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On July 11, 2009 six members of the Port au Choix Archaeology Project conducted an archaeological investigation of St. Paul’s Bay-01 (DlBk-05), a Recent Indian site located within the town of St. Paul’s on the Northern Peninsula of Newfoundland (Fig. 1). The objectives of this investigation were to: 1) assess and delineate the extent of undisturbed archaeological deposits at this site; 2) confirm the cultural affiliation and; 3) collect charcoal samples to help date the site.

St. Paul’s Bay-01 was first reported by Gerald Penney (1988, 1989) and was identified by stone tools, debitage, and faunal remains eroding from wind-blown sand dunes. According to Penney (1988:17) the site extended inland for approximately 100 meters as artefacts and debitage were observed in a then active vegetable garden. Based on diagnostic artefacts and lithic materials, Penney (1988, 1989:12) associated the site with a Recent Indian occupation.

Penney (1989) also identified another Recent Indian site – St. Paul’s Bay-02 (DlBk-06) – on the opposite shore of the narrows between St. Paul’s Bay and St. Paul’s Inlet (Fig. 1). This particular site was later identified as a multi-component lithic quarry workshop and habitation site which was primarily occupied by Groswater Palaeoeskimo and Recent Indian (Cow Head and Beaches complex) groups (Lavers and Renouf 2009). There was no diagnostic Little Passage material recovered from this particular site.

During the 2009 investigations at St. Paul’s Bay-01 a total of fifty-two 50cm² test pits were dug across the entire area identified by Penney (1988) as being the location of this site. All provenience information was recorded with a Total Station. Of the 52 test pits 16 were positive for prehistoric cultural material; however, all test pits indicated that the site had been heavily disturbed by various gardening and sod collecting activities. The recovery of a single corner-notched projectile point and the general raw material indicated that the site had been occupied by the Recent Indian Little Passage complex. Given that the site was disturbed, no charcoal samples were collected.

While the site may not be suitable for an in-depth research project it provides a basis for understanding the general settlement and mobility patterning for the Little Passage complex on the Northern Peninsula. The area within and around the community of St. Paul’s is remarkably rich in marine and terrestrial subsistence and lithic resources (see Lavers and Renouf 2009) and, for these reasons, should be the focus of future archaeological surveys.

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The 2009 summer season marks the third and final field season for the Hopedale Archaeology Project. As a part of my dissertation research on the influence of Moravian missionaries on changing Inuit culture during the 18th and 19th centuries, the Hopedale Archaeology Project was a community archaeology program that collaborated with the Hopedale community in northern Labrador. This past season we returned to Big Island (Anniowaktook Island) located just east of town to excavate the second of four Inuit sod houses. With the help of a team of Hopedale Inuit students, I continued the excavation of an 18th century Inuit sod house settlement originally identified in 1934 by American archaeologist Junius Bird (1945). Originally named House 4 by Bird, the second house was located just north of House 1 which was partially excavated during the 2008 season (Arendt 2009).

Excavations in House 4 hoped to provide additional information as to the occupation period of the site and discard patterns of its occupants. The 2008 season identified that a portion of House 1 had been disturbed or partially excavated most probably by Junius Bird, thereby compromising the archaeological integrity of the entire house (Arendt 2009). Test pits excavated directly outside both houses in 2007 suggested that House 1 and House 4 were contemporaneous, and additional excavation in House 4 would offer comparable data (Arendt 2008). However, this season’s excavations found that House 4, in fact, was occupied earlier and occupants may have focused more on hunting than trading with Europeans visiting the coast. The following report will discuss these preliminary findings and offer initial interpretations of the excavations of House 4.

The dimensions of House 4 was approximately 9x4 meters with a 6 meter entrance tunnel that ran east. A series of nine 1x1 meter units were placed north-south in the interior of the house and an additional five 1x1 meter units were placed east-west leading into the entryway (Figure 1). The northern half of the units exhibited a thin layer of sod before coming down onto the occupation level and eventually a flat stone floor. Deposits along the northern half were no more than 20 cm deep. A shallow layer of soil suggested that there was no sod roof (Mary-Rousselière 1979; Park 1988); instead, the sod houses may have been covered by skin roofs and were lived in throughout the year. Unfortunately, we were not able to locate a posthole to substantiate that claim.

The southern half of the unit exhibited something very different. The four southern-most units came down onto a later midden approximately 40 cm thick before reaching the occupation level and stone floor (Figure 2). The later midden was full with sea mammal bones, shell and nails, and a few artifacts, such as an iron ulu knife blade. The practice of using earlier house pits as midden dumps was also evident at another Labrador Inuit site on Adlavik Island located near Makkovik (Stephen Loring, personal communication 2009). Comparison of these two sites may offer insights into the occupation period and seasonal resource availability in Labrador during the 18th century, which I plan to conduct as part of my dissertation research. The post-occupational deposit does reveal that the four houses on Big Island were not occupied during the same period, yet closer analysis of the faunal material of the midden may offer insights into when some of the houses were occupied and what the occupants discarded.

Excavations revealed additional evidence suggesting House 4 was one of the earliest houses occupied at the site. A high quantity of whale bone was found, a practice some archaeologists argue was replaced by seal hunt-
ing during the historic period (Jordan 1977; Taylor 1974, 1977, 1988). A number of whale bones were found throughout the house, including a section of cut whale bone placed as part of the floor (Figure 3), a whale bone scapula and vertebrae found near the center of the house, and a scapula found in the entrance tunnel. The amount of whale bone found in this assemblage did not seem particularly unusual given Hopedale was an important place for whaling. Inuit originally called this area Avêtok meaning “the place of bowhead whales” (Brice-Bennett 2003:15). The prominence of whale bone and baleen in Junius Bird’s collection further suggested Inuit activities in the area included if not depended on whaling for resources.

However, House 4 had significantly more modified and unmodified whale bone than House 1. This level of dissimilarity in household assemblages proposed that the occupation periods differed as well as alternative subsistence strategies, perhaps also implying changes to social organization.

Preliminary analysis of the remainder of the faunal material revealed a diverse group of species present, including seal, caribou, dog, bird and fish. Based on the 2008 preliminary report of the faunal material from House 1 which was dominated by seal bone (Arendt 2009), the species collection is far more diverse in House 4. Although the majority of the faunal material was from the later midden deposited after House 4 was abandoned, the greater variation may suggest different subsistence practices or preferences as a result of the season. For instance, the presence of mussel shells may indicate a summer or late fall occupancy. Nevertheless, the collection requires further detailed analysis in order to enhance our understanding of 18th century Inuit subsistence economy, and how it did or did not change over time.

While iron and lead objects continued to be prolific throughout the house, very few objects suggesting trade with Europeans were...
Figure 2 Profile of western wall of House 4 (Arendt)

Figure 3 Floor of House 4. The red arrow is pointing to a fragment of whale bone which was cut to fit into the corner of the floor (Arendt)
found such as beads, buckles or tobacco pipes. Only a single tobacco pipe bowl was found near the center of the house and might be attributed to the later midden found inside the house. Nevertheless, House 4 exhibited excellent examples of hunting equipment at the occupation level, including a bone harpoon shaft, a slate harpoon head, iron fishing hooks, and an iron knife with a bone handle (Figures 4 & 5). Detailed analysis of the artifacts and their distribution throughout the house is currently being conducted and hopes to offer a better understanding of activity areas within House 4, and its occupation period.

The crew was able to identify architectural features and activity areas within the house including a sleeping platform located along the southern wall, and a cold trap in the entryway. One activity area identified was a possible hearth area situated in the center of...
the house near the whale bone previously mentioned. A large quantity of charcoal was located in the vicinity as well as a large piece of deteriorating green soap stone (Figure 6). Initially, the function of this large fragment of poor quality soapstone was unclear to me. During an Archaeology Open House, a Hopedale community member informed me that hunters still put a large piece of soapstone in the fire, cooking their meat on the stone instead of directly in the fire. Given its location near charcoal, surrounded by slightly burned stones, the poor quality green soapstone found in House 4 likely served this cooking purpose.

The final season of the Hopedale Archaeology Project proved to be successful by many standards. In addition to achieving my goals towards acquiring additional archaeological data on 18th century Inuit culture for my dissertation research, the project in conjunction with the Nunatsiavut summer employment program provided summer jobs for five Hopedale Inuit students. With the help of the students, we were also able to invite community members to visit the site and offer tours of the sod houses. We also held an open house in the Moravian mission building exhibiting artifacts and photographs from the summer. In addition, I provided the school with two posters and a teacher’s handbook that showcased our project and Hopedale’s rich archaeological history. As part of my predoctoral fellowship at the Smithsonian Institution in Washington, DC, I worked with summer intern Sarah Dickey to develop and publish two posters on the archaeology of Hopedale and Annioiwak-took and develop a teacher’s handbook that provided in-class activities that focused on the history and archaeology of Hopedale and northern Labrador. The 3’x2’ posters will also serve as teaching tools for Hopedale teachers during the school’s Heritage Festival this spring. Three hard copies and CDs of a teacher’s handbook with over 10 in-class activi-

Figure 6 Possible hearth feature. The red arrow is pointing to the large fragment of soapstone possibly used for cooking. Whale bone fragments lie along the eastern wall next to the north arrow (Arensit)
ties specific to the Hopedale region were also donated to the school. Working with the Hopedale community has been a wonderful experience I hope to continue in the future. I am grateful for the community’s willingness to work with me during these past three years.

**Acknowledgements**

This project would not have been possible without the financial support of the Predoctoral Fellowship from the Canadian Embassy, the Predoctoral Fellowship from the Smithsonian Institution, the Provincial Archaeology Office of Newfoundland and Labrador, and the Nunatsiavut Government’s Youth Employment Summer Strategy fund. Once again, I find myself indebted to many people from Hopedale. In particular, I would like to thank Judy Dicker and the entire Town Council and the Hopedale Nunatsiavut Office for their administrative assistance and general interest in the project; Rex Flowers for providing our daily shuttle to the island; and Teena and Gil Flowers for their hospitality and friendship. I must also thank Heather Angnatok at Nunatsiavut Government, and Jaime Brake, Delphina Mercer and Stephen Hull from the Provincial Archaeology Office for all their assistance and support. The majority of this work would not have been completed without the dedication and resilience of my field crew: Ashley Abel, Christopher Abel, Mary Jararuse, James Karpik, Nathan Karpik, Trevor Broomfield, and Sam Speedie.

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Introduction

This article provides a summary of the archaeological fieldwork that was conducted by the Nunatsiavut Government Archaeology Office (NGAO) during the 2009 summer field season. An overview of each field project is presented in a separate section, each with a “background” and a “field results” part. Most of the work that is discussed was done on Labrador Inuit Lands (LIL), although one project described here was inside the Torngat Mountains National Park (TMNP), which is part of the Labrador Inuit Settlement Area (LISA). The NGAO also participated in fieldwork in Ramah Bay which is described in a separate article in this review (Curtis et al. 2010). Figure 1 is a small scale map showing the places mentioned in the text and large scale maps of each study area are included in each section.

Although this article deals with fieldwork, the “desktop assessments” of the past year should be mentioned, at least in passing, since the number of referrals which have been reviewed by the NGAO dramatically increased in 2009. This year, 128 applications for different types of land use were processed by the office compared to 54 in 2008. These numbers include applications for development on Labrador Inuit Lands, for mineral exploration, and for archaeology permits. They do not include the applications for research other than archaeology, although proposals for other types of research are referred to the office by the NG Research Committee.

Uviluktok (Permit NG09.04)
Background:

On several occasions since March of 2008, people in Nunatsiavut have contacted the Torngasok Cultural Centre after encountering archaeological sites while out on the land.
In late September of 2008, Ethel Hunter, the Hopedale community liaison officer, sent an email about an archaeological site near that community which had not previously been recorded by archaeologists. The site she had visited is known as Uviluktok, which means “lots of Mussels” (Brice-Bennet 1977:198), and is about 30 km east of Hopedale. On some maps it is called Mussel Islands, or Double Island, and for many years it was a place where people gathered to fish during the warm months of year. Figure 2 shows the location of Uviluktok.

In 1903 the Inuit built a little church on the island – the idea, and the work all their own. Walter Perrett described the laying of the foundation stone for the church that summer, as well as the completion of the building and the first service in late August of that year (Hutton 1936:144-153). There are numerous other historic references to Uviluktok and the following paragraphs provide a couple of examples.

In the summer of 1905, Edward Caldwell Moore, a Harvard professor and Presbyterian minister who was traveling along the coast with Wilfred Grenfell, wrote in a journal entry about a visit to that island with Grenfell and a missionary from Hopedale. He describes a two roomed house in which 18 people were living that year, and the little church which “Hettach showed us with great pride and joy…” (Walsh 2009:118). At that time there was an organ inside the church which had been brought out to the island on the mission ship the Harmony. The missionary played the organ the night they visited the island while the people gathered and sang. Moore writes:

The Hopedale Esquimaux have had their huts etc. for summer fishing here for many years and were unwilling to go on any longer without a church. They spend about four months out of every year here and take their wives and children and dogs all over in their open boats (Walsh 2009:118).

Grenfell, who had previously brought some wood for the church (1905:247), describes another trip to the island that same year with Governor Sir William MacGregor. The Governor, Captain Eli Dawe (representing the Newfoundland Government) as well as Zachariah, head of the congregation at Uviluktok, and Manasseh, an Inuit elder, all made speeches which Grenfell included in his log (1905:243-247).

An opportunity for me to visit the site came up in late June of 2009.

**Field Results:**

On the morning of June 30th, NG conservation officer Ian Winters and I left Hopedale in a small speedboat for Uviluktok. On the trip out Ian explained that one of his ancestors had been involved in building the little church on the island over 100 years ago. He also mentioned that the church bell had disappeared from the site some years before. The following day we were relieved to learn that a church bell, apparently the one from Uviluktok, is being kept in the Hopedale mission museum.

We arrived on the island at approximately 11:30 after a fairly rough ride. Onshore the remains of the church were observed (Figure 3) as well as hearth features, tent rings and a pile of stones that may have been associated with a flagpole that used to be there. Photos were taken and some GPS data was collected that morning, but strengthening winds made it necessary to leave after just a tiny portion of the island had been explored. We were only able to spend about a half an hour on the island, and after a quick lunch onboard the speedboat we made our way back to Hopedale getting soaked with salt water on the trip. Borden number GiBw-01 has been assigned to the site and it is now included in the NG and Provincial archaeology sites databases.

**Mary’s Island (Permit NG09.05)**

**Background:**

In a situation similar to the one described in the previous section, Mary Dennis-ton (NG Environment Division) contacted the Tornagishok Cultural Centre in 2008 about cul-
Figure 2 Map showing the location of Mussel Islands (Uviluktok). Grey areas are LIL, white areas are LISA (NAD 83, Zone 21) (Brake)

Figure 3 Looking northeast towards the collapsed church and a recent hearth at Uviluktok on June 30th, 2009 (Brake)
tural features she had observed on a small un-
named island approximately 50 km east of
Nain (Figure 4). This island was visited on July
7th, 2009 under permit number NG09.05.

Field Results:

Conservation officer Simon Kohlmeis-
ter and I left Nain in a speed boat at approxi-
mately 9:30 on a beautiful sunny morning and
reached Mary’s Island around an hour an a half
later. We landed in a small cove on the south
side where a narrow isthmus joins the two
parts of the island – the eastern side being the
biggest. It is on this isthmus that most cultural
materials were encountered.

The isthmus is divided in half by a rock
outcrop and there are beaches on both sides
where numerous archaeological features and
artifacts were observed on the surface (Figure
5). A large boulder pit feature (approximately
3 m x 4 m) was encountered immediately upon
landing. This feature appears to be old al-
though no diagnostic cultural material was ob-
served directly associated with this. Touching
the south side of this feature is a more recent
tent ring and just south of that there are nu-
umerous small stone circles which may be
hearths. To the east on top of an outcrop a
couple of meters above this beach are at least
two caches, and a chunk of culturally modified
soft beige stone was observed next to one of
these. A stone cairn is located on a ledge ap-
proximately 14 meters above the caches.

On the west side of the dividing out-
crop we observed a large oval shaped tent ring
made up of relatively small, tightly placed
rocks, all covered in thick black lichen with
associated stone features including small
caches, tent rings and placed boulders. Just
east of this feature we came across what ap-
ppears to be a broken chipped and ground stone
adze as well as a few flakes, all of the same soft
beige material mentioned above. The broken
tool and one flake were collected. Inside the
tent ring was another piece of a ground stone
tool, also made of the same material.

Just north of this were another two
tent rings, each appearing to be quite old as
well, and inside the one furthest north we ob-
served a rock with obvious scraping lines going
in more than one direction – which looks like
it would have been a stationary whetstone. It
is clear that it was in place for quite some time
since the rocks beneath it are all of a com-
pletely different color. To the east of this tent
ring was a disturbed grave and other small
caches. South of the main tent rings were
other placed stones (some possibly represent-
ing other dwelling features), as well as at least
one obvious tent ring. There are also several
rocks placed together that resemble a chair in
front of which we observed a possible soft
hammerstone. This site has been called
“Mary’s Island 1” and has been designated
HbCf-02.

It is very likely that this site relates to
Iglooliatik Island 1 (HbCh-01) which was origi-
nally located in 1980 by a Smithsonian crew
(Fitzhugh 1981). Iglooliatik Island 1 is an im-
portant Thule/Inuit winter village with 16
semi-subterranean sod houses (Kaplan 1983;
Woollett 2008). After the initial discovery of
the site Fitzhugh wrote that “It seems likely
that the unsurveyed eastern end of Iglooliatik
and outlying islands will have seasonal sites
relating to this large winter village (1981:39)”.
Mary’s Island 1 is probably one such site. It is
clear that there are others, even on the same
island since we did not observe all of the fea-
tures shown in Mary Denniston’s photos dur-
ing our visit.

After marking waypoints and photo-
graphing all of the above mentioned features
we went to the east side of the island where we
came across one tent ring between two rock
outcrops in the highest part of the island in a
sheltered spot (Figure 6). Borden number
HbCf-03 was assigned to this site. The higher
elevation (13 masl) and the fact that the stones
making up this tent ring are all partially under
the surface suggest that this feature is older
than those observed on the beaches below. A
possible quartz flake was observed near this
tent ring as well.
Figure 4 Map showing the location of the “Mary’s Island” study area (NAD 83, Zone 20) (Brake)

Figure 5 Looking west over HlCf-02. 1: Cache; 2: Boulder pit feature; 3: Tent ring – there are small circular hearth or tent features associated with this; 4: Two small tent rings; 5: Oval tent ring with groundstone tool – the arranged boulders and hammerstone are just south of this feature and the broken chipped and ground stone tool was found just east of it; 6: tent ring. (Brake)
Base Island (Permit NG09.06)

Background:
A trip to Base Island (Figure 7) was planned because of a land use referral for a cabin which was proposed for an area where there are known archaeological resources. One map included in the application placed the cabin on top of a large Maritime Archaic Indian site. A second map contradicted the first, but put the cabin in the same location as a known Paleoeskimo site. Although it was clear that cabin construction had already begun that spring it was decided that the island should be visited to relocate the sites in question and to see if they had been impacted by this development.

Field Results:
Base Island was visited on July 10th, 2009 by Simon Kohlmeister, Donna Dicker (archaeology summer student) and I. We arrived at approximately 9:15 after a short speedboat ride from Nain. The partially constructed cabin was observed as we approached the southeast side of the island and after a few minutes on the ground it became clear that it was more than 100 meters northeast of the actual location of HdCj-05, the large Maritime Archaic site mentioned above.

Using site coordinates from when the southeastern part of the island was originally surveyed by Smithsonian researchers in 1980 we quickly located flake scatters which cover large areas. A partially exposed cobble feature (5.1m n-s x 2.8 m e-2) was recorded at the south end of a 50 meter long flake scatter (Figure 8). A Ramah chert biface fragment was surface collected from a snowmobile trail in this area as well. Approximately two hours were spent recording at this large site.

Just before lunch we went with Simon to an area on the mainland west of Base Island where he needed to take measurements of an-
other cabin. After that was finished we headed back to the island to visit Base Island 3 (HdCj-04). This time we landed on the south eastern tip of the island and we encountered previously unrecorded sites as we made our way towards Base Island 3. Each of those sites is briefly described below.

