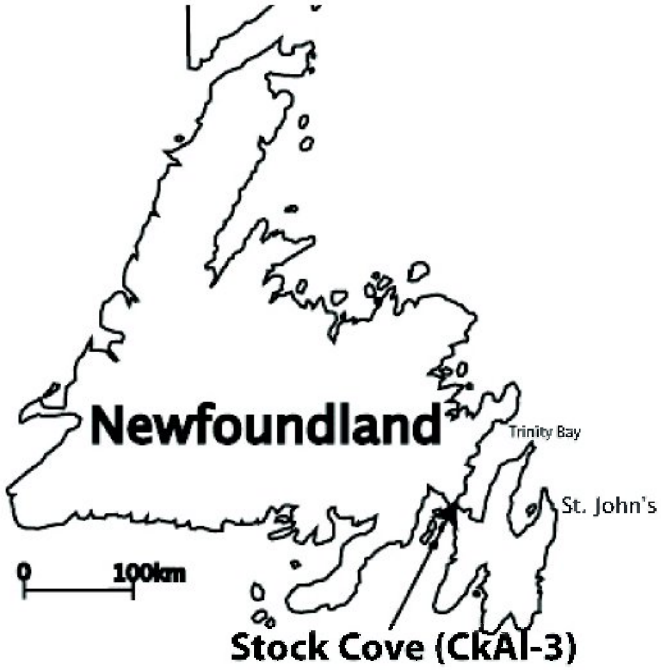

Figure 1: Location of Stock Cove (Wolff et. al.)

it is exposed to the open ocean (Figure 2). The site is located on a small gently sloping landform that terminates at a short beach cut where it is exposed to the open ocean of Trinity Bay. It is surrounded on the other three sides by sharply rising hillsides and large bedrock outcrops. Nearby is a freshwater creek that flowed steadily through the duration of our stay and may have been an attractive resource to the site's occupants. The site provides easy access to both marine resources of Trinity Bay and terrestrial resources of the island.

The Stock Cove site was first systematically investigated in the early 1980's by Douglas Robbins (1981, 1985) as part of his Master's research at Memorial University. Robbins found a great deal of cultural material at the site ranging from the Archaic to the historic, but focused his research on Dorset Paleoeskimo structures that were substantially constructed and contained thousands of artifacts. Robbins did not fully excavate the structures, but the size and nature of the deposits suggest they were part of a larger occupation. Robbins also demonstrated that Stock Cove was repeatedly occupied by several other cultures. He suggested the site would be an important location to study the prehistoric subsistence-settlement strategies of the region, and that its location at a place where the Dorset and other groups could take advantage of both terrestrial and marine resources may demonstrate the adaptability and diversity of prehistoric populations in the region (Robbins 1985).

In 2006, Laurie McLean revisited the site to assess environmental impact due to beach erosion and other factors, as well as the future research potential of the site. He found that a considerable amount of the site had eroded into the sea. Our investigations at the site in 2008 agreed with his assessment. There are hundreds of artifacts eroding onto the active beach along the entirety of the site (see Figure 2). Many artifacts were collected along the beach by McLean in 2006, and by us in 2008, and range from Maritime Archaic to historic European materials.

2008 Field Research

In the summer of 2008 the authors revisited Stock Cove to assess its potential to investigate human-environment relationships of prehistoric and historic groups that occupied Newfoundland. Through the help of resident, Robert Snook, of the nearby community of Sunnyside, we enlisted the expert services of another Sunnyside resident, Warrick Seaward, to boat our crew out to Stock Cove from the Sunnyside dock. We set up camp just upslope from the site near the freshwater creek that runs through the area. We camped at the site for three nights and excavated until rain set in on the last day.

Flora and Fauna

The site is wooded, with the middle and main part of the site slightly more open, with fewer trees and more grassland, peat, and small shrubs (see Figure 2). The relatively less dense forest in the middle of the site may be due to environmental factors associated with degradation of the hillside, which is discussed in greater detail below.

While at the site, we observed many animal species that may potential impact the site. First, while we did not see any moose (*Alces alces*), we found a great deal of evidence that they inhabit the area, including deeply grooved trails and droppings. Moose, of course, were introduced in historic times, but their paths and rutting behavior can damage the structure of the site, and therefore are noted here for future research considerations.