The first site we encountered consists of an elongated tent ring (Figure 9) and four rock piles which are arranged in a square pattern. This is possibly an historic Inuit site, although the function of the four piles of rocks is not clear. The site has been named Base Island 6, and designated HdCj-08.

A short distance northwest of HdCj-08 we came across three recent Inuit tent rings and a cache (Figure 10). A rusty can was inside the northernmost tent ring and a broken glass bottle was observed in the southernmost tent ring. This site has been designated 14C/12 Ethno 1 and named Base Island 7.

Base Island 3 is an early Paleoeskimo site where artifacts relating to both Pre-Dorset and Groswater use of the area were collected by Smithsonian researchers in 1980 (Fitzhugh 1980). We located quartz and Ramah chert flakes as well as some grey chert along a terrace near the original coordinates and we noted the locations of several other artifact scatters nearby. It seems likely that some of the debitage in this area relates to Maritime Archaic use of the island. The proximity of HdCj-04 and HdCj-05, an early Paleoeskimo site and a late Maritime Archaic Indian site, is interesting with regards to issues of culture contact and social boundaries (Hood 2008).

Figure 7 Map of Base Island – area shown is all within LIL (NAD 83, Zone 20) (Brake)
Figure 8 Cobble feature and associated 50 m long flake scatter at HdGJ-05 (view NW). The cabin floor is visible in the top right portion of the photo. Skidoo tracks running through the site are also visible. (Brake)

Figure 9 Tent ring at HdGJ-08 (Brake)
Figure 11 Looking southwest across Base Island 3 (HdGj-04) (Brake)

Figure 10 Looking south east across 14C/12 Ethno 1 (Brake)
**Saglek Bay (Permit TMNPR-2009-3233)**

**Background:**

In late July of 2009, I traveled to St. John’s Harbour, Saglek Bay, the location of the Parks Canada / Nunatsiavut Government base camp, in order to take part in the Ramah Bay research project described elsewhere in this Review (Curtis et al. 2010). Jenneth Curtis had also invited me to participate in the Sallikuluk (Rose Island – Figures 12 and 15) Archaeology and Oral History Project which involves revisiting known sites to update the information we currently have on them, conducting surveys, and determining if archaeological resources on Sallikuluk are currently vulnerable to damage or deterioration (Curtis 2009).

**Field Results:**

On the morning of July 31st, 2009 it was too stormy to go out to Rose Island. However, just before lunch the fog lifted a little and the winds died down enough for a crew to head out with three bear monitors. The team included Donna Dicker, Jenneth Curtis, Pierre Desrosiers, and Adrian Burke, as well as the three bear monitors: Robert Harris, Kenny Dicker, Bennett Barbour and I. Bennett stayed in the boat and the rest of us landed initially at Site Q (IdCr-07). We spent some time visually inspecting the site and taking photos and waypoints. We noted the presence of some interesting types of lithic material on the surface including black chert or “silicified shale”, grey chert, banded grey chert, and Ramah chert. We also came across a few nodules of Saglek quartzite. The most interesting things observed at that site were a thin soapstone vessel fragment, and a broken tip-fluted Dorset end-blade (Figure 13). Several badly disturbed burial features were seen very near the shore at the site that day as well.

After leaving Site Q we walked south, first towards Site P (IdCr-07) – which we had no trouble finding. At this location, flakes and pieces of lithic raw material were seen scattered on the surface of the ground. Again, photos and GPS data were taken.

After a short visit at that site we attempted to find the curious rectangular structure originally discovered by Tuck (1975) and designated Rose Island Site X (IdCr-08). No features or cultural material was observed at, or near the original coordinates, and although considerable time was spent walking out from those coordinates in all directions, our attempts at relocating that site were unsuccessful (Figure 14). We did, however, locate and record the locations of several undisturbed burials in this area. We left the island in thickening fog at around 4:30 that afternoon.
Figure 13 Tip fluted endblade observed at Site Q on Sallikulik on July 31st, 2009 (Brake)

Figure 14 Wandering in the mists on Rose Island in search of “Site X” (Brake)
**Torr Bay, Saglek Bay (Permit NG09.08)**

**Background:**

Participating in the two Torngat Park archaeology projects also provided an opportunity for me to assess two biology study areas in the vicinity of the Saglek Bay base camp. This biology fieldwork was part of a multi-year project that had started in 2008. During the first year of the project, work was proposed that involved significant ground disturbance in areas with potential for archaeological resources both inside the park, as well as near the base camp, which is located on LIL. The study area near the camp was assessed prior to the start of that project and it was recommended that the areas inside the Park be assessed as well (Brake 2009). The 2009 biology fieldwork would involve some additional (although less extensive) ground disturbance in other areas near the base camp (Figure 16) which were to be chosen after the researchers had arrived in Saglek Bay.

**Field Results:**

On the evening of July 31st, I spoke with the above mentioned biologists about soil pits they planned to dig this year between the base camp and Torr Bay. They provided directions to their study areas and described their work which would involve digging several small pits at two locations approximately 430 meters apart and just east of Torr Bay Pond. The following day Adrian, Pierre, Donna and I (along with two biologists and a bear monitor) located and assessed the berry plots. Based on that assessment there were no further concerns with the work that had been proposed for those areas. After taking a few photos and recording GPS waypoints at the berry plots, we
walked to the southeastern shore of Torr Bay to locate Torr Bay 1 (IcCq-05), which we found with no difficulty. This interesting site has evidence for Dorset and Inuit occupations and has many features including a sod house, an area of sod removal, tent rings and caches (Thomson 1986). A cave occupation is also referred to in records for the site (Thomson 1988). During our visit we observed the sod house (Figure 17), two tent rings, a feature which is probably the area of sod removal that Thomson (1986) described, as well as several small caves with associated cultural material. The site appears to be larger than previously reported and it appears to be in good condition.

After spending some time taking pictures and marking GPS waypoints at IcCq-05 we started heading back towards the base camp following a stream for part of the way. During this walk we came across a very recent looking rock pile (inuksuk) which was recorded along the way. Pierre noted that moss was growing only on the bottom of the rocks rather than the top which indicates that it must not be very old. A waypoint and a photo were taken here which is probably the area of sod removal that as well and the site has been designated 14L/07,08 Ethno 1 (Figure 18).
Little Bay (Permit NG09.09)

Background:

In July of 2009 a land use application for a large (70’ x 30’) building with a septic tank and system in a small cove in Little Bay, Labrador, was referred to the NGAO. There are references to tent rings in the bottom of that bay (Brice-Bennett 1997:104, 198), however, at that time, none of Little Bay had been surveyed by archaeologists. For this reason, an assessment would result from this land use, an assessment
was called for. That assessment was carried out on August 4th under permit number NG09.09. Figure 19 is a map showing the location of the study area.

**Field Results:**

I left Nain on the 4th of August at approximately 2:20 pm, and less than 2 hours later I was on a speedboat with Hopedale conservation officer Ian Winters heading for Little Bay. It was about a half an hour ride on flat calm water towards dark, unfriendly looking clouds and plainly visible rain showers in the distance.

The location chosen for the building discussed above is a very pretty scene – a small waterfall on the right side as you approach and a forest behind the active beach between the falls and the site. The proposed construction site is very low and there are higher rocky areas bordering it on the north and south sides.

Upon landing we immediately noticed a recent hearth feature – we also immediately noticed the thickest swarms of flies that either of us had seen that summer. After recording the hearth we walked along the beach and quickly noted a tent ring (Figure 20), the back of which was largely obscured by trees and other vegetation. Some of the rocks have been recently moved as well. A waypoint and photos were taken of this feature. The tent ring measures approximately 5.5 m e-w (parallel to the water) and 5 m n-s. Following that, the area between the waterfall to the north and the rock outcrops south of the site was closely inspected. Some cultural debris including cut wood, and garbage associated with the recent hearth were observed along the shore. Other than that debris and the features, there were no obvious signs of previous use of this particular place.

After the walkover and surface inspection had been completed, eight test pits were dug in the area. Of those, seven were dug randomly throughout the proposed construction area, and one was dug inside the tent ring. None of the seven random test pits contained cultural material. The test pit dug within the tent ring contained small fragments of thin, clear glass.

Based on the fact that there are fairly large trees growing out of the tent ring, it seems likely that it is more than 50 years old. Fragments of glass found in a test pit in the tent ring as well as its low elevation attest to its relatively recent use. This site has been designated GhCb-01 and named “Little Bay 1”.

Based on this assessment it was recommended that the construction should proceed under the condition that the above described feature is avoided.

**Conclusions**

The fieldwork conducted on LIL by the NGAO in 2009 involved revisits to 3 known sites and 9 new sites have been recorded. Work inside the TMNP involved assessing the condition of significant known sites on Sallikuluk, as well as the collection of information on the extremely important chert quarry sites in Ramah Bay where additional sites were also recorded (Curtis et al. 2010). Surveys have been conducted within the land claims area in places that had not previously been looked at by archaeologists including Uviluktok, Mary’s Island and Little Bay. Overall, I feel that the 2009 field season was quite successful.

Aside from the additional information we now have about how the study areas were used in the past, this season also provided a valuable employment and training opportunity for a local summer research assistant. Experience and training opportunities were also available to eleven summer students who got a chance to take part in various types of research throughout the field season at the NG/Parks Canada base camp and in the TMNP.

**Acknowledgments**

Thanks to the Nunatsiavut Government, the Torngisok Cultural Centre, the Provincial Archaeology Office, Parks Canada, the Youth Employment Strategy, the Tasiujatsoak Trust Fund Committee, Mary Dennis-ton, Ethel Hunter, Ian Winters, Simon Kohlmeister, Donna Dicker, Joan Andersen, Hans Rollmann, Elaine
Figure 19 Map showing the Little Bay study area (outlined in red). The area shown is all within LIL. (NAD 27, Zone 20) (Brake)

Figure 20 Looking west towards Little Bay 1. The tent ring is circled in red. (Brake)
Anton, Rose Smart, Jenneth Curtis, Pierre Desrosiers, Adrian Burke and Jennifer Williams.

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Tuck, James

Walsh, Kirby (Editor)
Signal Hill’s dominant position overlooking the town and harbour of St. John’s has ensured that it has played an integral part in the defense of the town for centuries. From the seventeenth century until the Second World War, the military has played an important role on the Hill: fortifications and military structures were erected at various locations; battles between British and French troops were fought here; and British, Canadian, and American military troops lived and served on Signal Hill.

During July and August of 2009, the Memorial University Archaeology Field School was held at Signal Hill National Historic Site in St. John’s, Newfoundland for the second year in a row. This was a joint venture between Parks Canada and Memorial University; both of these institutions provided funding, logistical support, and assistance.

Parks Canada was able to secure funding to hire additional supervisory staff this year, which allowed us to conduct excavations at two locations at the same time. Working in conjunction with Parks Canada Archaeologist Robert Ferguson, we selected sites for this year’s excavation.

One site that we explored is one of four sites recently reported by a frequent visitor to Signal Hill’s trails, Mr. Emberley. The Emberley sites collectively consist of several surface-visible stone walls, with possible cellar-like depressions, and one long drainage trench. None of the historic maps of Signal Hill show marked structures at these locations. As a result, excavation was required to determine the date and function of these undocumented sites. We selected the Emberley 4 site (1A64) as a good candidate for excavation. Emberley 4 has several collapsed stone walls that are still visible on the present ground surface. Our crew excavated a long trench through the centre of the site to try and determine the site’s date and function (Figure 1).

Our excavations quickly revealed that the site was of 20th century date, marked by wire nails, plywood fragments, asphalt shingles and electrical insulators- and a curious absence of eating or drinking vessels. We suspect that this structure perhaps served as an electrical waystation or as some sort of communications station on Signal Hill. The structure appears to have burned down at some point, as many artifacts are burned and the site’s topmost layers contains much charcoal.

The other site we explored in greater depth was the North Range Barracks site (1A51). This site is located on the top of Signal Hill, on a terrace just below Ladies’ Look-
out (Figure 2). This was a British soldiers’ barracks, used from 1800 to approximately 1842. After this, the building’s use is not clear, but it was certainly was abandoned by 1870, and likely collapsed after 1880 (Candow 1979). This site had been tested in 1984 by archaeologists Robert Ferguson and Martha Drake (Ferguson 1986). Their excavations uncovered the corner of a masonry feature, and a separate mortared stone wall. Preliminary interpretations suggested that these features were the southeast corner of the building and a retaining wall built on the very edge of the terrace.

Our plans were to expand the trench laid out by Ferguson and Drake in 1984, so that we could expand our excavations along the south and east walls of the structure, and to expose part of the single-hearth end-wall chimney in the south wall. Fortunately, we were able to re-locate the 1984 survey pins with the help of a metal detector, thus allowing us to re-use the original site grid. Our excavations expanded on the Ferguson and Drake test trench with three additional suboperation trenches, and several smaller suboperation squares laid out to locate key architectural features.

What our excavations revealed was not the southeast corner of the barracks building, but rather the remains of a large double-hearth stone chimney base, which would have been located inside the barracks building (Figure 3). We also located part of the east foundation wall of the building. The deposits located around the chimney base contained particularly rich deposits of artifacts and ecofacts, and appears to represent the remains of items stored (and discarded) in the building’s cellar. An 1805 report records that due to lack of room in other buildings, “provisions have been moved to a cellar under the barracks” (cited in Candow 1979:41). These provisions, utensils, and personal goods would have been the property of military personnel of varying backgrounds: either officers (who resided in the building for a time), by convalescent veterans (for whom this was a residence for a short while), or by the infantry soldiers and their families, who also lived in the barracks building.

The substantial artifact collection includes ceramics, bottle glass, and tobacco pipe fragments dating almost exclusively to the first half of the nineteenth century. The majority of
the ceramics are of undecorated creamware or decorated pearlware. Decorative styles are all of a period that predates the middle of the nineteenth century (see Figure 4). We suspect that this deposit accumulated rapidly, as the lowest occupation deposit in Suboperation E returned a mean ceramic date of 1807.6 and the topmost occupation deposit in Suboperation E returned a mean ceramic date of 1818.2. Bottle glass fragments which are complete enough to provide temporal data all support the date ranges derived from ceramic evidence.

A few coins and tokens were recovered from the site; though not well-preserved, enough detail was present to permit identification. They are represented by two George III halfpennies and one George III penny. Tokens are represented by: a one sou ‘Banque du Peuple’ token from Montreal (struck in 1838); an 1813 George III half-stiver from British Guiana (which matches another token found on Signal Hill in other excavations); and finally, an 1811 George III bank token that is made of copper with silver plating (research so far indicates that this is likely a counterfeit token).

The site also produced an impressive array of uniform buttons from a variety of British regiments, some of which were not known to be in Newfoundland. We suspect that the latter examples probably represent the use of surplus supplies or informal exchange between soldiers, rather than the undocumented presence of regiments. Research on the regimental insignia displayed on the buttons, and the maker’s marks found on the reverse of some fully support the dates derived for the site thus far. Additional uniform-derived artifacts include shako hat hardware (chin strap scales and fragments of shako plates) and other copper uniform hardware.

Other personal artifacts include gaming artifacts, including clay marbles (some of which were marked with x’s), as well as a bone domino piece from a double-nine set. Some artifacts were marked with the owner’s initials, including a bone utensil handle and a creamware plate. Personal items also include a bone comb with tightly-spaced teeth (suggesting it was perhaps to be used to remove lice), a large number of bone buttons, and two button punches (see Figure 5 for selected examples).

Ecofacts were recovered from the cellar deposits as well, though they are remain largely unidentified and unquantified at this point. Preliminarily, we can say that this part of the site contains abundant faunal material (which appears to have preserved very well), but little in the way of paleoethnobotanical remains (for which there is apparently poor preservation). The faunal remains certainly demonstrate that that the cellar was used for the storage of food supplies. Initial information derived during cataloguing suggests the assemblage contains plentiful mammal and fish bone. The discovery of rat bones and rodent-gnawed bones suggest that rodent infestation may have been a problem in the barracks.

At the close of excavations, the 2009 field season at Signal Hill accomplished a great deal. We were able to explore some of Signal Hill’s undocumented occupations at Emberley 4. We were also able to add to our understanding of the North Range Barracks, and gain an appreciation of its significant future research value. This season’s work has shown the North Range Barracks to be a large, well-preserved site that deserves further research.
Figure 4 A representative sample of creamware and pearlware ceramics recovered from the North Range Barracks (Crompton)

Figure 5 Some of the artifacts recovered from the North Range Barracks. From top row, left to right: burned bone utensil handle with incised 'T B'; bone comb; shako plate reading "UBIQUE"; bone domino; button of the 20th Regiment of Foot; creamware sherd bearing the scratched letter 'A' (Crompton)
the questions that we were able to answer this season, more remain. Where is the south wall of the building? Comparing the location of our chimney base with historic maps of the barracks leads us to conclude that the south wall of the building is located off of the end of the terrace. Is this the case? Given that documentary evidence indicates the building was standing until the 1880’s, does the barracks building have any deposits elsewhere that post-date 1850? How can we account for this gap in the archaeological evidence? Future seasons of fieldwork and more time spent in the Provincial Archives are needed to help resolve some of these questions. Ultimately, we hope to be able to build on the success of these excavations with further seasons of fieldwork in the future.

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Ferguson, Robert

ARCHAEOLOGY IN TERRA NOVA NATIONAL PARK
Jenneth Curtis
Parks Canada

Parks Canada conducted several small archaeological projects in Terra Nova National Park this past summer, resulting in the identification of four new sites and the collection of additional information about three known sites.

**Bank Site (DdAk-5)**

Salvage excavation continued at the Bank Site, a multi-component site that is eroding along the shoreline. The current excavations began in 2008, but due to the thick, artifact-rich layers that we encountered, the bottom of the cultural deposit was not reached. In 2009 we completed the excavation of three units along the eroding bank. This area included a thick midden deposit that was associated with a Dorset Palaeoeskimo semi-subterranean house structure (Curtis 2009). This midden appeared as a band of dark brown soil in profile and reached more than 20 cm thick in places (Figure 1). A charcoal sample recovered from the lower portion of this midden in 2008 returned a radiocarbon date of 1493±38 BP (X12863A). This date is consistent with the midden artifact assemblage that is characterized by tip-fluted endblades, preforms and tip-fluting flakes (Figure 2).

**Archaeological Assessments**

Archaeological Assessments were conducted in several areas in support of park activities. Methods of assessment included pedestrian survey and survey by canoe along the shorelines of interior ponds and brooks. Along one of the brooks we identified the remains of cribwork constructed for the damming of the brook during the early 20th century when forestry was a primary industry in what is now the park area (Figure 3). This feature is likely associated with the previously identified Park Harbour Sawmill Site (DdAk-9) (Tuck 1980:41) located on the...
coast nearby.

Additional sites relating to the historic period were identified along the Buckley Cove Trail: sawmilling is evident in the form of cut log ends and planks while small clearings represent former cabin sites. Finally, a brief survey among the park’s outer islands allowed us to monitor known sites and to identify a new Aboriginal site where a bifacial core and preform were found near the beach (Figure 4).

Acknowledgements
Thanks to Starlen Thistle and Barbara Linehan for their help with the fieldwork and to Terra Nova National Park staff for their interest and support with logistics for these projects.

References

The Ramah Bay area is the source location for a unique variety of stone that was widely used by Aboriginal peoples over thousands of years. Artifacts made of Ramah chert have been found on archaeological sites as far south as New England and as far north as the Canadian Arctic (Erwin 2009; Loring 2002). Ramah chert may have had a special symbolic significance related to its distinctive visual qualities – a translucent, ice-like appearance (see Loring 2002:184). As part of Parks Canada’s New Commissions Initiative this area has been identified as a potential nominee for national significance. In 2009 archaeologists from Parks Canada, Torngat Cultural Centre (Nunatsiavut), and Avataq Cultural Institute (Nunavik), along with the Université de Montréal, began a collaborative research project to collect information that could be used towards a nomination to the Historic Sites and Monuments Board of Canada.