Another introduced species that could impact the integrity of the site is the American mink (*Mustela*

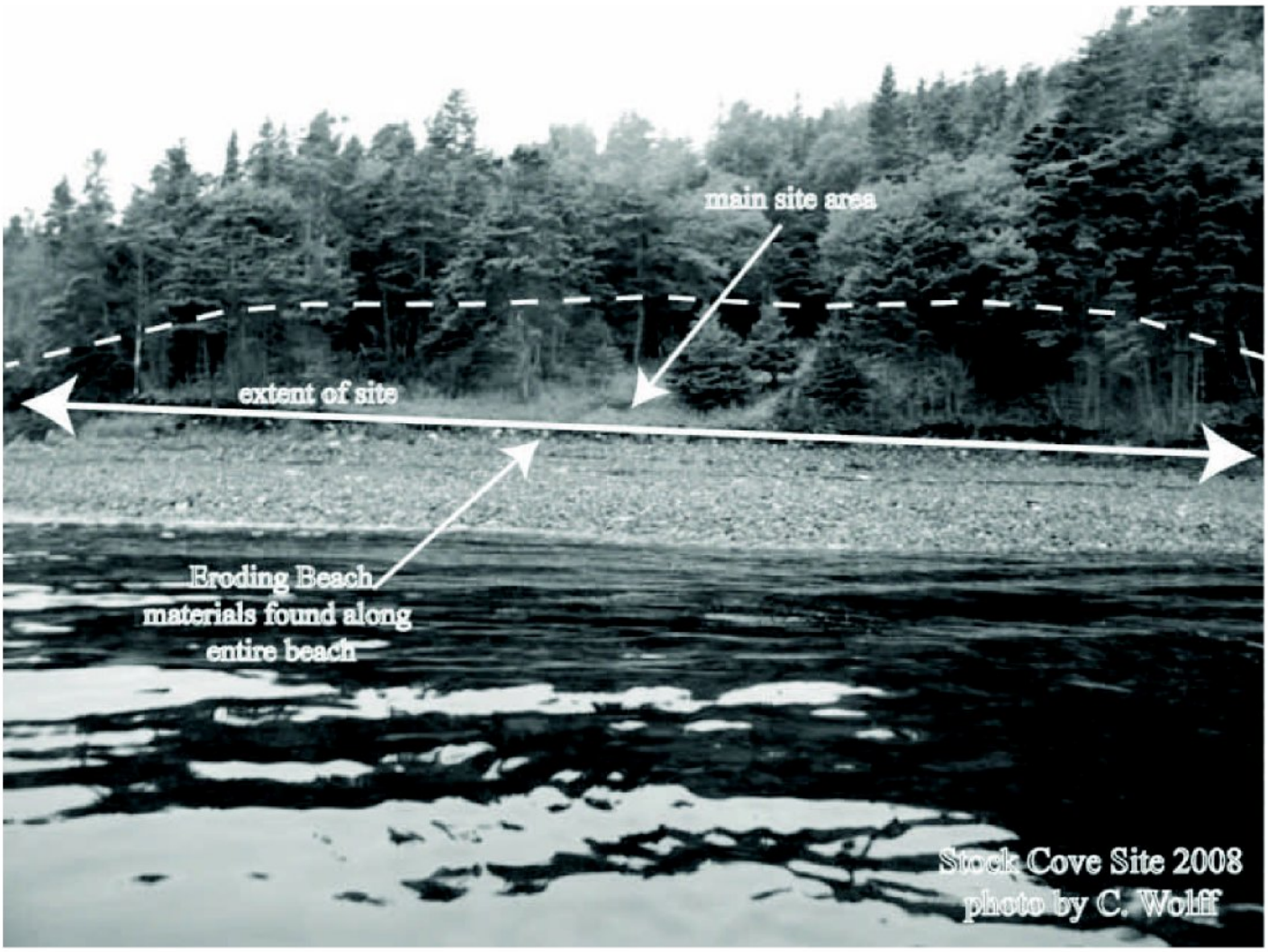

Figure 2: Photo of Stock Cove and Site Extent (Wolff et. al.)

vison). We observed (and smelled) several of them running around the site while we worked, and believe their burrows are currently in some large rocks along the beach cliff. Because mink are burrowing animals that live near the water, they are a potential source of bioturbation, which should be considered during excavation and interpretation of the site's structure and taphonomy, particularly since their subsistence focus on fish, shellfish, and small mammals could be similar to prehistoric human populations and if not accounted for could skew interpretation of human subsistence practices and changes in the ecosystem.

Other observed fauna were; several varieties of near shore fish, crustaceans, and invertebrates, as well as red squirrels, raptors, and many species of waterfowl. No sea mammals were observed during our short stay at the site, although seal bones were recovered at the site.

Cultural Material

A considerable amount of artifacts were recovered from the eroding beach. Although few diagnostic tools were found, it appears that most of the beach materials date to the Maritime Archaic and Paleoeskimo periods, which makes sense considering the sea level history of the area. When the Maritime Archaic and Paleoeskimos occupied the site in the Middle to Late Holocene, sea levels would have been lower and their occupation may have extended out further onto land that has since eroded away as sea levels rose. In fact, we think that the greater part of the Maritime Archaic site at Stock Cove has been lost to wave erosion, and Paleoeskimo and later cultural deposits have been significantly eroded and are in jeopardy of being lost entirely as sea levels continue to rise.

In addition to surface collection along the beach, we opened test excavations across the site to get a better idea of the depositional history of the area. We placed four parallel rows of test pits (21 total), ranging from 30 cm^2 to 50 cm^2, with roughly five meters between units and between each parallel row of units, as the topography would permit. The units were excavated to depths of between 20 and 60 cm until bedrock or consistently sterile soil was found. The exact nature of the stratigraphy of the site is still being analyzed and will be presented in future publications and presentations. However, initial findings were interesting and demonstrated clear differences in tool stone and cultural materials through time and deserve some mention here.

First, the stratigraphy of the site appears to be largely intact, with a few exceptions resulting from post-depositional factors discussed below. The basal deposits for most of the site appear to be early Paleoeskimo, with some Maritime Archaic material showing up near the beach. As discussed above, this is probably because the Maritime Archaic people were living close to the shore that has since been mostly eroded away and only the part of their occupation that was furthest inland remains at the site. However, many of the artifacts found in the basal deposits were not diagnostic and further excavation at the site is needed to assess the earliest occupation levels.

In the middle stratigraphic levels for most of the site, there is a very clear, and very large Middle Dorset occupation that rivals some of the biggest Dorset sites on the island. This was expected based on earlier work by Robbins (1981, 1985). We found significant numbers of tip-fluted endblades, and several perforated harpoon tips made from slate, as well as cores, scrapers, microblades, and perhaps most significant for our research, seal bone. This suggests that marine mammals were still a part of Dorset subsistence even in a location far from known historic paths of migratory seal species. While the single phalanx and temporal bone we found are not attributable to species, further excavation should reveal more bone that may be identifiable and we can learn if they belong to migratory or non-migratory species–information which carries connotations concerning subsistence-settlement strategies of Dorset people in southeastern Newfoundland–and about the prehistoric resource structure and environment of that region. This elevates the importance of this site, because it is rare to find faunal preservation in the acidic soils of Northeastern North America, and, therefore, it has great explanatory potential regarding human-environment relationships in that broad region.

Directly above the Paleoeskimo material we found a significant amount of Recent Indian artifacts, and it appears that there are lenses of faunal material (bone and shell) mixed in with the related stratigraphy. Most of the diagnostic artifacts were small projectile points resembling notched Little Passage points, but there may be finer-grained changes in cultural patterns during the Recent Indian period that will be revealed with wider excavation. Initial examination suggests that during the Recent Indian occupation of Stock Cove, there were shifts in stone material used for their tools, which may help in the assessment of settlement patterns and cultural developments of the region. There may also be some chronological overlap between late Paleoeskimo groups and early Recent Indians at Stock Cove, and investigating that possibility and possible contact between the groups will be part of our future research.

Finally, on the surface near the margins of the site we observed cobble hearths. We spent most of our time and effort with the test excavations, and did not examine these very closely, but they appear to have been historic period Beothuk hearths, and Jim Tuck (personal communication 2008) informed us that Beothuk hearths were found on the surface in earlier cursory surveys of the site. It will be interesting to investigate these further in the context of cultural change and development during the Recent Indian period, as well as contact period relationships between the Beothuk and Europeans.

Taphonomy

The Stock Cove site has an interesting taphonomic history. The erosion of the beach appears to be one of the main factors affecting the site, and some salvage work, and perhaps a breakwater should be built (see McLean 2006) to help mitigate the loss of material from this important site. As sea levels rise, the damage caused by wave action will only increase, and it is obvious that a significant amount of material is being eroded from the site daily.