The objectives of this field project were to verify the location and boundaries of known archaeological sites, to document the spatial and geological characteristics of the chert outcrops, to explore the characteristics of each archaeological site by identifying quarrying and manufacturing locations as well as associated habitation areas, and to explore the possibilities of developing a long-term research project.

We conducted four days of fieldwork in the Ramah Bay area in July. During that time we re-visited five known archaeological sites and identified seven new sites including at least

![Figure 1 Chert outcropping at Ramah Bay (Curtis)]
three chert quarry sites and two workshop sites.

History of Research
Archaeologists first recognized artifacts, made of what we now know as Ramah chert, in lithic assemblages more than 100 years ago (see Loring 2002 for more details). Though suggestions of its Labrador origins were made early on, it was not until 1964 that the archaeological finds were connected with a specific source location in Ramah Bay by Elmer Harp (1964; Erwin 2008:6; Loring 2002:169). Richard Gramly (1978) conducted fieldwork focusing on quarry sites as part of William Fitzhugh’s Smithsonian expedition in 1976. This research was continued by Colleen Lazenby (1980, 1984) who collected and analyzed geological samples along the length of the outcrops and considered the role of Ramah chert in Maritime Archaic culture. Archaeologists and geologists have continued to make occasional, brief visits to the quarry sites since the 1970’s.

Research Methods
We used the recorded geographical coordinates and descriptions to relocate known sites. Geological maps were also used to identify and follow the chert outcrops both within and beyond the known archaeological sites. At each site we mapped the extent of the chert outcrops, cultural features and artifacts visible on the surface using handheld GPS units and a Total Station. As these sites are located within Torngat Mountains National Park and comprise a potential candidate for national historic site designation, our goal was to document the sites in as much detail as possible, while leaving all cultural material in situ. We thus relied on GPS mapping combined with photography and field note observations to document the sites. In the process of relocating the known sites, exploring their boundaries, and following the chert outcrops, we encountered several additional sites. These were recorded in a similar manner, as time permitted.

Preliminary Results
Ramah Bay 1 (also known as the Quarry Bowl; IFCt-1) is the most well-known of the chert quarrying locations. Here we documented three areas of chert outcrops with associated loose chert pieces and artifacts. Cultural material is concentrated around the chert outcrops and declines in frequency between them. Scattered artifacts and pieces of chert are, nonetheless, present between the outcrop areas and extending beyond them. Several additional quarrying loci were identified on the slopes both within and outside the cirque that forms the “Quarry Bowl”. Each of these is characterized by a chert outcrop in association with cultural materials. Artifacts include flakes, blades, cores and bifacial preforms along with the hammerstones that were used to extract and begin working the raw material. It was Figure 2 Refitted Ramah Chert preform found in two pieces adjacent to an outcrop (Curtis)
possible to refit some of the broken preforms found on the site (Figure 2). The hammerstones are readily identifiable as coarse-grained stone cobbles that exhibit signs of battering on one or both ends. A wide range of shapes and sizes of hammerstones are present (Figure 3). Several natural post-depositional phenomena seem to have been significantly affecting the site and are deserving of future research. The refitting of preforms indicates that at least part of the site remains relatively intact.

Between the Ramah Bay 1 quarry site and the coast, several workshop sites were identified based on the presence of Ramah chert debitage, and in some cases hammerstones, but lacking chert outcrops. These include two previously recorded sites (Hilda Creek 1 and 2) and at least two new sites. These sites are characterized by lithic scatters in exposed areas and eroding bank edges (Figure 4).

Hilda Creek 1 (IfCt-2) is a large, multi-component site with conspicuous evidence of historic Inuit occupation visible on the surface. Ramah chert was observed coming out of the bank all along the shore and about half of one of the tent rings has slumped down towards the active beach. Since this is an historic Inuit tent ring (Table 1:F2), the site must be washing away relatively quickly.

Similar, multi-component cultural deposits continue along the coast and inland along Hilda Creek. Further analysis is needed to determine how many sites are present and which of them may correspond with the previously recorded Hilda Creek 2 site (IfCt-11). A summary of the features recorded in this area is presented in Table 1. The majority of the features appear to relate to historic Inuit use of the area and the Ramah chert must relate to earlier exploitation of the quarries. One particularly interesting feature is a small, approximately 1 m by 1 m pile of stones, some of which are Ramah chert nodules. It could be some sort of cache; however, the cultural affiliation remains unclear.

Analyses of the information that we collected at each of these sites is ongoing and will form the basis for future presentations and reports.

Acknowledgements
Thanks to Parks Canada, Torngâsok Cultural Centre, Avataq Cultural Institute and Université de Montréal for their support of this research. kANGID-LUASUk Base Camp (a collaboration between the Nunatsiavut Government and Tormag Mountains National Park) provided the logistical support that we needed to conduct the field work. Thank you to Polar Bear Monitors Bennett Barber, Harry Hay, Robert Harris, Eli Merkeratsuk, Jacko Merkeratsuk, and Kenny Dicker who accompanied us in the field and students Donna Dicker, Caitlyn Baikie, Lily Anderson, Minnie
Figure 5 Looking northeast towards Hilda Creek on July 27th, 2009 (Brake)

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Feature Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hilda Creek 1</td>
<td>F1</td>
<td>Roughly circular tent ring without visible internal features (665 cm n-s x 570 cm e-w)</td>
</tr>
<tr>
<td>Hilda Creek 1</td>
<td>F2</td>
<td>Historic Inuit tent ring with rear sleeping platform (540 cm n-s x 450 cm e-w). This feature is eroding.</td>
</tr>
<tr>
<td>Hilda Creek 1</td>
<td>F3</td>
<td>Small tent ring with reused stones</td>
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<tr>
<td>Hilda Creek 1</td>
<td>F4</td>
<td>Tent ring adjacent to F3 with possible sleeping platform (490 cm n-s x 450 e-w).</td>
</tr>
<tr>
<td>Hilda Creek 1</td>
<td>F5</td>
<td>Tent ring with rear sleeping platform (480 cm n-s x 530 e-w)</td>
</tr>
<tr>
<td>Hilda Creek 1</td>
<td>F6</td>
<td>Small cluster of boulders (180 cm e-w x 120 cm n-s)</td>
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<tr>
<td>Hilda Creek 1</td>
<td>F7</td>
<td>Small cluster of stones (190 cm e-w x 160 cm n-s)</td>
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<td>Hilda Creek 1</td>
<td>F8</td>
<td>Tent ring with possible internal feature (490 cm n-s x 440 cm e-w)</td>
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<td>Hilda Creek 1</td>
<td>F9</td>
<td>Small pile of stones</td>
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<td>F10</td>
<td>Boulder cache (110 cm x 65 cm)</td>
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<td>F11</td>
<td>Boulder cache (210cm x 240 cm)</td>
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<td>Hilda Creek ?</td>
<td>F1</td>
<td>Historic Inuit tent ring with sleeping platform</td>
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<td>F2</td>
<td>Tent ring with some stones that had been reused as a cache</td>
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<td>Hilda Creek ?</td>
<td>F3</td>
<td>Circular tent ring</td>
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<td>Hilda Creek ?</td>
<td>F4</td>
<td>Cache</td>
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<td>Hilda Creek ?</td>
<td>F5</td>
<td>Cache</td>
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<tr>
<td>Hilda Creek ?</td>
<td>F1</td>
<td>Small pile of stones, some of which are Ramah chert nodules</td>
</tr>
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</table>
OkKuatsiak, and Mike Ford who assisted us with all aspects of the field work.

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UNDERWATER ARCHAEOLOGY AT L’ANSE AUX MEADOWS NATIONAL HISTORIC SITE OF CANADA IN 2009
Charles Dagneau and Jonathan Moore
Underwater Archaeology Service, Parks Canada

In 2008-2009 Parks Canada’s Underwater Archaeology Service (UAS) completed a submerged cultural resource inventory of the marine component of L’Anse aux Meadows National Historic Site of Canada (hereafter NHS). The study area was 49km² and encompassed Sacred Bay and the adjacent minor inlets as well as numerous islands, shoals and reefs (Figure 1). Some work was also conducted in nearby Quirpon Harbour. This inventory was carried out to locate and evaluate a range of archaeological site types representing all chronological periods of regional history and prehistory. The main reason for the creation of the marine component of L’Anse aux Meadows NHS was to ensure the protection of the surrounding landscape and potential marine cultural remains associated with the terrestrial Norse site (EjAv-1). Although at the outset chances of finding marine sites related to this period were considered small, it was taken for granted that a full chronological range of sites could be found during the inventory. The following summary focuses on the 2009 fieldwork results. Information on 2008 fieldwork can be found in last year’s PAO Bulletin (Dagneau and Moore 2009).

Archaeological Background

Prior to this inventory, Parks Canada underwater archaeologists conducted limited diving searches in Épaves Bay near the Norse site in the mid-1970s and another off Wreck Island in 2005. Although no sites were located in both cases, oral and written histories of wrecks from the local community guided the UAS team in new research avenues. Several interesting sites were investigated in 2008, namely the Warrens Island Wreck (73M2A1), the Wreck Island Boat (73M1A2) and the Bell Shoals Wreck (73M1A1). It was believed that more sites would be discovered in 2009 since the previous year’s fieldwork had been impaired by bad weather and technical problems (Dagneau and Moore 2009).

Objectives

This project aimed to gather information on the number and distribution of underwater archaeological sites within the marine component of the NHS in support of cultural resource management (Parks Canada 2003: 28-
The specific objectives of the 2009 survey were as follows:

- Complete a comprehensive side-scan sonar survey of the marine component of L’Anse aux Meadows NHS to meet requirements of its management plan, 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; and
- Work with local stakeholders and Parks Canada staff to gather local information and develop outreach products.

Methodology

This inventory combined several means of archaeological field investigation, including side-scan sonar paired with a magnetometer, shoreline field-walking searches, shoreline dive searches and target or site inspection and recording. Search areas were determined based on previous archaeological work, other known site locations, historical information, local topography and information from local fishermen (i.e., fishing gear snag spots).

Most of the 2009 survey work was done with a side-scan sonar system for fast and effective coverage of large areas of the seabed. The UAS employed a Klein 3000 sonar paired with a Marine Magnetics Scasy magnetometer that was towed by its diving and survey boat Red Bay; it in turn was equipped with accurate DGPS equipment. A great portion of the NHS marine component and all targeted zones were effectively covered by sonar. Work was also conducted outside the NHS boundary in Quirpon Harbour, an area that has seen European presence from the 16th century onward.

The diving operations for survey and
target verification were made from the *Red Bay* and a rigid-hull inflatable boat. Dive searches were conducted in front of the Norse settlement in Épaves Bay (73M6A1), as well as in other locations in the NHS, namely Bell Shoals (Wreck Island, 73M1), Black Duck and Skin Ponds (73M11, 73M12) and Franche Point (West Road, 73M23). Some selected dive searches were also carried out in Quirpon Harbour (6M9).

In all cases, a team of two underwater archaeologists usually covered an area following specific depth contours or compass bearings. While searching for cultural remains, divers noted bottom type and depths to the surface. Waypoints were taken from the surface with a handheld GPS to record the search tracks, and relevant observations or discoveries. In addition to the underwater survey, most tidal flats and shorelines between L’Anse aux Meadows and Curlew Point were covered by field walking at low tide, including many islands and shoals.

A total of 40 working days were spent in L’Anse aux Meadows NHS in 2008-2009, including 35 hours of diving at depths ranging from 1 to 35 meters. Team members included Jonathan Moore (permit holder), Charles Dagneau, Ryan Harris, Filippo Ronca, Thierry Boyer and Chriss Ludin.

**Table of Diving Statistics**

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</tr>
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</tr>
<tr>
<td>Total</td>
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<td>46</td>
<td>35</td>
</tr>
</tbody>
</table>

**Site Descriptions**

**Langleecrag (73M8A1)**

Half of the hull of the *Langleecrag* stands high on Great Sacred Island’s east 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. Local residents report that divers removed a bronze propeller in the 1970s as well as many other things. Reportedly, the wreck was broken in half in 1948 and then moved and partly destroyed by subsequent storms around 1985-1990.

The main 50 m long hull section standing on shore represents the fairly intact rear half of the ship, with a mast and the stern castle still in place. A stem piece and two smaller ship sections are found on land within a debris field more than 200 m long, 50 m wide. The engine, a boiler and three anchors are also associated with this wreckage on land. An intensive side-scan sonar and magnetometer survey conducted directly off the east side of the island has mapped scattered metal hull remains and debris as far as 180 m offshore on an underwater slope to a depth of 35 m. Although no diving was carried out on site, at least a second boiler and part of a deck cabin are recognizable in sonar and magnetometer mosaics.

**Benegal Shoal Wreck (73M22A1)**

Local fishermen have reported snagging fishing gear and hauling out from the water ship’s timbers in the past around Benegal Shoal, off Warrens Island. A schooner named the *Nelson* was lost in that area in 1939. At the time, “Canadian authorities” based at Cape Bauld had to dynamite a projecting spar as it posed a hazard to navigation.

A shipwreck believed to be the *Nelson* was located by side-scan sonar off Benegal Shoal by the UAS. This discovery was followed-up by two episodes of diving inspection and recording. The wreck consists of the remains of a wooden hull about 27 m long and 9 m wide exposed at both ends. An anchor, the windlass and a few wooden remains are visible in the aft section of the shipwreck. Eroded frames emerge from the sediment; deck planking and transom remains are also observable in the aft section, including the wheel and steering mechanism. Several early 20th-century artefacts are scattered over the site, including a navigation speed log, a navigation light’s lens, tools, coils of steel cable and two old automobile tires possibly used as bumpers. Approxim-
Figure 2 Air photo and sonar mosaic of the Langleecrag (Harris and Dagneau, Parks Canada; Newfoundland and Labrador Lands Surveys & Mapping Division)

mately 40 to 70 percent of the ship has not survived and structures are flattened due to ice action and a multitude of other site formation processes.

This shipwreck is believed to be the Nelson, a 60-ton fishing schooner built in Trinity Bay in 1906 and owned by Captain John B. Smith of South River, Conception Bay (Ship Information Database 2008; Parsons 2003). On October 18, 1939, returning from the Labrador fishery, the ship struck Little Sacred Island during a storm at night and sank soon after. Captain Smith, his sons William, Clarence and Cecil, and grandson Jack were on board, with three other men. A letter from William Smith to his sister Marion Carson describes in detail the tragedy in which Cecil Smith and Tommy Bussey lost their lives (Crane 2004; Parsons 2003: 52-57). These events, and the rescue of the survivors, are still remembered in
L’Anse aux Meadows where they represent an important part of the local oral history. Further research is currently being done to confirm the identification of this shipwreck as the *Nelson*.

**St. Vincent Island Wreck (6M9A2)**

The remains of a fishing schooner were located in Quirpon Harbour near St. Vincent Island (Salt Island). This wreck consists of the lower hull of a wooden ship 24 m long and 7 m wide, and is well preserved. Frames project from the bottom, and deck beams, stanchions and transom remains are visible. Features and artefacts are seen on the shipwreck itself, including a windlass, the anchor chain, and a ship stove. Approximately 20 to 40 percent of the original vessel has disappeared (mostly superstructure) and structures are flattened due to deterioration, corrosion and ice action. The ship is not yet associated with a known historical ship casualty, but it probably dates from the mid 20th century.

**Quirpon Wreck 1 (6M9A1)**

Part of a wooden hull and four cannon believed to be the remains of an 18th century French vessel are located in Little Quirpon Harbour, Noble Cove (EjAu-3). Numerous early 18th-century French artefacts were collected by local divers at Herbert Point, on the south end of Quirpon Island. The site was first studied archaeologically by the Newfoundland Marine Archaeology Society in 1981 and revisited in 2009 by the UAS for monitoring purposes (Barber 1981). Two small guns less than 2 m in length were found close together, with some lead caulking material and Normandy stoneware fragments. Wooden planks and frames were observed emerging from the sand here and there, but no definite hull section was located and the site looks well covered. A third and fourth cannon reported by J.M. Barber could not be relocated.

**Bell Shoals Wreck (73M1A1)**

A few diagnostic shipwreck remains were discovered near Bell Shoals, off Wreck Island, in 2008, namely a brass gudgeon fragment, most probably from a ship’s rudder, an iron knee and a nail. These artefacts as well as ballast stones found on nearby Wreck Island were believed to indicate the presence of shipwreck in the surrounding waters (Dagneau and Moore 2009). An intensive side-scan sonar survey of Bell Shoals and the perimeter of Wreck Island, and a few diving searches were conducted in 2009 to locate a possible shipwreck. However, no further evidence was found.

**Shoreline and Inter-Tidal Field Walking**

Field walking was conducted at low tide on most of L’Anse aux Meadows NHS’s shorelines and tidal flats not covered in 2008, from Medée Bay to Curlew Point. Recent boat remains and scattered ship timbers were located in Wreck Cove and South Road. A dozen boat wrecks were observed on beaches and rocks on the western side of Curlew Point specifically. These remains represent abandoned or discarded local boats of two distinctive types: long boats (shallops) and flat skiffs.

**Conclusion**

A submerged cultural resource inventory of L’Anse aux Meadows NHS’s marine component was completed between 2008 and 2009. It was possible to survey all of the targeted underwater and inter-tidal areas in a timely manner thanks to cooperative weather conditions and efficient remote sensing equipment and strategy.

Two shipwrecks were investigated, the first near St. Vincent Island in Quirpon Harbour and the second near the Benegal Shoal; the latter is possibly the remains of the 1939 fishing schooner *Nelson*. The wreck site and debris field of the *Langleecrag* on Great Sacred Island and its offshore components were documented and better defined. A number of recent small boat remains found by field walking searches were documented. Finally, an 18th century wreck site was revisited in Little Quirpon Harbour for monitoring purposes.

Importantly, no Norse sites, features or artefacts were found during the 2008-2009 surveys. Side-scan sonar surveying and three diving searches of Épaves Bay revealed that its
The seabed consists of sand, cobbles, and exposed bedrock, thereby presenting a very poor preservation environment and low artefact potential. Selected tidal flats and eroding shorelines throughout the study area do offer site and artefact potential however.

Acknowledgments

The UAS wishes to express its acknowledgments to Parks Canada staff members Loretta Decker (Site Supervisor), Jeff Anderson (Field Unit Superintendent) and to all of the other Parks employees involved for the help they provided. We extend a special thanks to Donald Bartlett who served as a guide and boat operator. The UAS also thanks individuals who provided information on local history and potential archaeological sites in the study area: Clayton Colbourne, Damian Bartlett, Don Bartlett, Lloyd Decker, Loretta Decker, William Bartlett, Dennis Hedderson, Clarence Hedderson, Ed Hedderson, Leonard and Kathleen Tucker and many others.

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Ship Information Database

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1995 Air photograph of Great Sacred Island showing the Langleecrag. Newfoundland and Labrador Lands Surveys & Mapping Division, ref.: 95-401/95008, scale 1:125,000.

Figure 3 A navigation speed log and a hand tool on the hull remains of Benegal Shoal Wreck, possibly the Nelson. The scale bar is graduated at 10 cm increments (Boyer, Parks Canada)
In July 2009, the author and Robert Maher (Provincial Airlines) visited the crash site of Consolidated Liberator Mk. III, RCAF s/n 586 (FgCb-01), approximately 20 km southeast of Happy Valley – Goose Bay (Figure 1). Liberator 586 was one of 148 Liberators used by the RCAF during World War II (RCAF 1999), and was specially modified for long range flight and equipped with air-to-surface vessel (ASV) radar (Figure 2). It crashed on February 18, 1944, killing one civilian passenger and injuring one of five crew members (Hynes 1990a, b, c, d). This aircraft was one of the most celebrated anti-submarine aircraft in the Eastern Air Command, since it was involved in the sinking of two German submarines (U-boats) in 1943.