The site also appears to have been impacted by

degradation of the hillside. In the middle of the site it appears that the layers post-dating the Middle Dorset occupation have been washed into the bay, probably from hillside slippage resulting from heavy precipitation events. The stratigraphy of that section of the site shows a layer of pebbles and cobbles, and some larger boulders, that appear to have washed down from the steep hillside at the back of the site and essentially armored the cultural deposits below. During that same event any Recent Indian and historic materials (and maybe later Paleoeskimo materials) would have been washed into the ocean. The soil that has since accumulated is mostly sterile, and the modern hillside shows evidence for degradation with large boulders and felled trees making their way down slope toward the site. On the margins of the site (roughly ¼ of the site on both sides, so approximately ½ of the site), trees appear to be anchored more firmly and the soil and stratigraphy is intact, and that is where you find the bulk of Recent Indian and historic artifacts. Further excavation will provide better information about post-depositional processes, as well as environmental information concerning climate and precipitation regimes.

As mentioned above, some of the region's fauna may have affected the integrity of the site (e.g. burrowing animals like mink and red squirrels, moose trails); however, we think their impact is minimal, and with careful excavation we should be able to recognize any resulting bioturbation.

Conclusions

It has been demonstrated that the Stock Cove site has great potential to address some important questions in the cultural and environmental history of Newfoundland. While a great deal of future study is needed to fulfill that potential, initial research is promising. There are two main questions that Stock Cove may directly address. First, how have people affected, and how were they affected by, their relationship to the dynamic resource structure and environment of Newfoundland? The examination of the impact that the various subsistence strategies pursued by prehistoric and historic people had on the ecology of the region has possible connotations for modern economic and subsistence practices and policies. Moreover, past adaptations to climate change and attendant sea level fluctuation, even at a different scale, has modern relevance, as these are increasingly important concerns of current populations of Newfoundland and around the world. Information recovered from Stock Cove can provide a deeper chronological context for the development and assessment of modern strategies to deal with this issue.

The second question is; what level of cultural interaction existed between historic groups, and how did it affect their subsistence-settlement strategies? While we know a lot about the individual cultures of Newfoundland, the examination of the level and type of interaction they may have conducted is still largely unknown. Sites like Stock Cove that have a well-defined stratigraphy, with evidence of most of the main actors in the cultural history of Newfoundland, could provide important information about the nature of chronological overlap and interaction between those groups.

Future Plans

Currently, the main author is writing grant proposals for a multi-year, interdisciplinary study to address the main questions outlined above. He plans to collaborate with regional researchers and specialists, as well as with people in nearby communities interested in the history of their region. If funding permits, he will be opening up broader excavation and systematically surveying the surrounding region, to start to piece together its historical ecology. A great deal of good research in the area has previously been conducted (e.g. Gilbert 1990, 2006, 2008; LeBlanc 1998, 1999, 2000, 2003; McLean 2006; Robbins 1981, 1985) on which to append and extend this research, and we are excited about its potential to address some important questions and issues.

Acknowledgements

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PUBLICATIONS, CONFERENCES, ANNOUNCEMENTS ETC.

BIRD COVE AND BEYOND: CELEBRATING A DECADE OF REGIONAL ARCHAEOLOGY ON A GLOBAL SCALE

Latonia Hartery
University of Calgary

In 2008, the Bird Cove-Pond Cove Archaeology project did not engage in a regular field season but instead focused its energies on preparing a conference that celebrated its 10th anniversary, which was held September 3-6, 2008. The conference promoted a decade of archaeological research and achievement in the Bird Cove – Pond Cove region. It also showcased this project's contribution to Newfoundland and Labrador history, culture and public education, as well as highlighted the benefits created for the local communities in terms of employment opportunities, as well as increased tourism. The conference was an international forum that put Bird Cove-Pond Cove and Newfoundland research into a regional, national, and international context not only for the scientific communities targeted, but also for the public which has supported and actively participated in the research. The conference, entitled *Bird Cove and Beyond: Celebrating a Decade of Regional Archaeology on a Global Scale,* was the first event of this magnitude devoted to archaeology and held in our region. In addition to being a scholarly endeavour, it provided the opportunity for local organizations involved in the heritage, tourism and economic development industries to exchange information on how to promote the various research, tourism and economic development projects within the local and international communities.

The conference lasted four nights (3-6th) and three days (4-6th) during which 50 speakers and performers discussed the culture and history of Newfoundland, Labrador, Canada, the United States, and

the Basque Country. In brief, the sessions carried out follows:
were as

SEPT/2008	TITLE	Session Chair
3	Opening Reception and Traditional Newfoundland Elder Knowledge	Latonia Hartery: Calgary (U of C) Elder Elva Spence
4 (Day)	A Decade of Research in Bird Cove-Pond Cove	Latonia Hartery: Calgary (U of C) Steven Cox: Augusta (Maine State Museum)
Evening	The Award Winning Film: ***Passage***	Filmmaker: John Walker, Halifax, NS
5 (Day)	Current Developments in Archaeological Research in Newfoundland, Labrador , & Quebec	Stephen Hull: St. John's (Provincial Archaeology Office) Mark Penney: Albany, NY (Louis Berger Ltd)
Evening	Stories in the Kitchen, Stories from the Sea: Authors Session	Host: Anne Major Kevin Major: St. John's (No Man's Land) Bernice Morgan: St. John's (Random Passage) Michael Crummey: St. John's, (River Thieves)
6 (Day)	Circumpolar Perspectives, Northern Archaeology and the Changing Arctic	Brian Kooyman: Calgary (U of C)
Evening	History in Harmony: A Musical Journey Through Newfoundland and Labrador's Past.	Host: Daniel Payne, Corner Brook (Musician)

Conference organization was a joint partnership between Amina Anthropological Resources Association and the Big Droke Foundation. Together our goals for the conference, and the future, included efforts to disseminate information and findings of archaeological and other scientific and cultural heritage research in the region to scholars and to the general public; to provide short-term and long term economic benefits to the local communities; to promote continuation of the community-based archaeological program, with its associated economic and educational benefits; to raise provincial, national and international awareness of the Bird Cove - Pond Cove Archaeology Project; and to tie in the Bird Cove - Pond Cove area with regional, provincial and national tourism, as well as research.

The intermarriage of research, culture, history, music and literature was an excellent formula for a successful conference that was attended by academics and the local community. At present, both the Big Droke Foundation and the Amina Anthropological Resources Association are discussing the regularity of this event. The two organizations have also developed a new public educational program for summer 2009 that will be announced in the upcoming months. Special thanks to all who supported our conference, and to those who attended and made it a unique event to be remembered. An extra special thanks to the Provincial Archaeology Office for the support and guidance in the early stages of conference planning.

Figure 1: Kristy Sheppard of the Nunatsiavut Government with Author, Michael Crummey (Hartery)

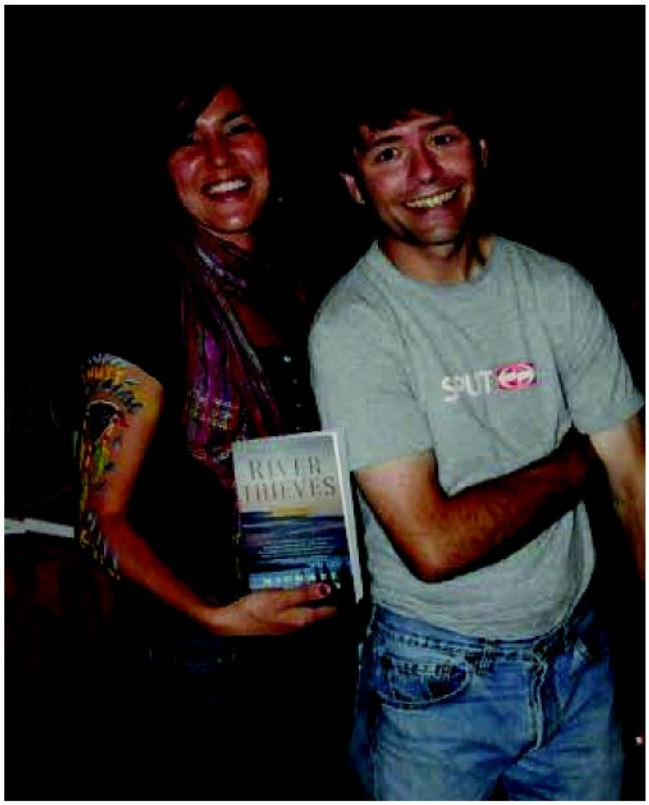

Figure 1: Performers at the event History and Harmony, A Musical Journey Through NL's Past (Hartery)