In 1943, Liberator 586 was a member of No. 10 (Bomber Reconnaissance) Squadron, based in Gander. On September 19th, three Liberators from this squadron were at Reykjavik, Iceland, after escorting the HMS Renown, which returned Winston Churchill and the British chiefs of staff to England after the “Quadrant” Conference in Quebec (Douglas 1986:562). The crew of the A/10 aircraft piloted by Lieutenant J. F. Fisher, spotted U-341 500 miles (1250 km) south of Iceland. On their second pass, they dropped six depth charges, which blew the U-boat’s bow out of the water. Four more
On October 26, 1943, Liberator 586 was piloted by Lieutenant R. M. Aldwinkle, on a slow speed westward transatlantic convoy (Douglas 1986:566). The crew spotted U-420 and dropped six depth charges, with only one exploding. This was followed by a lengthy gun battle. Eventually, the u-boat dived and Aldwinkle dropped a homing torpedo. The u-boat resurfaced and was hit with the two remaining depth charges and sunk. The engagement lasted four hours. Lieutenant Aldwinkle was awarded the Distinguished Flying Cross.

On February 18, 1944, Liberator 586 left Reykjavik, Iceland, on route to Gander. Due to deteriorating weather conditions the aircraft was rerouted to Goose Bay, but after crossing the Labrador coast they began having icing problems, which ultimately lead to the crash (Curtis 1944). Them Days magazine published a stirring account of the crash and rescue by the navigator, Garnet Harland (1988). According to Harland:

*When we hit the trees she cleared a swath 110 feet wide, and rotated 180° and broke her fuselage behind the wing. This rear section of the fuselage then lay parallel with the wings and behind the right wing. The nose which contains the navigator’s compartment was completely ripped off.*

Harland, along with the pilot, S/L Al Imrie, co-pilot, F/O Doug Campbell, and two wireless operators, W/O A. C. Johns, and F/O M. J. Gilmour survived, but a civilian passenger, D. Griffin, became tangled in cables and was killed during the crash. The crew managed to survive for three days, when a local trapper, Jim Goudie came upon the site. Goudie returned to Goose Bay, where a rescue mission was mounted.

In 1988, Tom Reilly of the Flying Tigers Warbird Air Museum, Florida, purchased the Liberator 856 wreck as salvage. Reilly’s plans included a documentary film of the restoration and one last flight over Labrador by surviving members of the original crew. He hired a helicopter to remove pieces of the wreck from its remote crash site, but he was forced to leave these parts on a Goose Bay dock because he did not have a permit under the *Historic Resources Act*. The wreck received some additional damage from souvenir hunters while in the bush and while exposed on the dock. Eventually, the wreckage was moved to a fenced storage area. Reilly argued that the plane was less than 50 years old and the builders were still alive, so it should not be considered an historic resource (Porter 1991). It was later established that the wreck belonged to the provincial government, even though it had been sold to a salvor in Prince Edward Island by the federal Department of Supply and Services in 1986, on behalf of the Department of National Defence. Further, the salvor had no legal right to sell the aircraft to Mr. Reilly. Despite support from local aviation enthusiasts, the government upheld its original decision not to allow the aircraft to be removed from the province.

In 1995, a Canadian company, Coulson...
Forest Products, contracted the Aerospace Museum of Calgary to look into the possibility of acquiring the B-24 bomber for the purpose of restoration, but they were concerned that the bomber was too badly deteriorated to restore (Pomeroy 1995). Some of the surviving parts collected by Reilly were placed in protective storage at the Gander airport. The aircraft is now under the care of the North Atlantic Aviation Museum, which has plans to restore at least the cockpit and tail sections to static display.

The main objectives of the 2009 fieldwork were to (1) update the official archaeological site record form, (2) assess the damage to the site by salvors in 1988, and (3) map the surviving wreckage and debris field. Prior to visiting the site two container trucks were loaded with additional wreckage, including an engine, from the storage area in Goose Bay (see Figure 3). This material was shipped to Lewisporte and later trucked to Gander.

After being dropped by helicopter (444 Squadron, Goose Bay) at the site, a datum was established and a site map was made using a compass and tape measure. GPS readings were taken on the datum and any material culture recorded or collected at the site. Photographs were taken of the crash site and debris field, in order to record the surviving remnants of the aircraft and assess disturbance to the site by salvors.

Figure 5 illustrates the current condition of the crash site. Most of the wreckage was removed during a two week visit by salvors. Most of the aircraft wing is intact except the starboard tip, which was damaged on impact. The remaining remnants include a landing wheel and propeller. A large cluster of materials represent a collection area for removal. The only personal item recorded was a mass of rubberized material and zipper, which probably represent a raincoat. A few instruments were collected and brought back to the conservation laboratory at MUN for treatment (see Figure 6).

Liberators had a very successful record
in anti-submarine action, having sunk or contributed to the sinking of 72 u-boats during World War II. Of the 18,431 Consolidated B-24 Liberators produced during the war, nearly all were either lost in action or sold to scrap dealers after the war (Jackson 2004:88). At least 20 Liberators crashed in Newfoundland and Labrador, while on convoy duty or deployment to Europe (Deal 2006:145). Today, only about a dozen complete aircraft exist, and almost all of these are in American museums (e.g., Blaugher 2005). Many of the original models are no longer represented, or exist only as derelicts on museum lots or unrecovered wrecks at crash sites. Many of these wrecks, like Liberator 586, represent aircraft that made a major contribution to the war effort.

Acknowledgements

Logistical support for this project was provided by Provincial Airlines. Additional assistance was provided by the Woodward’s Group of Companies for the loading and transport of remnants of Liberator 586 from Goose Bay to Lewisporte. We would also like to thank Captain Dean Vey and his colleagues at 444 Squadron, 5 Wing Goose Bay, for their assistance and hospitality.

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BASQUES AND INUIT ON THE QUEBEC LOWER NORTH SHORE: 2009 FIELD REPORT

William W. Fitzhugh1
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The central goal of the Smithsonian’s Gateways Project, which began in 2001 with a survey of the coastal zone of the Quebec Lower North Shore, was to clarify the southern extension and limit of Eskimo cultures, their interactions with Indians and European groups, and their environmental conditions. This study was the logical progression of earlier Smithsonian research on the northern limits of Indian cultures on the Labrador coast and their interactions with Eskimo/Inuit peoples (Fitzhugh 1972, 1977). The outcome of the latter studies revealed three northward Indian advances to the northern limit of trees in central and northern Labrador, the first by Early Period Maritime Archaic culture from ca. 8000-4000 BP (Fitzhugh 1975, 1978a; 2006a); the second by Intermediate Period cultures (Brinex, Charles, Saunders and others; Nagle 1978) from ca. 3500-2800 BP; and a third by Late Period Recent Indians (Daniel Rattle, Point Revenge; Fitzhugh 1978b; Loring 1985) ca. 1200-800 BP. These expansions coincided with periods of climatic warming and were facilitated by warmer, longer summers, less sea ice, and northward forest expansion (Fitzhugh and Lamb 1984). These conditions were less advantageous for Eskimo/Inuit cultures, for during these times Inuit retreated from southern coastal territories they had occupied during cooler periods and became restricted to arctic regions of northern Labrador (Fitzhugh 1980; 1990a)

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Curtis, W. A.

Deal, M.

Douglas, W. A. B.

Harland, D.

Hynes, C.


Jackson, R.

Pomeroy, B.


Porter, M.

RCAF (Royal Canadian Air Force)
Tuck and Fitzhugh 1986). Social factors and inter-cultural relations must also have played a key role in these territorial shifts, but archaeology provides little indication of inter-group contact, influence, or exchange. Gateways set out to examine the southern Eskimo/Inuit boundary issue in northern Newfoundland and the eastern Gulf of St. Lawrence.

During the 1970-80s a scholarly controversy erupted over this issue in a dedicated issue of *Etudes/Inuit/Studies* (Martijn and Clermont 1980). Wintemberg (1928) had (probably mistakenly) reported Dorset artifacts as far west as Kegashka on the Quebec Lower North Shore and (more accurately) along the western coast of Newfoundland (Wintemberg 1939/40), and research later extended its range around the entire Newfoundland coast, reaching even St. Pierre and Miquelon Islands. The earlier transitional (Pre-Dorset/Dorset) Groswater culture had been found in central Labrador and later came to be identified throughout most of Newfoundland but was absent—as was Dorset—west of Blanc Sablon.

The situation regarding the ‘missing’ southern Inuit sites was more uncertain, since early claims for occupation of northern Newfoundland had been disproved or were disputed. By 2000 scattered evidence of Inuit had been found in the form of Inuit graves and summer structures at St. Paul River (Martijn 1974); two Inuit winter dwellings of probable 18th C. age were identified (but not excavated) on Belles Amour Peninsula near Brador (Dumais and Poirier 1994); and Auger (1993) had excavated an Inuit dwelling on the Seal Islands in Chateau Bay in southern Labrador. Surveys along the southern Labrador coast by Marianne Stopp (1997, 2002) produced evidence of boulder pit structures, some of which may be Inuit seasonal dwellings; but the absence of winter villages and summer tent rings suggested only transient seasonal Inuit use of this coast. As a result, the dates, types of settlements, geographic extent, and question of seasonal vs. permanent Inuit settlement of southern Labrador, Newfoundland, and the Lower North Shore after 1600 remained largely unknown and contentious.

This history has recently been reviewed in the light of new data emerging from the Gateways Project (Fitzhugh 2009a, b; Fitzhugh and Ford 2009; Fitzhugh et al. in press). Our surveys and excavations along the Lower North Shore since 2001 from the Straits to Cape Whittle produced evidence of several Groswater sites dating ca. 2400-2200 B.P. (Fitzhugh 2006b). By contrast, Dorset sites and finds from this area have been singularly absent, as they are also along the Labrador shores of the Straits (Plumet et al. 1994; Pintal 1998). However, although we found no Dorset settlements west of Blanc Sablon, we did recover isolated Dorset artifacts of Ramah chert at Jacques Cartier Bay and at the Hare Harbor site on Petit Mécatina.

The past two years have produced major advances regarding Inuit occupations of the Lower North Shore. New finds include a 16/17th century winter settlement at the Hart Chalet site near the mouth of the Brador River and Inuit fox traps and cache pits in Jacques Cartier Bay. In addition, the Hare Harbor site has produced Inuit soapstone lamps and pot fragments and oil lamp encrustations on the floor of a Basque cookhouse, designated Structure 1 (Fitzhugh 2006b; Fitzhugh and Ford 2009). How Inuit finds came to be included in the floor deposits of a Basque domestic structure puzzled us for several years. Was this evidence of a post-Basque Inuit intrusion or Inuit participation in a Basque enterprise?

**The House Beneath the Smithy**

A breakthrough occurred in 2008 when we discovered the burned remains of an Inuit winter house beneath the stone-paved floor of a second Hare Harbor Basque structure which probably served as a smithy or cooperage (Structure 2). The architecture of the Inuit dwelling (Structure 3), was typical of 17/18th C. Inuit houses in central and northern Labrador: a rectangular structure with a sunken entry tun-
nel, cold-trap, and lintel-type stone doorway, but it lacked rear or side sleeping benches and lamp stands. On this floor, which was paved with partially-burned Basque barrel and tub staves, we found a mixed assemblage of Basque and Inuit objects, and among the latter were a wick trimmer and several Inuit toys: broken bow fragments and tiny soapstone lamps. The bow fragments and wick trimmer had been preserved by wet conditions in the tunnel area, but all other organic remains had either decayed or been burned in the fire that destroyed the dwelling. Along with Inuit objects we found clay pipes, burned canvas, iron nails, glass beads, and small amounts of Iberian and European ceramics. The stave pavement was scorched and in some areas completely consumed, and small clusters of unidentifiable calcined bones were present in this horizon. The absence of turf or soil development between the Inuit floor and the smithy pavement indicated that the Inuit remains were paved over shortly after the fire. Structure 3 is described in 2008 Hare Harbor field reports (Fitzhugh 2009a, b; Fitzhugh and Ford 2009).2

Site History

The history of the Hare Harbor site as of 2008 may be briefly summarized:

(1) Excavations at the S1 cookhouse and S2 smithy/cooperage produced ceramics, glass beads, and other material suggesting these structures date to the late 17th or early 18th century (Herzog and Moreau 2006; Herzog in press). However, a few ceramics, mostly from non-structure contexts, indicated a 16th century occupation was also present, although no consistent site component of this age had been identified.

(2) Micro-stratigraphy in the peaty soil between the cook-house and smithy revealed 8-10 trampled layers with charcoal, tile fragments, and cut wood alternating with clean peat, suggesting episodes of occupation and re-vegetation.

(3) The underwater site stratigraphy (Phaneuf 2008) provides a different kind of history, beginning with wood chips and debitage, indicating the initial occupation involved construction of site facilities like workshops, piers, ship repair, or possibly a small boat-building. This was followed by whaling, and later by market-oriented cod-fish production. Throughout this period ballast piles accumulated and multiplied and ceramic vessels were lost or discarded overboard along with shoes, leather garments, glass, rope, and large numbers of clay tiles broken in outbound voyages from Europe. The formation of eleven separate ballast piles suggests that multiple vessels used the anchorage cove, sometimes simultaneously.

2009 Field Program

The 2009 project took place in early August and was planned as the final season at Hare Harbor (Figure 1). The principal activities were to prepare a site map; to excavate beneath the upper pavement of the cookhouse (Structure 1); and to search for other excavation targets. To our surprise, we identified an earlier Basque occupation below the cookhouse and discovered two more Inuit winter houses (Figure 2). These finds raised new questions: What was the age of the early Basque component at the cookhouse, and how did it relate to the latter Basque occupations here and at the smithy? Were both new structures of Inuit origin, and if so, what was their relationship to the cookhouse and smithy? Could the cookhouse soapstone finds be linked to the Inuit dwellings? Was there evidence of burning and destruction at the new Inuit houses as in Structure 3?

Structure 1, Cookhouse

Cookhouse Floor and Tile Midden

Excavating below the S1 cookhouse pavement we found European materials similar to that obtained from the floor deposits above, including grey Normandy stoneware fragments that fit vessels recovered in our earlier excavations. New Inuit soapstone was also recovered, including re-worked vessel fragments and a lamp with a hole in its bottom (Figure 3). Just
Figure 1 View of the Hare Harbor-1, Petit Mécatina, view west (Fitzhugh)

Figure 2 Map of Hare Harbor-1 (Fitzhugh)
east of the cookhouse floor we found a 10-20cm thick layer composed of almost nothing but shattered roof tiles, in which we also found an iron axe and iron nails and spikes (Figures 4, 5). Domestic artifacts were rare. The midden appears to have accumulated as a result of periodic roof re-tiling episodes.

**Sub-Tile Level with Hearths and Baleen**

Below the tile level was a thin tile-free but charcoal-rich soil layer. This level produced a variety of soft earthenware ceramics clustered around small hearths whose oil-encrusted bases were paved with charred sherds (many from marmite cooking vessels). One hearth was surrounded by a mat composed of short strips of baleen (Figure 6). This level also produced a small iron fishhook. This layer is distinctly different from the 17th/18th C. cookhouse and smithy deposits and probably dates to the late 16th century (Figure 7).

**Lower Site Complex**

While we were cutting the alder thick-
ets and high grass to prepare an overall site map we discovered the foundations of two distinct Inuit winter houses with square or rectangular walls, entrance passages, and rear benches (Figure 8). Probing revealed floor pavements in both structures. Structure 4, the largest, ca. 6x12 meters, with a 5m long entrance passage, has a secondary room or enclosure in its southeastern end. Structure 5, possibly a second Inuit winter house, could not be positively identified from surface indications but had a paved floor and suggestions of a rear sleeping platform.

**Structure 4**

Two 2x2m test pits in S-4, one in the entrance passage and the other on the floor pavement inside the house door (Figure 9), produced a large volume of European material culture in a thin cultural deposit just below the ground surface. Among the dozens of finds were and iron axe identical to the one found in the S-1 cookhouse tile level, large sherds of stoneware (of both grey and pink varieties, Figure 10), two lead cod jiggers, a large lead knife handle, clay pipe stems, lead musket balls, a few earthenware sherds, and a congealed mass of rusted nails (Figure 10). Pieces of whale bone and tile had been used as floor pavements and wall components. No food bone, baleen, or midden deposit was noted, and the
cultural deposit was only a few centimeters thick, suggesting a short occupation. The abundance of charcoal and large amount of valuable material coming from a 2x2 m test pit might indicate a rapid or forced abandonment.

**Structure 5 and Charcoal Pit**

The rectangular wall outline of Structure 5, with an entry in the southwestern wall, a cobble-paved floor, and suggestions of a rear sleeping platform suggests this may also be an Inuit winter dwelling, or possibly a workshop. The test pit produced mainly nails and roof tiles, although thin goblet glass, some tan earthenware, and charcoal were also present. Several meters northwest of S-5 is a conical depression in which we found a large slab of rock overlying a deposit of nearly pure charcoal. A lenticular clear blue glass bead, a fragment of green bottle glass, and an iron nail were also found. This may be a charcoal production facility.

**Site Units and Correlations**

The 2009 finds allow us to identify five distinct structural or stratigraphic assemblage components present at the land site and three from the underwater site. Tentatively I estimate the chronological relationships of these components as follows:

**Occupation 1:** S-1 lower level, Underwater site levels 1 (wood zone), and whaling level. Estimated date: late 16th century Spanish Basque. No Inuit presence.

**Occupation 2a:** S-1 cookhouse floor and tile midden; S-3 lower level Inuit house with its toy soapstone lamps and bow fragments and Basque/European artifacts; underwater ballast rock and cod fishing horizon. (glass beads, Normandy stoneware, clay pipes). Inuit winter house is burned and blacksmith shop is established on its ruins. Estimated date: ca. 1700-1730.

**Occupation 2b:** This unit may be part of Occupation 2a, however it would appear to be a late
expression of this period. The large S-1 hearth appears to have disrupted the cookhouse floor and is the source of most of the grey Normandy stoneware found in this structure. This hearth may correlate with the top of S-1 tile midden and with the S-2 smithy/cooperage, the underwater site ballast and upper level cod fish horizon, and Inuit S-3/4/5 houses. Hallmarks include grey and grey-pink stoneware, iron axes, beads, clay pipes, soapstone vessels, lead cod-fish jiggers. Continued Inuit collaboration with Basque fishery. Estimated age: ca. 1700-1730.

Discussion

The growing evidence of Inuit occupation at Hare Harbor provides support for a local oral historical tradition noted by Samuel Robertson, who in a paper read in 1841 to the Literary and Historical Society of Quebec (Robertson 1843:28), considered the possibility of Inuit and Basque occupations along the Quebec Lower North Shore:

“...It is true that there is no want of remains of buildings and tumuli [stone Inuit graves] of such ancient date [pre-Columbian], that tradition ascribes them to the Esquimeaux, which in one instance, at least, was false: this occurred three years ago, where a person had occasion to remove part of a ‘Terasse’, to make a garden. He found an iron instrument, of about eighteen inches in length, of a crooked form, which I conjectured to be a Cerp, such as were used [as vine-pruning tool?] 300 years ago in Spain — if my supposition is right, the remains must have been those of the Basques, as the Norman and Breton countries are not vine countries.”

Robertson’s report indicates that LNS residents in the early 1800s were well aware of Basque and Inuit history in their region. All but the basic outline of this oral history has since been lost, although Hare Harbor is known to the nearby French settlement of Tête à la Baleine as ‘Eskimo Harbor.’ Our interviews failed to discern any other information than the name itself. Other accounts provide more detail.
In a 1729 report describing events of 1728, Martel de Brouague (1923:384), who was then commandant of the Courtemanche establishment at Brador, noted conflicts in the Strait of Belle Isle and along the Quebec coast between Europeans, Inuit, and Indians. In one instance Brouague remarks on an Inuit family murdered “at Mécatina” by a party of “French and Indians” in which all were killed except a woman and young boy, who were sent west to Quebec. The presence of Inuit and Basque artifacts dated to ca. 1700 at the Hare Harbor cookhouse and Inuit winter dwellings whose floor deposits include both Basque and Inuit artifacts of the same period, in one case including Inuit toys, suggests that Basque crews working at Hare Harbor employed one or more Inuit families as camp assistants, hunters, and winter site custodians. Further, the congruence of Brouague’s Mécatina location and the oral history of “Eskimo Harbor” raises the possibility that the 1728 incident may have taken place at Hare Harbor.

It is generally accepted that 16th century Inuit movements into southern Labrador and the Straits were undertaken as raids during spring and early summer on the Basque stations along this coast in order to acquire European materials before Basque vessels returned from Europe. After Basque voyaging had declined following 1590, the Straits became an extension of the central Labrador Inuit settlement area. Two multi-family Inuit winter house villages have been found in the Brador region—a 16th/early17th century village at the Hart Chalet site near the Brador River (Fitzhugh 2009a, b) and the Belles Amour Peninsula site whose dwellings and graves date to the 18th century (Dumais and Poirier 1994). By ca. 1700 a new phase of Inuit-European relationships in the Straits had begun as service employment, collaboration, and social reciprocity became attractive to Inuit as a safer way to acquire European materials and engage the growing numbers of Europeans operating in the Newfoundland-Gulf region.

The political geography of European and Native lands made such engagements dangerous, especially for Inuit. Conflict between the various European groups and their Native Indian allies may have resulted in serious problems also for Basques, who by this time had lost their 16th century dominance and had become bit players in a larger, highly competitive field. The late 17th and early 18th centuries were times of conflict between European groups operating in this region. Records cited by Cleophas Belvin (2006) indicate that political jurisdiction over the LNS shifted back and forth between the French and English, officially and unofficially, resulting in periods of anarchy that even attracted American privateers. It is probably due to the region’s topographic complexity and navigational difficulties that Basques were able, although perhaps only for a limited period, to successfully exploit loopholes in Dutch, French, and English surveillance, making possible the Basque and Inuit activities uncovered at Hare Harbor.

The stratigraphic evidence at Hare Harbor for precedence of whaling, followed by a subsequent focus on commercial cod-fishing, follows the general development of Basque fisheries in the Newfoundland-Gulf region. Significant whaling activities are not known to have been part of the post-1600 Basque enter-
prise. This raises the question of the dating of the Hare Harbor-1 whaling record. The presence of 16/early17th century ceramic types in both land and underwater deposits suggests that Basque whaling took place during this early period and that a later occupation, evident especially in the upper levels of Structures 1 and 2 where late-dated Normandy stoneware, clay pipes, and beads are present, represents this 17/18th century period and its associated cod-fishing activities. For reasons noted above concerning the inter-linkage of these structures with Inuit artifacts, it seems likely that all of these structures were used in the early 1700s, perhaps even in 1728. Identification of the 16/17th century level below the cookhouse explains the previous anomaly of scattered early ceramic finds and the lower stratigraphic whalebone level from the underwater site.

The burning of the smithy/cooperage and its sub-floor Inuit house and the rapid abandonment at the newly-discovered S4/5 structures raise the possibility that Hare Harbor may have suffered from pirates, French-Indian aggression, or French or English attempts to rout the Basques and their Inuit partners. Future excavation and archival studies will hopefully provide answers to these questions. For the moment, archaeology is providing intriguing clues not only about Basque history in the “forgotten Labrador” but about how Inuit exploited the ecological and social world of a new, dangerous, non-arctic frontier.

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The 2009 field season began with further exploration of two areas partially excavated the previous year. The first was a terrace located south of the brewhouse and bakery in Area F, where a 3 foot wide by 12 foot long ‘pathway’ was discovered last August (Gaulton and Tuck 2008). This year’s excavations focused on following the ‘pathway’ and solidifying the date of its construction - both of which resulted in more questions than answers. As it turned out, the pathway terminated in the next excavation unit to the south but a short (50cm) distance away a cobblestone pavement was revealed (Figure 1a). It is uncertain whether the pathway and pavement are contemporaneous or if the latter feature destroyed portions of the former. Artifacts found between the pathway and pavement included coarse redware, tin-glazed ceramics and a broken but completely restorable eighteenth-century glass pharmaceutical bottle (Figure 1b). A two by three metre area of the cobblestone pavement was exposed and on its surface were a few fragments of Westerwald mugs, creamware vessels and dark-green wine bottles. Further work will be required to ascertain the function and extent of this new cobblestone feature.

A one metre test unit was also dug immediately northwest of the pathway feature to: 1) expose any underlying natural and cultural deposits; and 2) determine its relative date. Excavations revealed that the pathway was set atop a thick, compacted yellowish clay which was essentially sterile save the occasional brick or nail fragment. A half metre below was a midden deposit from the second half of the seventeenth century containing a variety of North Devon milkpan fragments, case bottle glass, iron nails, Rhenish brown stoneware, refuse bone and the occasional clay tobacco pipe. Based on the proximity of the Kirke House, it is believed that the refuse originates from this dwelling and, in turn, may have been deposited here up until the French attack in 1696. The subsequent accumulation of the thick, compacted yellowish clay atop this midden, followed by the construction of the pathway feature, provides a terminus post quem of 1696 for both events. All that remains to be determined is how extensive the Kirke-era midden is and what other features may be in this location - an interesting prospect except for the fact that it requires the careful excavation of over two metres of overlying natural and cultural deposits.

The second area of the site to which we returned in 2009 was at the northwestern
end of Area F. Here the crew continued to expose a mid-to-late seventeenth-century midden possibly associated with the house of Philip Kirke. Not only did this result in a fine collection of tin-glazed (Figure 2) and North Italian sgraffito ceramics, along with masses of clay tobacco pipes and other artifacts, but overlying eighteenth-century deposits also hinted at the presence of a later structure nearby. This was in the form of a concentrated layer of bricks which look to have been dumped as part of a renovation or clean up. There is no pattern to their placement nor do they appear to be a fireplace collapse. Below the brick is a layer of charcoal and refuse dating from the first half of the eighteenth century, as shown by the presence of English white salt glazed stoneware, contemporaneous pipe bowls and maker’s marks but no creamware or pearlware fragments. A corroded, yet beautifully preserved, gunlock firing mechanism was also recovered.

![Figure 1b Eighteenth-century glass pharmaceutical bottle (Gaulton)](image)

![Figure 2 Two examples of tin-glazed plate fragments from midden in Area F (Gaulton)](image)
from this deposit (Figure 3). Even the honey-colored gunflint was still firmly fixed between the jaws of the hammer.

Below these colonial-period layers we also found evidence for both seasonal European fishers and Native Beothuk. Initially, this consisted of the occasional piece of Breton coarse earthenware, Portuguese redware or a scattered flake of local Drook formation chert. However as excavations proceeded west upon land formerly owned by Mrs. Lizzie Costello (designated as Area B), evidence for this occupation became more prevalent. At this point we tested other parts of the property to determine the extent of these deposits and if any were associated with the sixteenth- and seventeenth-century occupation layers encountered at the west end of Area B in the mid-1990s. This work could potentially provide the added bonus of exposing more of the cobblestone street that bisected the early village of Avalon, likewise discovered at Area B in 1995.

We were not disappointed in these efforts; not only were additional sections of the cobblestone street revealed but several pre-colonial deposits in Area B were at the same depth and stratigraphic position as those found back to the east. Based on this information, it appears the area underneath the Costello property was a prime location for occupation by seasonal fishermen and the Beothuk. Excavations further suggest that this area was once a sheltered cove with a sandy beach. The work conducted in 2009 uncovered hundreds of chert flakes, along with several bifaces and projectile points (Figure 4). Sixteenth-century European ceramics and iron fragments likewise number in the hundreds. The 2010 excavations will coincide with research conducted by graduate student Jennifer Comeau, whose focus will be to learn more about these early occupations through the examination of ceramics, faunal remains and botanical material.

As the 2009 field season progressed, we were able to explore other areas of the site including portions of the original defenses at

Figure 3 Gunlock firing mechanism from eighteenth-century context (Gaulton)
Avalon built under the leadership of the first governor, Edward Wynne. Previous investigations (between 1995-2000) revealed a substantial defensive ditch composed of stone scarp, counterscarp, and an earth and stone rampart that defined the eastern edge of the early settlement. This year, test trenches were placed on the hill to the south and southeast of the earlier excavation area in order to locate further evidence of these defensive works. The test units encountered a ditch feature with a roughly north-south orientation just to the east of an earthen mound believed to be a Calvert-period gun emplacement (Tuck 1993). The ditch measured approximately 4.5 meters wide with a maximum depth reaching 90cm below naturally deposited subsoil (Figure 5). This feature is clearly a continuation of the previously excavated ditch to the north and must jog out to the east somewhere in the unexcavated portion between the two sections. Unlike the excavations in previous years, almost no cultural material was found within the fill of the ditch save for a small caliber cannonball likely related to one of the “3. Peces of Ordnance” requested by Wynne in 1622, possibly a “Saker” which would have used shot consistent with this find (Cell 1982:257).

Another section of defensive ditch, this one much shallower, was also found south of the earthen mound/gun emplacement in a location previously designated as Area E. This is the location where a series of postmolds spaced eight feet apart and oriented east-west was discovered in 1993 (Tuck 1993:308-9). It is believed that the posts may represent a section of palizado built by Wynne and the colonists in 1622, and which he describes as made up of “post and rayle seuen foote high, sharpened in the toppe, the tree being pitched vpright and fastened with spikes and nayles” (Cell 1982:197). The shallow ditch uncovered in 2009 was immediately south of this line of posts and essentially devoid of artifacts with one notable exception - a pipe bowl stylistically dating from the first half of the seventeenth century. With the posi-
tive results of this field season, next year’s excavations will continue to investigate the defensive structures, particularly the shallow ditch and palisade, in order to define the extent of the southern edge of the Calvert-period settlement. This defensive ditch, along with a palisade and gun emplacements (likely at all corners of the settlement) served to define the shape of the early colony. By exposing the location and construction of these protective structures we will develop a much better understanding of the initial design and subsequent spread of the seventeenth-century settlement.

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Newfoundland and Labrador has two amazing UNESCO World Heritage Sites, at L’Anse aux Meadows National Historic Site and Gros Morne National Park. When the Federal Government released its Tentative List for World Heritage Sites in 2004, we gained the potential to double that number, with the inclusion of the Precambrian fossil deposits at Mistaken Point and the 16th-century Basque whaling site at Red Bay.

Archaeological evidence of 16th-century whaling activity at Red Bay and several other locations in southern Labrador was first discovered during an expedition organized by Selma Barkham in 1977. Barkham had spent several years studying archival material in the Basque Country and other areas of Spain related to this little-known aspect of Canadian history. The following year Dr. J.A. Tuck of Memorial University of Newfoundland began terrestrial excavations at Red Bay that would continue until 1992. Late in the summer of 1978, underwater archaeologists from Parks Canada found the remains of a whaling galleon that they believe to be the San Juan – a vessel lost during a storm at Red Bay in the fall of 1565. The ship was excavated, dismantled, recorded in great detail and reburied on site between 1979 and 1985. Intensive study, both archival and archaeological, relating to Red Bay and 16th-century Basque whaling in Labrador has revealed a clear picture of this very significant part of our history.

In recognition of its significance to the history of Newfoundland and Labrador and of Canada, Red Bay was declared a Provincial Historic Site in 1978 and a National Historic Site in 1979. The opportunity now exists to have Red Bay recognized for its global significance as well. In order to achieve the World Heritage designation, a lengthy dossier is required that documents the history of the site, justifies the reasons why Red Bay National Historic Site is considered to be globally significant and outlines the management practices in place to ensure the perpetual care and protection of the site should it be inscribed on the World Heritage List. The compilation of the material for this file is being undertaken by a group of dedicated stakeholders from the local area, and from across Canada. Led by Parks Canada and guided by community members, regional partners, historians, archaeologists and researchers, this process seeks to bring together the knowledge, research and expertise accumulated through more than thirty years of
study in a document that showcases Red Bay National Historic Site’s unique historic status in the world.

Since the 1980s, the 16th-century Basque whaling site at Red Bay has been at the centre of the development of the tourism industry in the Labrador Straits region, and it continues to be the main attraction in the area. Those involved in the regional tourism industry are therefore supportive of the World Heritage nomination for Red Bay. An integrated regional approach to the nomination process has been taken, involving representatives from various community, economic development and tourism organizations. Since a World Heritage designation for Red Bay National Historic Site would raise the profile of the site, in turn benefiting the tourism industry of the region as well as the larger Labrador tourism industry, all major stakeholders in the area are working together towards a shared vision and a common goal.

The management of archaeological resources at Red Bay is shared by the Town of Red Bay, the Provincial Archaeology Office and Parks Canada. This three-way partnership is strongly committed to the long-term care and conservation of these resources, and will be integral to the success of the World Heritage nomination. In fact, partnerships and community involvement have always been important at Red Bay National Historic Site. From the participation of many local residents in archaeological excavation and research to the joint tourism and interpretation initiatives offered today, Parks Canada and the people of the region have worked to build a world-class attraction, presenting the unique history of the site to visitors from around the world while protecting it for generations to come. The collective knowledge and experience gained over the years has been invaluable to the ongoing protection and management of the archaeological resources at Red Bay. The commitment of the community to the success of the nomination bid has been evident from the very beginning. Community members have come together to discuss all aspects of the nomination process, from the core values of the site to the proposed boundary of the property to be nominated. They have been eager to sign a community declaration that recognizes the value of the 16th-century whaling site and expresses support for the World Heritage nomination. In addition, community volunteers have recently assisted with the stabilization of several archaeological features that required attention. Support and involvement such as this from community members will continue to be invaluable to the future monitoring and protection of the archaeological resources at Red Bay. We look forward to a successful nomination process ahead, so that we can connect the hearts and minds of people from around the world to this unique site here at home.
During the 2009 phase of the Baccalieu Trail Archaeology Project we conducted excavations at three sites: New Perlican 3 (ClAi-4), Dildo Island (CjAj-2) and Cupids (CjAh-13).

**New Perlican 3 (ClAi-4)**

Between May 12 and June 18 our crew spent four weeks (20 days) conducting excavations in Area E at New Perlican 3 also known as the Hefford Plantation. This site, discovered in 2001, is believed to be the plantation first recorded as being occupied by William Hefford and his family in 1675. Area E is located at the north end of the site and on the southern edge of a meadow that extends north towards the salt water for several hundred metres. This was the first area we tested during our 2001 survey. In 2004 we dug a 1m x 3m trench in Area E which revealed a 20cm thick cultural deposit beneath a roughly 35cm thick plough zone (Gilbert 2003a, 2006c).

Area E seemed like a good place to have erected a building and to determine if this was the case, in 2007 we established two trenches there. The first trench (Operation 19) was 1m wide and 8m long and ran from east to west. The second trench (Operation 20) was 1m wide and 9m long from north to south and cut across Operation 19 extending 4m north and 4m south from it. (Gilbert 2008) In 2009 we returned to Area E and expanded on this excavation opening two 2m x 2m units (Operations 21 and 22). Operation 21 was located immediately east of Operation 20 and north of Operation 19 and Operation 22 was located immediately east of Operation 20 and south of Operation 19.

Since excavations began in Area E we have recovered approximately 6500 artifacts from this part of the site. These artifacts range in date from the mid-17th century to the early 20th century. However, the vast majority are from the period between roughly 1675 and 1760. A detailed analysis of this material has yet to be completed. However, the majority of it appears to be domestic material. Of the ceramics recovered, a high proportion are from the Verwood region in Dorset, England. These
include both the more common lead glazed vessels and the examples of brown manganese glazed vessels (Draper 2002). This no doubt reflects the close cultural and trade connects that once existed between that part of England and the south side of Trinity Bay. Among the evidence for a mid-18th century presence in the area are a number of fragments of English salt-glaze stoneware.

In addition to the artifacts, a considerable amount of faunal material was recovered from Area E including a high proportion of jaw fragments and teeth. An analysis of this material has yet to be conducted but jaw fragments and teeth from cows and pigs are clearly present in good late 17th and/or early 18th century context. Given its location and the nature of the faunal remains, it appears that Area E was used, among other things, as a convenient place to butcher animals.

Despite out best efforts, aside from a single post hole, no features were uncovered to indicate the presence of a building in this area. However, literally hundreds of wrought iron nails were found suggesting that some sort of structure must have stood either within the area of our excavation or somewhere close by. If a structure such as a bier or small outbuilding was located here in the late 17th and/or early 18th century it is possible that it may have left little trace of its presence other than nails.

As mentioned above, analysis of the material from Area E is in the very early stages. However, a detailed analysis of the artifactual and faunal material recovered from this component of the site has the potential to answer a number of important questions about the late 17th and early 18th century occupation of the Hefford Plantation.

**Dildo Island (CJAJ-2)**

Between June 19 and July 8, 2009 we spent eight days working on Dildo Island. In 2008 we uncovered a Recent Indian hearth in Area E (Area E, Hearth 1). The hearth was mapped and photographed that year but not excavated (Gilbert 2009). Our main goal in
2009 was to excavate this hearth. As with the Recent Indian hearth we dug in Area C in 2004 (Area C, Hearth 1), we planned to reconstruct the Area E hearth after excavation so that it could be used for interpretation. To facilitate this, the large to medium sized stones in the hearth were numbered and their location marked on the site map. Then the hearth, which measured roughly 3 metres north to south by 2.5 metres east to west at its widest point, was divided into three 1m wide sections running from east to west. The feature and the underlying cultural deposit were dug one section at a time, starting with the middle section, and each section was reconstructed before removing the next. This provided us with more control over the shape and contours of the hearth and allowed for a more accurate reconstruction.

Hearth 1 in Area E was clearly created towards the end of the occupation of this part of the island. The uppermost level in Area E consists of a 7cm thick layer of forest humus totally devoid of artifacts and Hearth 1 was located immediately below this humus layer. The hearth we dug in Area C had produced 922 fragments of calcined bone, numerous charcoal samples, a number of diagnostic artifacts, and thousands of flakes. We were hoping that the hearth in Area E would prove equally as productive but it did not. The hearth was fairly thin, measuring only 6 to 7cm thick at its thickest, and produced just a few small fragments of calcined bone, some charcoal, and some small to medium sized flakes. Around the edges of the hearth we found a number of grease stains and dabs of red and yellow ochre paint.

Despite the lack of diagnostic artifacts, there is evidence to suggest that Hearth 1 was of Little Passage/Beothuk origin and dated to the early historic period. The flakes recovered from the hearth were all of grey chert. almost identical to those found at the Little Passage/Beothuk site at Russell’s Point five miles to the south, and totally unlike the rhyolite that was used by the Recent Indian people who occupied Area C just 40 metres to the north of Area E sometime around AD800 and the patinated cherts use by the Dorset people who occupied the Island between about AD 70 and AD 720 (Gilbert 2002: 68-88; Gilbert 2003b:21, 23)

A cultural deposit, consisting of grey-brown clay, extended down below the base of the hearth for another 19cm indicating that the site had been in use for a long time before Hearth 1 was created. This deposit produced fire-cracked rock, fragments of red and yellow ochre, flakes and a scattering of artifacts. The flakes from this deposit were mostly of the same grey chert found in the hearth but there were also some red chert and black chert flakes. These too are typical of the lithic material found at Russell’s Point. A number of biface fragments were also recovered along with a linear flake made of the same blue chert. While it is hard to assign a date to the biface fragments, the linear flake is also similar to examples recovered from Russell’s Point (Gilbert 2002: 68-88).

Most telling of all, this deposit produced several European artifacts. Directly below the hearth we found two pieces of iron, a fragment of tin-glazed earthenware, and a single clay pipestem. Unless these items were deposited as the result of some type of disturbance, Hearth 1 must have been in use during the post-contact period. This conclusion would seem to be supported by the discovery of a tiny blue trade bead next to the hearth in 2008 (Gilbert 2009).

Below the level of Hearth 1 and just a few centimeters to the east of the north end of it, we uncovered an elliptical concentration of fire-cracked rock measuring 52 cm in diameter that appeared to be a second smaller hearth clearly predating Hearth 1. This feature, designated Area E, Hearth 2, was mapped, photographed and excavated. Unfortunately it produced only a few small grey chert flakes.

Since it was first discovered in 2007, a
total of 33 square metres have been excavated in Area E. This includes the hearth excavation described above and an area extending east from the hearth for seven metres. This entire area has produced cultural material in the form of lithics, fire-cracked rock, and red and yellow ochre. A detailed analysis of the material recovered from Area E has yet to be conducted. However, both the types of stone tools found at the site and the raw materials used to make these tools suggest a long period of use ranging from perhaps as early as circa AD800 up to the early historic period. However, while the area appears to have been in use for a long time, the relatively thin concentration of lithic material suggests that the Recent Indian presence was probably somewhat transitory. Certainly Area E has produced nothing like the dense concentrations of lithic material found at Russell’s Point which served as a fall and winter base camp for the Beothuk and their ancestors for over 600 years or Hearth 1 in Area C which appears to have been used intensively over a number of years sometime between AD780 and AD820 (Gilbert 2002; 2006a).