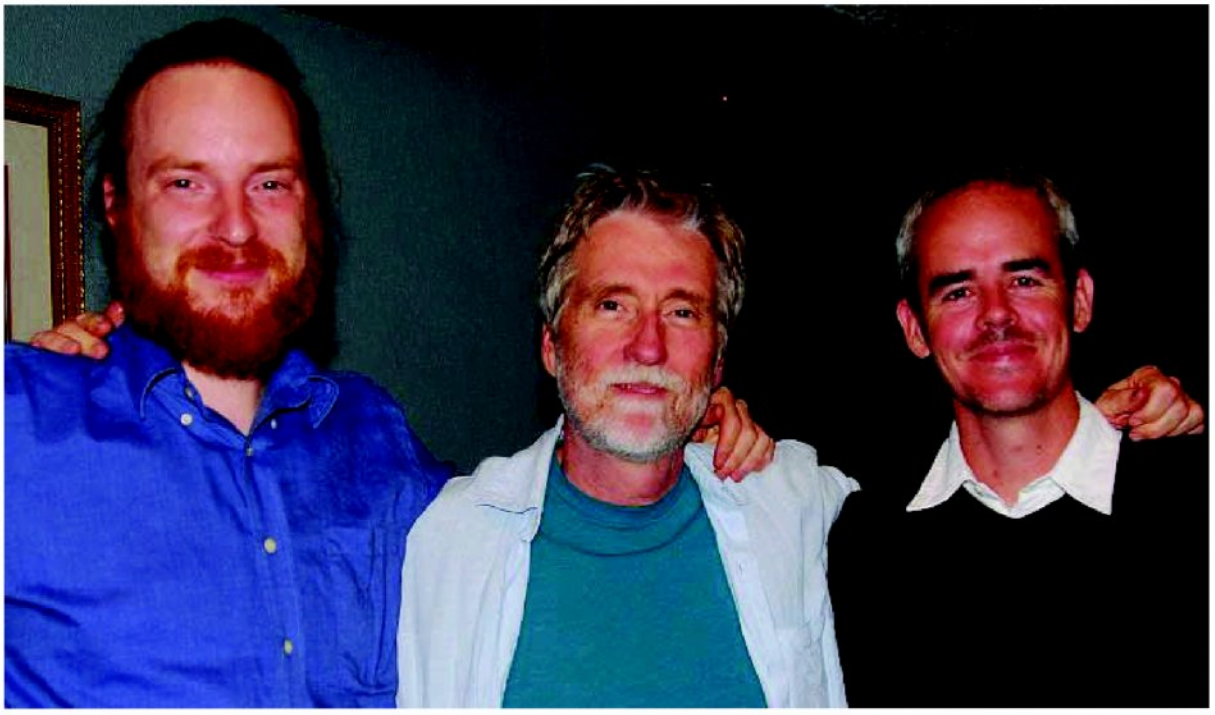

Figure 2: Musician Daniel Payne, Filmmaker John Walker, Archaeologist Don Holly (Hartery)

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INNU PLACE NAMES WEBSITE LAUNCHED.

Pepamuteiati Nitassinat: As We Walk Across Our Land.
www.innuplaces.ca

A comprehensive website dedicated to Labrador Innu place names was launched by the Innu Nation on November 21, 2008. The website should serve as an important resource for archaeologists working in Labrador because it promotes an understanding of Innu land use strategies as well as the phenomenological aspects of land use. Furthermore, it provides a useful source of names upon which to generate new archaeological site names.

What's on the website

- The site features a searchable database of close to 600 Innu place names.
- Each place name record in the database contains information about the meaning of the name, how to pronounce it, and its location. Site users can click on an audio icon to hear the pronunciation of each place name.
- The site has an interactive map showing the locations of the place names.
- Background information on how Innu place names are constructed is presented.
- Video clips and photographs show people what the named places look like or document land use activities there.
- Audio narratives from Innu Elders and youth tell stories about events and people associated with certain place names.
- Future phases of the website will add more place names, video clips, photos, and audio stories.

Dr. Ingeborg Marshall's booklet 87 page booklet *The Beothuk* (originally published by the Historical Society in 2001) has been updated and is being reprinted by Breakwater.

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If you have any comments or suggestions for the next Archaeology Review please contact Stephen Hull.

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