When Henry Crout visited the Beothuk camp on Dildo Island in July 1613, he reported that the people in Savage Bay (Dildo Arm) were busy collecting “egges and birds [to] dry for ther wintter” (Mi X 1/24). Perhaps this is what Area E was mainly used for during the 800 or so years that Recent Indian people occupied the island. The location next to the brook might have facilitated the boiling and processing of large numbers of birds eggs and such an activity would not have produced the same amount of lithic and faunal material one would expect to find at a hunting or base camp. The relative distributions of Little Passage/Beothuk material and older Recent Indian material on the island does seem to indicate a shift in focus over the period of Recent Indian occupation. Whereas the lithic and faunal material recovered from Area C indicates a fairly intensive occupation during the early Recent Indian period (circa AD800) focusing on seals, birds and possible salmon, the later Little Passage/Beothuk occupation seems to have been much more transitory and may have focused more on the harvesting of birds and bird eggs over a relatively short period each year.

**Cupids (Cjah-13)**

Half of our crew began field work in Cupids on June 22. On July 9 they were joined by the rest of the crew and field work continued at the Cupids site until November 13. Our efforts at Cupids during 2009 focused on both excavation and site development work. Excavations concentrated on three areas.

**Shallow Pit (Operation 77)**

When we expanded the excavation southwest of the dwelling house in 2002 we discovered part of a shallow (30cm deep), rubble-filled pit. In 2005 we expanded the excavation farther south and found that this pit was 3.6m (11 ft 9in) wide from north to south (Gilbert 2006b). In 2009 we extended the excavation west to determine the length of the pit. A 1m wide unit (Operation 77) was established extending for 6m from north to south immediately west of that portion of the pit that had already been excavated. This revealed that the pit measured 4.8m (15ft 9in) long from east to west.

It seemed clear that this pit, whatever its purpose, had been dug early in the 17th century and filled in shortly after it was dug. It produced very few artifacts and those that could be dated were all clearly from the first half of the 17th century. These included a pipe stem with an 8/64 bore diameter, several fragments of Werra slipware made in Germany sometime between 1590 and 1630, and an early 17th century pewter button. Indeed, the very lack of artifacts in the pit suggested that it was probably dug and filled in at an early date. Within a year or so after 1610 there must have been cultural material scattered over much of the site and it is hard to imagine a pit being dug and filled back in so near the dwelling house without a fair bit of material ending up in it. Much of the rubble in the pit consisted of frag-
ments of seventeenth-century brick some of which had been charred on one side as if they once formed part of a chimney or firebox. One suggestion made by a visitor to the site was that this may have been a ‘borrow pit’ dug simply to acquire soil or clay needed for construction or terracing elsewhere on the site and then filled in with rubble debris from the construction (Eric Klingelhofer: pers com). However, there is another explanation.

We know from John Guy’s second letter, written on May 16, 1611, that the first dwelling house and storehouse at the plantation were finished “about the first of December” 1610 (Quinn 1979:148). In his first letter, written on October 6, 1610, shortly before the ship that brought the colonists left for England, John Guy states that his party had made “safe places for [our provisions] and ourselves to shroude vs in untill our house could [be] builde...” (Cell 1982:61). So, there was a period of almost two months between the time the ship left to return for England and the completion of the dwelling house during which the colonists were housed in temporary shelters. It may well be that this shallow pit was one of those temporary shelters. A rudimentary pit house, the earth from the pit may have been piled up along the edges to create a low, earthen wall over which might have been placed a crude wooden frame to support an improvised roof, perhaps of cloth or canvas ‘to shroude” them until they had more permanent accommodations. If this is the case, then this shallow pit marks the location of one of the first English structures in North America.

Western side of the Enclosure (Operations 78 & 79)

In early September 2008 the Provincial Government acquired the property on which the western most portion of the site is located and on September 15, 2008 we were given permission to begin excavations on this property. By October 20, 2008 we had uncovered an 11m (36ft) long section of the base of an 81cm (2ft 8in) wide stone wall extending from east to
west across the property. A 6.4m (15ft) section of this wall had been uncovered a number of years earlier immediately east of this new section making the total length of wall uncovered 15.6m (51ft). There can be little doubt that this wall is part of the north wall of the enclosure erected around the plantation (Gilbert 2009). The wall ended just a few feet east of the edge of the terrace on which the site is located and it seemed logical to assume that if there was a western wall, it would be located south of the western terminus of the north wall. With this in mind in 2009 a 4m x 4m area (Operation 78) was opened 6m south of the western end of the wall. This was later extended north for another 2m creating a second unit (Operation 79). Although it is possible that the western wall was built of stone, it seemed more likely that it would have been a palisade constructed of posts, rails and pales and that the only surviving evidence of it would be the holes dug to accommodate the posts.

A stone footing was uncovered in Operation 78 but this proved to be part of a 19th century structure probably erected by the Spracklin family. Beneath this, in the southern half of the operation, we uncovered one large post hole that may have been part of a palisade wall. However, it will be necessary to open up a larger area and look for more post holes before we can determine if this is correct.

**Possible Gun Battery (Operations 80-86)**

Twenty-nine square meters (operations 80-86) were opened up to the north of the north defensive wall discovered the previous year. Here, approximately 38ft (11.58m) north of that wall we uncovered the remains of another 17th century structure. When the Province acquired the property this area was covered by a stand of small-to-medium-sized aspen trees. Most of these trees were removed during the fall of 2008 and during the summer of 2009 the low brush was cleared away and the area cleaned up to reveal a low mound measuring roughly 25 ½ ft (7.8m) from east to west by 31 ft (10.4m) from north to south. When we probed this area with a chaining pin we discovered that the mound consisted of a thin layer of silt over a rubble deposit.

Excavations began at the north end of the mound on September 17 and, although site development work took us away from digging for an extended period of time, by November 13 we had uncovered the base of an 18 inch (46cm) wide stone wall. The eastern-most portion of this wall has yet to be exposed but the section that is exposed runs from east to west across the site for 21ft (6.4m). Another wall has also been found adjoining the western end of the east-west wall and extending south from it for an as yet unknown distance.

The rubble accumulation that formed the mound clearly dates from the early 19th century but the deposits that accumulated beneath the rubble and against the base of the wall are obviously of 17th century origin indicating that this is a 17th century structure that either collapsed or was dismantled sometime in the early 19th century. As appears to have been the case with the northern defensive wall, whatever part of the structure reminded above ground in the early 1800s was probably dismantled by the Spracklin family in the search for usable building stone.

At this point it is too early to say what this structure was used for. However, its location, outside the enclosure and overlooking the harbour with a clear view to the west, north and east, suggests that it may have played a role in the defense of the settlement. In his letter dated May 16, 1611, John Guy reports that the colonists had erected three cannon upon a platform “to command the Harboroughs” and it seems unlikely that any other type of structure would have been placed in such a vulnerable position (Quinn 1979:148). Excavations in this area will resume in June of 2010.

**Survey Work**

Various developments planned for the site and elsewhere in the community for 2010 meant that we had to devote a certain amount of time to archaeological survey work during
2009. The Province had negotiated the purchase of a part of Roger Norman’s property on the eastern side of the site and one of the conditions of the sale was that Mr. Norman be permitted a right-of-way along the eastern edge of the property. As a result, some of our crew spent a week testing in this area and determined that the right of way would not endanger any archaeological resources.

Plans for the Cupids 400 celebrations include the development of Pointe Beach, the barachois beach that forms the north side of the Salt Water Pond at the bottom of the Cupids harbour. To determine if there were any archaeological resources in this area that might be endangered by such a development, part of the crew spent five days testing on Pointe beach. Evidence of a 17th century presence, almost certainly related to the salting and drying of cod, was found there beneath approximately 40cm of gravel fill. However, it was determined that the proposed development posed no threat to these resources.

**The Will of James Hill, Cupids Cove 1674**

One of the most exciting discoveries made in 2009 is not an archaeological discovery at all although it has great significance for our work at Cupids. While searching the British National Archives website for documents related to Newfoundland about two years ago, an amateur genealogist from Ontario named Susan Snelgrove came across a document dated 1674 which she transcribed and posted on several genealogical websites including the Newfoundland Grand Banks site and the Newfoundland Genweb site along with numerous other documents that she has found and transcribed over the last ten or so years. I only found out about the document on December 2, 2009.

It is the last will and testament of “Master James Hill inhabitant of Cupits Cove” dated March 4, 1674 (Prob 11/349). It is brief but at the same provides us with some vital new information about Cupids in the seventeenth century. In it Hill designates “Thomas Butler now of Porta Grave” his executor and bequeaths to Butler “All my Goods within and about the said house of Cupits Cove”.

This is not the first time the name Hill appears in relation to Cupids. For almost twenty years now I have been trying to determine who the Master Hill was that was mentioned by both Henry Crout and Thomas Rowley. I first came across him in early 1991 when I read Thomas Rowley’s letter from September 13, 1619 in which he says that he and Master Hill were planning to go from Cupids to Trinity Bay “about 16 days hence” to trade with the Beothuk. In another letter, dated October 16, 1619, Rowley states that Master Hill is leaving next week for Trinity Bay (Gilbert 1992: 7). In
a letter dated February 8, 1620, Rowley states that if he can not hire a carpenter to help in building his house in New Perlican, “we shall make means without with master hills carpenters” (Mi X 1/53). The earliest reference to a Master Hill being at Cupids that I am aware of comes from 1616 when Henry Crout reported that he “received from Master hyll from 10 May to the 4 Iune ½ hundred of dry fish” (Mi x 1/38).

For the past fifteen years we have been digging the site established by John Guy at Cupids in 1610 and the more we dig the more obvious it becomes that the site was occupied throughout most of the seventeenth century (Gilbert 2003c:130-135). However, although we knew the names of quite a few of the earliest settlers, we could not say with any degree of certainty who the people were who continued to live there after the first ten or fifteen years of settlement. Now one of those settlers has emerged from the shadows: “Master James Hill inhabitant of Cupits”. It is possible that the James Hill who had his last will and testament drawn up at Cupids on March 4, 1674 was the same Master Hill who provided salt fish to Henry Crout and made plans with Rowley to trade with the Beothuk. If so he would probably have been nearly 80 years of age. If this is not the same man, then chances are very good that he is a descendent of the original Master Hill.

The connection with Thomas Butler is also very interesting. We know from the first Newfoundland census conducted in 1675, that Butler was living in Port de Grave at the time but had land and kept cattle in Cupids. The fact that Hill refers to Butler as being “now of Porta Grave”, appoints him his executor, and leaves him all his goods implies a close relationship and suggests that Butler may have formerly lived in Cupids. I have wondered for a long time how far back Thomas Butler’s links with Cupids go and if he may have been a descendent of the Samuel Butler who was living in Cupids in 1612 (Gilbert 2003c:150).

It is also interesting that Hill bequeaths Butler “all my Goods within and without the said house of Cupits Cove” but not the house itself indicating that Hill probably did not own the house. If he did not, who did? Did it belong to Thomas Butler or did Hill still think of it as belonging to one or more of the early investors in the Newfoundland Company? As always in the case of discoveries such as this, some questions are answered and more are raised.

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The 2009 Bird Cove – Pond Cove field season had three major goals: to further assess the condition of historic features; to take professional photographs of archaeological sites, people and landscapes; and to implement a newly designed public archaeology programs. Each is discussed in turn below.

Before implementing our recently devised 10 year plan which starts in 2010, we devoted 2009 to small scale yet important parts of our project which involved visiting historic structures and assessing their state of preservation. These ranged from French bread ovens to the cairn Cook erected in our region in 1764. This past summer we hired professional photographer, Dennis Minty, who will represent Canada at China’s World Expo, to photograph all the historic features in our area. In addition, we photographed archaeological sites in their natural states. We travelled up the coast from Bird Cove to Flower’s Cove to capture images of traditional Newfoundland activities, such as seal skin boot making, hide tanning, traditional gardening, as well as prominent elders in this region. Finally, we went to homes throughout Bird Cove-Plum Point to digitize black and white photos taken between 1900-1950. Elder Elva Spence of Plum Point served as the most lucrative source for these photos having hundreds of images which recorded the technological, religious, economical, and medical aspects as well as fashion of this region.

For the community, and the province as a whole, we offered a week of no limits and new frontiers in an expedition designed to encourage young women to explore the natural and cultural world while acquiring skills to develop an empowering future. We called it the FINCESS program (Females in Natural Earth and Social Science). This program was designed for young females between the ages of 15-18 and had an enrolment of five individuals. This five-day inspiring yet fun-filled program taught females about archaeology and earth science as well as challenged their physical, intellectual, and social abilities. The diverse program gave them early training in archaeology, understanding of geology in northern environments, plant identification skills, as well as traditional plant use knowledge and most importantly got them excited about field research and social-cultural issues. Workshops on creatively
capturing the breathtaking local landscape were provided by Dennis and his wife Antje Springmann, and a sample of the each girl’s photographs was displayed on a 16 x 9 foot screen for a community viewing. All activity was set to the back drop of fun hikes and field trips over the panoramic Dog Peninsula as well as boat rides through sheltered bays, and coves of the coastline. Evening programs included social activities such as storytelling sessions and music led by the prized pearl of Newfoundland song, Anita Best.
Hartery with the young women of the FINES program at Captain Cook's Cairn (©Dennis Minty) (Hartery)
Early Morning and Uncle Garland's Old Fishing Shed in Plum Point (©Dennis Minty) (Hartery)
This field season saw a number of organic material type objects coming into the laboratory along with the usual large numbers of ferrous metals and the miscellaneous modern materials being generated through Dr. Deal’s Aviation Archaeology project. One beautiful project has been the work on a soapstone bowl excavated by Dr. Rankin. The bowl is approximately 48cm X 38cm X 9 cm and is carved out of green/blue soapstone. The rim is decorated suggesting to Dr. Rankin an early contact period date of the 16th century. Overall there was nothing out of the ordinary this season however I would briefly like to discuss the use of consolidants in the conservation of archaeological conservation. Generally for this field of conservation less is best in terms of chemical use as many of the artefacts are used for scientific analysis and any material you add becomes part of your analytical data set. However there are times when a consolidant must be used in order for the object to survive for the purpose of study and exhibition.

**The Case of Consolidant Use for Soapstone, Bone Archaeological Objects and Wood objects**

For archaeological conservation consolidants are often applied as without some sort of support objects would crumble loosing their shape and evidence of purpose and use. For buried objects the deteriorating effects of the geological environment can render both the organic and inorganic objects structurally unstable. Here in Newfoundland and Labrador where the soil is considered wet acidic peat to loamy gravel, deterioration for terrestrial archaeological objects is extensive. The cold climate allows for the preservation of a high percentage of the organic record which normally would not be preserved. These objects are however generally considered fragile. In this case many are now being sampled for the purpose of scientific analysis. For these objects consolidation is not recommended. However for those objects with the potential for research and exhibit the need to consolidate is great. Two scenarios will be discussed here with the purpose of showing researchers what materials currently work best and are approved by the greater conservation community. These include a soapstone bowl, two wooden dolls and a bone tool.

From a conservation perspective one of our tenants of the profession is to use materials with which the composition is known, inert and will not interfere with scientific analysis or interpretation of the object. For archaeologists working in the area of biological or environmental archaeology the need to preserve the environmental conditions of excavation is paramount. Therefore the use of conservation approved materials is important. This approach excludes the use of nail polish and white school glue for the numbering and repairing of objects either in the field or laboratory. Though it is often easiest to use materials readily available if one intends to use their objects for scientific research they should avoid materials with unknown ingredients. Conservation grade materials can be provided to the archaeological team by the conservator hired for the project. Within the context of Newfoundland and Labrador no permit to excavate is granted without a conservator working with the team.

One disadvantage for applying conservation grade chemicals for archaeological objects is the difficulty in purchasing. Much of what we use to treat objects comes under the dangerous goods category and therefore is not usually available to small individual companies. This sort of clearance is generally only granted to universities and government institutions. Within Newfoundland and Labrador the con-
servators at the Rooms Provincial Museum and Memorial University have helped and will continue to help researchers outside of these facilities obtain chemicals which fall into this category.

**Recommended Consolidants and Adhesives:** Rhoplex Ac-33 and B72 are the adhesives used for the above artefacts. Rhoplex Ac-33 is typically used as a consolidant but also serves as an adhesive for friable objects. Rhoplex Ac-33 is water soluble. The Acryloid B72 (ethyl methacrylate copolymer) is a solvent based adhesive with acetone being the common solvent however ethanol can also be used. Polyethylene Glycol (PEG) has been successfully used in the Memorial University Laboratory for the past 20 some years. This consolidant is best used for wood but can also be used for bone, leather and wool textile.

**Recommended Fill Material:** For fragile organic artefacts which are going to be used for exhibit purpose structural stability is necessary. For this fill materials will be applied. One material which has been used for wood fills but which is suitable for both soapstone and bone are microballoons. Generally we use phenolic microballoons for archaeological materials but glass microballoons are also available. Consolidants used for archaeological wood have varied somewhat over the past few decades but it is generally accepted that polyethylene glycol (PEG) is the better choice. One aspect of this treatment that is not widely known or reported is the length of treatment time required for adequate penetration of the consolidant. For a consolidant to work it must fully support the structure of the material being conserved. Polyethylene glycol is manufactured in various molecular weights for the purpose of allowing penetration (for the lower molecular weights) and greater support (with the higher molecular weights). Unless you take a cross-section slice of your object and subject it to some sort of scientific analysis that will identify the areas where the consolidant has travelled it is difficult to predict where the consolidant has penetrated as the burial environment has randomly created an object of compromised physical integrity. Generally speaking based on some 20 years of treating organic artefacts with PEG, the standard one year treatment is not long enough. One should note that the treatment was developed working with oak barrel staves. This object type does not represent most of the object types that one encounters in...
an archaeological assemblage for either prehistoric or historic excavations. The longer you can keep an object in PEG the better the outcome.

Below are images of a soapstone bowl which has been repaired with an adhesive, filled in areas and consolidated, wooden dolls which have been consolidated and a bone tool which has been consolidated and repaired with an adhesive.

The soapstone bowl has had minimum conservation as it is not necessary at this point to fully restore this object. Support measures to allow the object to be researched have included adhesion using acryloid B72 dissolved in acetone, consolidated with Rhoplex Ac-33 and filled with a B72/microballoon mixture. Note the image of an old repair, possibly contemporaneous with manufacture, shows a repair using an iron staple. The B72 adhesive used for the bowl sides is reversible. The base of the bowl was extremely fragile and therefore the choice of consolidation was made as it would be impossible to research this object otherwise. Though conservators indicate that consolidation procedures are reversible that is only to a point. In the case of the bowl base this will never be totally reversible.

The wooden dolls were consolidated with an aqueous 20% PEG 400. Without this consolidant these dolls would warp and crack as they dried after excavation. This consolidant is also not totally reversible. In this case scientific analysis of the material was not of interest and therefore reversibility is not an issue.

The bone tool has been adhered for the purpose of research. This required stabilizing the bone using Rhoplex Ac-33. This consolidant is also not reversible. Again as in the above case scientific analysis is not an issue and therefore reversibility is not an issue. Fragments were adhered using B72 and a B72/microballoon mixture.

Soapstone bowl showing a repair using an iron staple (Mathias)

Soapstone bowl excavated by Dr. Rankin (Mathias)
Wood doll, IgCx-3:4934 after treatment with PEG 400 excavated by Dr. Whitridge (Mathias)

IgCx-3:5581, wood doll, after PEG 400 treatment, excavated by Dr. Whitridge (Mathias)
2009 was a busy year in the Archaeology and Ethnology Unit for Collections work and for exhibit curation.

There were 20 individual submissions of collections from archaeologists, representing over 35,000 artifacts and flakes from 147 sites.

Eight volunteers throughout the year provided over 275 hours of work to unpack/sort the majority of these collections. They are now largely available for access by researchers and staff.

Artifacts from these and other collections continue to be used in exhibits, both here at The Rooms and in community museums throughout the province. We facilitated over 20 artifact loans in 2009, including one to the Bank of Canada’s Currency Museum (coins from Ferryland) and one to the National Art Gallery of Canada (Beothuk pendants).

Two in-house exhibits also benefited from regular collections study and artifact loans: “Slicing the Waves, an exhibit on traditional boats”, and “Collecting the North,” an exhibit on the arctic voyaging/specimen collecting of Captain Bob Bartlett. A small exhibit on lithics was also mounted in the foyer of our Level 3 main gallery.

Visiting researchers continue to use the Lab for extended periods, and there were over 190 requests for information, loans, research visits, and photograph use. We also provided K 1-6 school classes with tours of our Lab and storage facilities. Some classes participated in the new K1-6 curriculum-related “Open Minds” program, spending an entire week studying here. For some classes this involved a morning discussing archaeology, doing an exercise in artifact cataloguing and getting a curatorial-led exhibit tour.
Rooms Museum Gallery - from the exhibit “slicing the waves:
Wood working/boat building tools (McAleese)

Portuguese Dory “Cronula” (McAleese)

Labrador Inuit kayak, with sea mammal hunting gear (McAleese)

To access our Archaeology & Ethnology collections for research, and/or to conduct exhibit-related studies, please contact:
Elaine Anton, Collections Manager
Archaeology & Ethnology,
The Rooms Provincial Museum Division,
(709) 757-8076
canton@therooms.ca,
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The Rooms Provincial Museum Division
709 757-8075
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kmcaleese@therooms.ca
2009 marked the Burnside Heritage Foundation Inc.’s (BHF) 20th archaeological field season. Three projects were conducted outside the regular BHF study area in addition to the regular BHF season which ran from July 1 until November 6.

**Permit No. 09.23: Archaeological Survey of Parts of Hall’s Bay’s North Shore**

BHF archaeologist Laurie McLean and Memorial University of Newfoundland archaeology graduate student Harley Brown surveyed parts of Hall’s Bay’s north shore during June 25-29, 2009. This consisted of walking much of the survey area and using a boat to access more isolated sections. Five new sites were identified and three previously known localities were re-visited. Two of the new sites, Butt’s Point (DiBa-08) and Andrew Joe’s Point (DiBa-07), occupy opposite sides of Butts Cove, a small harbour within Indian Brook Arm which contains the mouth to Indian Brook. flakes and Newfoundland settler artifacts were found at both of these sites. flakes were non-diagnostic and in low frequency. Historic materials date to the nineteenth-early twentieth centuries.

Andrew Joe was a well-known Mi’kmaq trapper, meaning that some or all of the settler artifacts at this locality represent a Mi’kmaq occupation. Mi’kmaq began moving into this region during the 1860s. A small Mi’kmaq community existed nearby at Beachy Cove which is now occupied by cottages. Some of the latter are homes remaining from the Mi’kmaq village. Other Mi’kmaq settlements are known historically. A late nineteenth-early twentieth century surveyors’ map owned by the Springdale Heritage Society shows an “Indian Reserve” on the plateau overlooking Beachy Cove.

The survey crew visited the site of a reported Mi’kmaq cemetery overlooking Dock Point which also once accommodated Mi’kmaq residents. Groswater Paleoeskimo material was recovered in a previous archaeological assessment of Dock Point (DiBa-06) (Erwin and LeGrow: 2009). One uprooted fence post and a rotted lumber fragment were the only cultural items found at the alleged cemetery which is clogged with conifers and shrubs. A local heritage group has marked the location and a few other important cultural locations. It was filed as an archaeological site (DiBa-11).

Evidence of historic activity was found at Hamilton’s Place (DiBa-10) and Grassy Point (DiBa-09). Hamilton’s Place consists of a large open meadow with forest now encroaching over its edges. The site overlooks the Hall’s Bay beach by a steep, four-metre high bank. A cut nail, a handmade wrought nail and a clay pipestem were found in test pits dug inside a 6.4 x 2 m rock cluster. A depression suggesting a former root cellar lay 25 metres southwest from the rock cluster. Two sterile pits were dug inside the depression, but two cut nails were found in pits dug outside the possible cellar. Hamilton’s Place is marked with a sign resembling the one erected at the Mi’kmaq cemetery. The Springdale Heritage society’s historic surveyor’s map shows a large tract of land owned by Douglas Hamilton that appears to be this locality.

Hamilton’s Place and many of the archaeological sites described in this report are linked by the Line Road, a historic path that connected Springdale to the Newfoundland interior. A local historian told the author it was used by Mi’kmaq. The road was restored a few years ago by a local heritage group who installed signs at many of the known settlements along the path. The survey team walked the road from Hamilton’s Place to Eaton Point, encountering much bog and sections where the path was not obvious. Weathered,
large-diameter tree stumps were common along the road, indicating past culling of the large trees accessible from the path.

The Grassy Point site (DiBa-09) is located on a wide, grass-covered promontory containing two terraces. It lies within a kilometre southwest from Hamilton’s Place. The first terrace is 1.5 metres above the Hall’s Bay beach and the second terrace rises slightly above this. Grass-covered, extra-wide potato beds are oriented east-west, perpendicular to the point’s long axis. A 3 x 3.3 x 0.6 m deep depression at the inner edge of the first terrace suggests a former root cellar. A sharp-edged piece of clear glass, suggesting a bottle fragment, and cut wood chips were found in black humus in a test pit dug inside the depression. Cut wood fragments were found in a second pit dug within the depression. 25 sterile pits were dug over the two terraces outside the feature, sug-
suggesting activities here were small-scale or erosion has destroyed much of the cultural evidence.

**Re-visited Hall’s Bay Sites**

Eaton Point (DiBa-01), Indian River-1 (DiBa-02) and Dock Point (DiBa-06) were revisited during the Hall’s Bay survey. A Maritime Archaic site previously found in the town of Springdale (DiBa-01) could not be found. Eaton Point is a small area near the southwestern terminus of Hall’s Bay. It is currently occupied by a number of cottages and outbuildings which are expanding northeastwards along the shoreline. The Line Road reconstruction ends at the northeastern end of the community.

Eaton Point juts into Hall’s Bay, offering a wide view of the latter’s southern end. It is bordered by a low eroding bank under a metre high. Beothuk and Dorset Paleoeskimo occupations were previously identified at Eaton Point (Penney 1989:42). The 2009 survey found 12 non-diagnostic lithic items and five fragments of historic pottery from the beach/tidal area just inside the westernmost cabin. Most of the artifacts were waterworn and were found in shallow water.

Indian River-1 (DiBa-02) is located on the south side of a small blunt peninsula extending southwards from Springdale. The site lies on the opposite side of Indian Brook Arm from Andrew Joe’s Point. It was identified as a Dorset Paleoeskimo occupation in 1987. The 2009 examination showed that the site is completely eroded. Two waterworn stone artifacts were found in the tidal zone.

**Permit No. 09.25 Central Bonavista Bay**

The Burnside Heritage Foundation Inc.’s regular study area is a 1400 km² section of Bonavista Bay coastline centered on the community of Burnside. 2009 activities mainly consisted of excavations at the Beaches (DeAk-1), an eroding multi-component site located 13 km north of Burnside, and at Sailor South (DeAj-05), a Dorset Paleoeskimo site in the village of Salvage. Erosion has destroyed 90% of the Beaches, leaving a 4000 m² area containing parts of former Beothuk, earlier Recent Indian and Dorset Paleoeskimo occupations.

466 stone artifacts were salvaged from a 60 metre long section of the site’s eroding south bank in 2009. Diagnostic items include a Paleoeskimo microblade made on chert and a tip flute spall made on Bloody Bay Cove rhyolite. There were 344 flakes and 41 special flakes, along with 43 non-flakes and 25 waterworn artifacts. 208 objects were made on Bloody Bay Cove rhyolite, obtained in the nearby quarry, while 194 were made on white quartz which occurs within the Beaches harbour. 43 items were made on chert. Quartz crystal, non-Bloody Bay Cove rhyolite, slate and shale were also present.

The rampant erosion of the Beaches has deposited an endless supply of stone artifacts on the beach and the tidal zone bordering the site. 191 lithic items were collected from the surface in 2009. These include 45 flakes and 121 waterworn flakes. A number of large flakes, cores and bifaces were found in the tidal area during low tide. A distal fragment of a Beothuk projectile point, made on chert, was found on the beach near the base of a badly eroding section of bank. This endangered area lies between wooden retaining walls erected by the BHF in 2008 and 2007, indicating the need to protect all of the Beaches’ south border with such a structure.
Sailor South (DeAj-05) Excavations, 2009

Sailor South (DeAj-05) is a Dorset Paleoeskimo site located on the outskirts of the community of Salvage. It lies 40 metres south of the Sailor site (DeAj-01), a multi-component locality that was mostly destroyed by excavation of a gravel pit in the 1950s. The Sailor and Sailor South sites constitute provocative complements to Salvage’s historic significance as a European fishing station and community.

Sailor South was discovered during the 2002 BHF field season and has been excavated most years since then. Field work takes place here on days that are too windy to safely travel in open speed boats to the Beaches, Bloody Bay Cove and other sites lacking overland access. Excavation of 25 m² during 2002-2008 produced 5298 Dorset stone artifacts and 47 items representing historic settlement. A radiocarbon date of 1130 ± 60 BP makes this one of Newfoundland’s more recent Dorset occupations. Stone objects include six endblades, 10 endblade performs and 26 tip flute spalls, indicating that endblade manufacture was an important activity at the site. Endscrapers, microblades and other tools were also present.

Two m² were excavated at Sailor South in 2009, producing 651 stone artifacts. One endblade, 2 endblade preforms an endscraper and seven microblades were present. One of the microblades had been retouched, giving it a stem. Thirteen other stone items were found on the site surface. As in previous years,
Bloody Bay Cove rhyolite is the most common raw material, totalling 317 artifacts/48% of the lithic assemblage. 265 chert objects represent the second most common raw material. Fragments of window pane, refined white earthenware, a clay pipe and roof slate make up the Newfoundland settler assemblage (n = 4).

**Broad Cove Harbour (DeAk-04) Assessment**

The Broad Cove Harbour site (DeAk-04) was identified during the 1989 BHF field season. It lies on a vegetation-covered isthmus separating two harbours on Broad Island, five km north of Burnside. Three cabins have occupied the bar for some time and in 2009, Newfoundland and Labrador’s Provincial Archaeology Office was apprised of a request to replace one of the old structures with a new one. The BHF re-visited Broad Cove Harbour on September 19 to assess the potential impact of building a new cabin on the bar.

Upon landing, the BHF crew found waterworn stone artifacts on the beach running along the east side of the bar. Test pits dug around the northernmost cabin, which was to be demolished and replaced with a new one, revealed a rich cultural area. Expansion of the test area 60 metres south of this cabin produced stone artifacts distributed over much of the bar; including the other two cabins at the opposite end of the isthmus. Thirteen cultural test pits yielded 109 stone artifacts while 35 items were found on the surface. One waterworn endblade was present. Cultural material is distributed over 700 m² at the site and only two sterile pits were dug.

The assemblage was mostly comprised of Bloody Bay Cove rhyolite, n = 99/68.7%. This is not surprising, given the close proximity of the quarry, within a kilometre. The presence of 15 cores of BBC rhyolite, including one especially large example and three with large battered striking platforms, suggests the site's occupants had brought raw material directly from Bloody Bay Cove. The wealth of cultural material at DeAk-04 resulted in the BHF recommending that an alternative location be selected for the requested cabin.

**Bloody Bay Cove Quarry Re-Visits**

A number of trips were made to Bloody Bay Cove for filming a documentary, performing surface analyses and monitoring BHF infrastructure. Surface features were identified at the Bloody Bay Cove Summit (DeAl-09) and Charlie (DeAl-11) sites. Particularly-worked bedrock was noted at both sites and in situ remains of a lithic reduction station was found at the BBC Summit. The latter feature contains large primary flakes and smaller flakes of rhyolite along with granite hammerstones in a discrete cluster on top of bedrock. The artifacts are roughly encircled by a ring of large rhyolite objects. This appears to be man-made although the reasons for doing so are unclear. All of these features present interesting research subjects that can hopefully be tackled in the near future.

**Concluding Unfinished Business In 2009**

Un-catalogued flake bags from previous seasons were processed in the Burnside lab during 2009. 2757 stone artifacts collected at the Charlie site (DeAl-11), in the Bloody Bay Cove quarry, during 2007-08 were catalogued. These include 2404 flakes of BBC rhyolite and 173 special flakes divided into 17 categories. There were 159 cores and one crude biface. Nine granite hammerstones were the only non-rhyolite artifacts present. 312 stone artifacts collected during pre-2009 field work at the Beaches site (DeAk-01) were catalogued in 2009.

**Permit 09.44: Archaeological Survey of the Ramea Islands**

Laurie McLean and Harley Brown, assisted by Ramea resident, Eric Fudge, surveyed six of the largest islands in the Ramea archipelago from September 25-29. Twelve new sites were identified, three of which produced a few non-diagnostic flakes from test pits. A fourth aboriginal site yielded three flakes in a blow-out while pits dug in the surrounding turf were sterile. The Ramea area coast has suffered widespread erosion which may have destroyed
many archaeological sites and large portions of extant localities. A fifth aboriginal site consists of a quartzite outcrop containing evidence for large flakes having been removed.

Two small graveyards were identified on the basis of fallen headstones that had deteriorated to the extent that their inscriptions are not fully legible. Dates could not be read on any of the headstones, but they probably represent late nineteenth-early twentieth century residents as the other historic sites are tentatively placed within this period. The Harbour Island-1 Foundation (CjBi-06) is the stone footing for a former home in a sheltered inlet on Harbour Island. This 6 x 5 metre feature is divided into a number of rooms. Test pits dug inside and outside the feature contained ceramic and glass fragments. A flake and an exhausted core, less than 30 mm long, from one test pit are evidence for a pre-contact or Beothuk presence. Alternatively, the stone artifacts may be remnants of a gun flint.

A six metre-long stone wall found in Eastern Harbour (CjBi-04), on Great Island, also had historic artifacts associated with it. Nineteenth-early twentieth-century ceramics and glass were present in test pits dug on either side of the wall. Another historic site from Eastern Harbour and two from Southwest Island were identified on the basis of historic artifacts with no associated structural remains.

Seven rock features were observed in addition to the aforementioned sites. Two of the features are recent hearths encircled by small boulders. They were sufficiently overgrown to suggest some antiquity, but test pits dug inside them produced modern artifacts in addition to charcoal. Two similar rock circles were tested, but held no charcoal. Three other variably-shaped rock clusters were obviously man-made, but had no associated cultural material. One of these occurred a few metres...
away from Rudder Cove (CjBi-09), which produced a flake from a test pit, but cannot be associated with it.

Permit No. 09.48: Indian Point (Debd-01), Red Indian Lake, Assessment

Newfoundland and Labrador’s Provincial Archaeology Office, in 2009, ruled that a Stage 1 Historic Resource Impact Assessment was required concerning the Department of Environment and Conservation’s planned construction of a Hydro-meteorological (Hydromet) station at Indian Point, Red Indian Lake. BHF archaeologist Laurie McLean drove to Indian Point in October and performed the assessment.

Indian Point (DeBd-01) is a well-known Beothuk and pre-contact site. Logging, fluctuating water levels in Red Indian Lake and landscaping have negatively impacted this site. A surface appraisal of DeBd-01 revealed no artifacts or visible features. The sub-surface assessment consisted of digging 30 test pits within a five metre diameter where the Hydromet station was to be built. Most of the pits were sterile other than seven waterworn stone artifacts occurring in six units. None of the items were diagnostic. Lenses of black humus existed in some pits, but there was no intact culture layer. The assessment indicated the planned installation would not negatively impact historic resources.
In May 2009 Aardvark archaeologists Dr. Barry Gaulton and Steve Mills paid a visit to Frenchman’s Island, at the bottom of Bull Arm, Trinity Bay to document the condition of an archaeological site first investigated there in 1980-81. Frenchman’s Island is a small island connected to the mainland by a narrow tombolo beach. It lies about 1k south of the town of Sunnyside. This is also the Isthmus of Avalon, where Placentia Bay and Trinity Bay are just 5km apart. The location is significant for being the northern entrance to the overland trail between the two bays, a trail used by Aboriginals for thousands of years and probably also the early Europeans who lived in the region. John Guy was the first European to record the trail when, in 1612, he and his men visited the bottom of Bull Arm to trade with the Beothuks. He also describes Frenchman’s Island as the place where he began construction of a trading post (Cell 1982: 72, 76).

Eighty-five years later, in the winter of 1697, Pierre Le Moyne D’Iberville, his troops and their English prisoners spent several months on or near Frenchman’s Island, awaiting the opportunity to bring his prisoners to the French capital of Plaisance in Placentia Bay. At least one scholar speculated that he fortified Frenchman’s Island at that time (Williams 1987: 81-85). In 1980 and 1981 Frenchman’s Island (CIAL-01) was the focus of an intensive excavation by Memorial University archaeologists. They investigated a significant multi-component site dating from the Paleo-Eskimo period to the late-seventeenth century, including a Beothuk habitation (Evans 1981, 1982). While most of Evans’ investigations were on Frenchman’s Island, he also reported testing a structural feature in a cove immediately to the northwest of the Frenchman’s Island site. This “earth-mounded rectangular-walled” foundation had walls up to 1m in height with a center doorway in the side facing the beach. Evans’ testing produced nails, tobacco pipe stems and flakes of European ballast flint (Evans 1981:92).

Our visit to Frenchman’s Island noted that the areas excavated in 1980-81 had grown over to the point where the precise location of the trenches was difficult to discern. Other than minor evidence for looting around the area of the 1980-81 archaeological investigation, the island and its cultural features, namely several man-made pits of an undetermined date or function, appeared to be in good shape.

On our way back to Sunnyside, we looked for the structural feature Evans had recorded in the cove bordering the tombolo beach. We quickly located an earthen foundation in the forest, approximately 12m back from the shore (Figure 1). Although it partially matched the description of the feature discovered by Evans (it had 1m-high walls and a doorway facing the beach), its dimensions were not close to those recorded for Evans’ feature. Whereas Evans recorded his foundation to be 9m by 15m, the foundation we recorded measured 4.5m by 5.5m with a 1.5m high mound of rocks just outside this doorway. The dimensions of the foundations aside, test pits placed in the front of this foundation produced virtually the same variety of artifacts recorded by Evans and his crew. We also found numerous wrought iron nails of varying sizes, tobacco pipe stems, European ceramics (tin-glazed and coarse earthenwares) and hundreds of flakes and cobble fragments from European ballast flint.

We returned to the site on June 5th, accompanied by Ken Reynolds of the Provincial Archaeology Office and Dr. Jim Tuck. Additional test pits were dug and although the artifact count increased, the variety of artifacts
stayed the same. Fortunately, this second trip produced fragments of tobacco pipe bowls which allowed us to tentatively date the feature to the second half of the seventeenth century. The artifacts from the European component of the Frenchman’s Island site also date to this period. Whether the feature identified during this investigation is the same one recorded by Evans in 1980 remains to be seen as the area around this cove was not intensively surveyed. What is certain is that the artifact assemblages are virtually identical.

Preliminary analysis of the artifacts indicates this site represents a European habitation during the second half of the seventeenth century, within the early period of English settlement in Trinity Bay. The structural evidence suggests considerable effort was put into a foundation for a structure of modest size, yet sturdy construction. The abundance of nails to the east of the earthen foundation suggests there was a wooden component to this structure, possibly the main part of the house. This dwelling was not a mere tilt or similarly temporary structure. As to its function, it is speculated that it was a Planter’s winter house possibly with root cellar or similar addition on its west side.

In historic times, planter families generally lived in the outer regions of bays during the warmer months to be close to the fishing ground and would move deep into the bays for the winter months. During these months families would trap and hunt animals for fur and food and also cut trees for fuel and also for the next fishing season. Such transhumance was clearly related to the ecology of coastal Newfoundland. Environmental conditions deep in the bays were not as harsh as those in the more exposed regions in the outer bays. Winter housing in Newfoundland has been well documented for the nineteenth century with some references dating to 1739 (Smith 1987:5-6). The practice was common in most of the island until the mid-nineteenth century, continuing for some time later in the northern regions and Labrador (Smith 1995:83). What is less clear is when this practice began. That is where this discovery in Sunnyside becomes important. If this is indeed the site of a seventeenth-century winter house, it would be the earliest physical evidence for such transhumance in the province. Therefore, this site is important to our understanding of this integral part of European settlement in Newfoundland and Labrador.

Coincidently, Steve Mills spent an afternoon in July test pitting at Stock Cove, some 12k further out Bull Arm. Stock Cove (CkAl-03) was the site of intensive habitation during the Paleo-Eskimo period onwards (Robbins 1982). Dr. Chris Wolff and others were conducting another investigation at Stock Cove. Wolfe’s crew noted two tobacco pipe stem fragments eroding from a bank at the northern edge of the site. Mills dug a test pit near this location and, as fate would have it, uncovered wrought nail fragments, seventeenth-century pipe stems and numerous flakes of European ballast flint. That this assemblage was virtually identical to the one from Sunnyside-1, some 12k away, begs the temptation to connect the two sites. Perhaps the people who discarded the pipe stems and nails and chipped away at some ballast flint in Stock Cove were the same ones who wintered near Frenchman’s Island!

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*Figure 1  Steve Mills standing inside the earthen foundation at Sunnyside 1 (Mills)*
This past season I put my PhD research and funding on hold to undertake some CRM work in the community of Sheshatshiu, across the river from my home in Northwest River, Labrador. As has been reported in this newsletter in other years, Sheshatshiu - much like Northwest River - is a hot bed of archaeological resources; and it is currently going through a period of infrastructure development (i.e. new school, homes, etc.). Because of the significant number of sites already known much of the vacant land within the community boundaries is considered to have elevated potential for the presence of archaeological resources (see Schwarz 2002 and 2003), and therefore must be subjected to investigation, and often mitigation in advance of development activities.

My activities this past season were associated with a new housing development in the community, and included surface survey, shovel testing and excavation within the housing development footprint, as well as the locations where fill material was to be collected, i.e. borrow areas. The crew assisting me with these activities was entirely from within the community, and over all it was one the best archaeology seasons I have had. All together, we dug and screened 1173 test pits within the housing development area, and an additional 210 within one borrow area. We also conducted detailed and test excavations in seven different areas, at three different sites, with a total of 94m² being excavated. As a result of these activities we provided additional information on three previously recorded sites within the PAO database, and recorded four sites which were not previously known. Beginning with the two new sites, the activities undertaken at each site and the preliminary results are summarized below.

**FjCa-72**

This site is located in the woods, on the north side of a cleared path (which covers a buried sewer line) running between the lower and upper roads in Sheshatshiu. The wider area associated with this site has been identified as one of the borrow areas, where gravel fill will be collected for use in the new housing area. A total of 210 test pits spaced approximately 5 m apart were dug in 28 rows, covering the entire area. All soil was screened. With the exception of test pit 7 in row 8, immediately north of the sewer easement, all the test pits in the area were negative. An additional 10 test pits were dug surrounding the one positive test pit, two of which were positive. Together these three positive test pits relinquished 18 quartzite specimens (including flakes, flake shatter, and a biface fragment), in an area about 16m². This site is close, but down slope from site FjCa-48. Because it is at a different elevation, and therefore likely a different age, it was given its own Borden designation. The assemblage at this site is also strictly quartzite, where FjCa-48 includes quartzite and chert. According to handheld GPS readings FjCa-72 is elevated approximately 15 masl, which gives it an approximate age of 2500 BP. Given this assumed age and the strictly quartzite assemblage this site could be affiliated with the North West River phase. Current plans see this site being excavated in summer 2010, in advance of the gravel removal from this location, which will allow for more detailed analysis and interpretation. Site FjCa-48 is beyond the borrow area and will not be disturbed as a result of that activity.

**FjCa-71**

This site is located on the terrace overlooking site FjCa-51 within the new housing area in Sheshatshiu. It is approximately 22 masl. Test pitting in the area was entirely negative. However, during a post-grubbing survey a small depression was identified between the locations of test pits 0+300N30 – N35, and 0+305N30 – N35. No definite artifacts were observed, but there were a number of quartzite...
shatter fragments in vicinity of the depression, as well as some charcoal flecks. Much of the possible feature was still intact following grubbing, as just the overburden had been removed. A small excavation was undertaken. Still no definite artifacts were identified, but additional charcoal flecks, quartzite shatter and some cemented calcined bone fragments were recovered. The function of this feature is unknown. It could be a food preparation location, or possibly have a ceremonial function. Considering the absence of proper flakes and tools there is also a slight possibility that it is a natural feature. Assuming it is an archaeology site, given the proximity to FjCa-51 and FjCa-57 it could be that the feature is an outlier loci of one of these sites (particularly if it is a ceremonial feature).

**FjCa-70**

This site is located on the second highest terrace within the housing development area, approximately 30 masl. During shovel testing two flakes and one preform were recovered from test pit 0+415N30. Following this, an additional 13 test pits were dug within 1 to 3 meters of the original positive test pit. One additional specimen of quartzite flake shatter was recovered. Three 1 x 1 m excavation units were set in encompassing the two positive test pits to determine if additional resources were present. Excavation of these units resulted in the recovery of additional quartzite flake shatter and shatter, but no flakes or tools. No features were present either. This site could be an isolated find with the shatter specimens being natural; however, given that the preform and some of the shatter specimens are the same type of quartzite this seems unlikely. It could be that this site is where an individual collected a quartzite cobbie and knapped it into the recovered preform (although no flakes were recovered); or it may be that other resources are present to the north of this location. The landform associated with the site does extend to the north; however, it is beyond the project boundary and was not tested. The elevation of this site indicates it was an active shoreline during the Archaic period, the site could date to this time, or it could be a monitoring location associated with one of the lower elevated sites. This area has since been grubbed, and no additional resources were identified. No more work is planned for this location.

**FjCa-69**

This site is located approximately 75 m west of FjCa-51, on the same terrace system. Two red quartzite flakes were recovered in shovel test 0+300S35 and 0+320S30. An addi-
FjCa-70, 3x1 excavation and test pits on upper terrace immediately adjacent to northern project boundary (Neilson)

FjCa-69 excavation area and test pits. (Site FjCa-71 located in upper right of photo, and FjCa-58 located in upper centre). (Neilson)
tional 11 test pits were dug 2.5 to 3 m away, surrounding the two positive test pits. These were all negative. Furthermore, the flake recovered from 0+320S30 is 80 to 90% cortical, and given its location at the base of a steep slope, which was once an active marine shoreline it could be of natural production. The specimen from test pit 0+300S35 is more convincing as an artifact, and is located on a small ridge, raised a meter or two (approximately 20 m asl) above the surrounding terrain, which is generally low lying. Three 1x1 meter excavation units were set in at this location, and one additional flake shatter specimen, of red quartzite was recovered. This area was grubbed and graded in November 2009, in preparation for housing construction. This activity was monitored and no other resources were identified. It seems that these specimens were isolated finds and not associated with any type of feature. It is possible that they stem from activities associated with the FjCa-51 occupation to the east.

FjCa-58
Testing at this location recovered quartz shatter fragments in test pit 0+380S15. This area was tested in 2003 by Fred Schwarz, and if not for the preform he recovered I would not have considered this a site. Through its location on a slope at the former water edge, quartz shatter fragments could easily be produced by natural processes. Furthermore, none of the other test pits dug in the area contained any debitage or tools, including the four test pits dug 2 to 2.5 m away, surrounding 0+380S15. Given this, I agree with Schwarz’s assessment of the site as an isolated find. It is possible the preform could be associated with FjCa-51 activities, as this terrace offers an excellent vantage over the lower terrace and Lake Melville. This area was grubbed and graded in September 2009 in preparation for road and housing construction. This activity was monitored and no new resources were identified.

FjCa-56
Quartzite flakes, flake shatter, and a biface fragment were found eroding from a narrow strip of forest remaining between two housing lots at the end of the upper road (immediately south of the last house on east side of the road). The majority of this component has been destroyed by lot preparation prior to this season. The remaining forest is approx. 3 m wide, and extends west to east for the length of the lot; it is bounded by the road to the west and additional forest to the east. Excavation here may recover additional specimens, but would require cutting down the trees between the two lots. Specimens were approx 2 m from the roadway, and no other specimens were observed along the grubbed edge. The majority of this component may have been located in the area where the road is now; however, testing in the vicinity, but closer to the crest of the terrace in the woods behind the two lots, by Fred Schwarz did identify in situ resources that are likely still undisturbed. No further activity is planned for this site.

FjCa-51
This is a large Saunders phase site (i.e. Brinex and Charles complex) located directly within the housing development area in Sheshatshiu. It was first identified during preliminary construction activities (grubbing) in 2002, and subsequently investigated and documented by Fred Schwarz over two field seasons. Our testing program systematically covered the entire site area within the housing project footprint, and identified a number of loci which fell outside the disturbance reported by Schwarz. These include loci to the north and south of the area grubbed in 2002, as well as the area beneath the slash pile created during the 2002 grubbing (some of these loci had been noted by Schwarz as well). Additional resources were also collected from the slash pile itself and the grubbed surface, but we could not be certain that these were in situ. Based on Schwarz’s assessment and our investigations this past season, the site appears to be a palimpsest of activity stations, in a number of discrete loci.

Following testing of the site area within
FjCa-51 after the slash pile was removed from the centre of the roadway. Area grubbed in 2002 indicated by light brown soil along vegetation edge. Excavation Areas 1 and 3 are near the stake in centre of the photo. Area 2 is further back, near the person. Area 4 and 5 in vegetated area in background of the photo. (Neilsen)

FjCa-51 - Area 3 - hearth/processing feature, note large cobbles used as work platforms and significant amount of fire and heat cracked rock fragments, and cemented soil. Also, note small concentration of red ochre just right of photo centre. (Neilsen)
the project footprint, our efforts were directed towards clearing the proposed roadway (the area grubbed in 2002) of in situ resources in order to allow access to the housing lots beyond – west of – FjCa-51. First, the slash pile which had been placed along the centre of the roadway in 2002 was removed with an excavator and dump truck, and transported to a secure location to insure it would not be dispersed throughout the community (as it certainly contains artifacts from the grubbed surface). This activity was monitored to insure the excavator disturbance remained above the level of the cultural deposits. Once completed, this area was test pitted in the same fashion as the remainder of the project footprint – on a 5m grid with shovels and screens. Excavation grids (Area 1, Area 2, Area 3 and Area 4) were then set up encompassing or adjacent to the positive test pits. Artifacts were recovered from all four of these excavation areas, and features were recorded in Area 1, 3 and 4. Area 2, although it did contain artifacts – including red quartzite cores, preforms, bifaces, flakes, flake shatter and shatter – was found to be entirely disturbed in vicinity of the positive test pits. Some undisturbed areas were present, but did not contain any resources. A number of lithic specimens had been collected from the grubbed roadway immediately adjacent to Area 2, and it is felt the excavated specimens had originally been associated with these artifacts, and had been re-deposited as a result of the 2002 grubbing activities. Area 1 and 3 were immediately adjacent to one another, and contained quartzite and chert bifaces, scrapers, utilized flakes, debitage, etc. in association with features, including: a pit, a raised mound and multiple hearths. Charcoal and calcined bone samples were also recovered from some of these features. Ancient activities undertaken in association with Area 1 and Area 3 appear to have included, but are likely not limited to: the quarrying and processing of quartzite cobbles into preforms and complete specimens and their subsequent sharpening; the shaping and repeated sharpening of chert tools; and the processing, preparation and cooking of faunal species. A number of unaltered cobbles also appear to have been used by the sites inhabitants as hammer stones and processing platforms. These specimens were also recovered in association with the hearth features.

Just beyond the western extent of the 2002 grubbing, test pitting identified another area with in situ resources, which needed to be removed in advance of road construction. Two positive test pits had been identified in Area 4, and became the focus of excavation at this location. Artifact concentrations were not as heavy in Area 4, as in Area 1 and 3. Our activities resulted in the recovery of bifaces, abraders, utilized flakes, and debitage. These were centred on a small hearth feature, and were not heavily concentrated (charcoal was also recovered). Monitoring of grubbing activity immediately west of the Area 4 excavation resulted in the recovery of an additional scraper and biface, but no other specimens or features. This component of FjCa-51 is different from those to the east, consisting primarily of rhyolite and grey chert specimens as opposed to quartzite and chert, and appears to be the result of a single event.

Area 5 is located to the northwest of Area 4. Like site FjCa-71, it fell between test pits excavated on the 5m grid and was not identified until the overburden was removed during grubbing for the roadway. A small hearth feature consisting of four or five small cobbles grouped together, a few chert tools and debitage was surface collected along the boundary of the grubbed roadway. Thankfully, what appears to be the majority of this component lies beyond the grubbed roadway within one of the housing lots and therefore was avoided during roadway grubbing and is still available for excavation.

The remainder of the FjCa-51 components within the housing project boundaries are associated with proposed housing lots and remain undisturbed. These lots have been
flagged as off limits until such a time that these components are excavated in their entirety. By clearing the roadway through and the housing lots west of FjCa-51, we managed to provide access and area for development over the coming summer, which will afford the archaeology crew the opportunity to continue with the excavation of FjCa-51. In addition, we will continue to be on hand to assess additional locations, such as the borrow areas, as they arise.

The community of Sheshatshiu remains committed to recovering as many of the archaeological resources as possible within their community over the coming field season(s), and are eager to interpret and disseminate the results of these studies following their completion; particularly in reference to the significant Intermediate period site FjCa-51. For further information on this project, including: the methodology, site specific results, photographs and maps please refer to the soon to be completed preliminary report for archaeological permit 09.14. If you have any further questions feel free to contact me at: sneilsen@mun.ca

_FjCa-51, biface recovered from Area 1, 4 m south of Area 3 (within inches of grubbing undertaken in 2002). (Neilsen)_
PA had a busy year in 2009, conducting investigations under 10 provincial permits and one Nunatsiavut Government permit. Three investigations were related to monitoring of the St. John’s Harbour Interceptor Sewer (HIS), which continues to deadline. This project has been ongoing since 2004 and is scheduled for completion in 2010. A final report, detailing findings from archaeological, documentary and cartographic research is due in 2010. There were three other projects in St. John’s, and two in Labrador.

**RNC, Fort Townshend (Permit 09.04)**

This project involved desk-based assessment (2008) and monitoring (May-December 2009) of excavations for an extension of the existing Royal Newfoundland Constabulary Headquarters Building, a parking garage adjacent to the new extension (currently, a parking lot), a tunnel to connect headquarters to the annex (the old MUN campus/Fisheries College), a subterranean firing range, and the removal/replanting of mature trees. The development is within the historic precinct known popularly as “Fort Townshend” whose major historic association is its proximity to this former Fort, which was the major military establishment in St. John’s from 1780 to 1870. The study area is outside the Fort itself, but within the former ordnance boundary, and served as a Parade Ground, for drilling troops and later also the Constabulary.

**St. Lawrence (Permit 09.07)**

GPA was approached by Canada Fluorspar Inc., proponents of re-opening the abandoned St. Lawrence mine, to conduct an assessment of their mineral license. Onshore remains of a shipwreck had been previously documented at Blue Beach, southeast of the community of St. Lawrence, proposed as the marine terminal for the mine. Research identified Blue Beach Wreck (CfAu-03) as a 1946 wreck, of the tug *Rio Sama*. A mitigation scenario was proposed, to preserve the most significant portions of the wreck, and to provide public interpretation. Another piece of wreckage, a steel open boat, likely also of 1940s vintage, was documented at nearby Shoal Cove – within the mineral license being surveyed, but unlikely to be impacted directly by the proposed development.

**Trouser Lake, Nain (Permit NG 09.11)**

This project involved assessment of 2.5 km of pipeline from a new water supply at Trouser Lake to the Nain townsite, and an associated 20 m road right-of-way and pump station. No historic resources were found to be at risk in immediate proximity to the proposed pipeline location. Precise GPS locations were obtained for four features which comprise the registered archaeological site Trouser Pond.
Wreckage from the tug Rio Sama, Blue Beach, St. Lawrence Harbour (GPA image SL.087 (Penney))

Bennetts Brook, St. John’s (Permit 09.27)

After attention was drawn to historic resources potential by a concerned resident, GPA conducted a desk-based assessment and site monitoring of excavations at Brewery Lane and adjacent areas, designed to enhance the control of waters flowing underground from Mundy Pond to the Waterford River (formerly known as Bennetts Brook, or Mullins River). Numerous historic resources were documented during the monitoring of excavations in July 2009, including a vaulted stone drain under Water Street (reburied), a length of streetcar track along Water Street (removed) and a 19th century stone retaining wall on Sudbury Street (not impacted).

Scanlans Lane, St. John’s (Permit 09.35)

GPA was approached in July 2009 to monitor the re-configuring of Scanlans Lane, a laneway of considerable antiquity running between Duckworth Street and Water Street, east of the former Newfoundland Museum. The lane takes its name from a 19th century occupant, liquor dealer Michael Scanlan, but was probably a recognized right-of-way from the 17th century. Structures on the east side of the lane date to the period between the Great Fires of 1846 and 1892 and include two historically
significant addresses: the law offices of Newfoundland’s first Premier under Responsible Government (Philip Little) and the offices of the newspaper Royal Gazette. We recorded traces of these structures (including printers’ leading from the Gazette), as well as the liquor shop, an outbuilding, and late 17th/early 18th century deposits. An early partial foundation was recorded in Water Street during associated work.

**Sir Ambrose Shea Lift Bridge Replacement, Placentia (Permit 09.43)**

GPA was approached in August 2009 by the Department of Transportation and Works, to conduct an assessment of a proposed replacement for the Sir Ambrose Shea Lift Bridge, under Terms of Reference developed by the PAO, to identify and assess potential historic resources within the bridge and road right-of-way and adjacent approaches prior to construction activities… and recommend appropriate mitigative measures to protect potential and known historic resources. The potential exists for the bridge replacement to impact historic resources, specifically known archaeological sites: fortifications at either side of the bridge over Placentia Gut. On the south side of the Gut (Townside) the footprint of an English fortification (Fort Frederick, 1721-1812, ChAl-1) is generally east of the current bridge approach. Further assessment, and monitoring of construction activities, will take place in 2010.

**Colinet Harbour Survey (Permit 09.47)**

During 2007 GPA was commissioned by the PAO to conduct a historic resources overview assessment of the area from Cape St. Mary’s to Cape Pine “to identify archaeological potential of this poorly understood region.” Colinet Harbour was one of three priority areas identified for further investigation, which survey was conducted in October 2009. No pre-contact artifacts or features were encountered. There was abundant evidence of historic occupation at three abandoned settlements: Tickles, Johns Pond and Davis Point, which have been designated archaeological sites.

**Pinware, Labrador (Permit 09.51)**

This proposed project involves rerouting a portion of the Trans-Labrador High-Way.
way from the Pinware River Bridge, across a barren (locally known as Kelsons Gulch) to rejoin the current course of route 510 near Countycat Pond, approximately 10 km west of the community of Red Bay. No historic resources were found to be at risk in immediate proximity to the proposed highway’s marked centreline, although we encountered much evidence that the landscape had been previously disturbed (c.1965). Local informants were most helpful in indicating historic usage of the study area, and accustomed transit routes between Red Bay and Pinware.
The summer of 2009 marked our fifth year researching An Archaeology of the Petit Nord. Once more we were based in Conche, where our field station is hosted by the French Shore Historical Society (FSHS). The Memorial University Archaeology Department team consisted of Dr Peter Pope, doctoral candidate Mélissa Burns and incoming master’s students Eric Guiry, Annique Jones-Doyle and Kara Wolfe. The FSHS sponsored our local assistant, Grenfell student Natalie Byrne, who worked with Annique in the lab when the finds were coming a bit too thick and fast. We continued intensive excavations at Dos de Cheval (EfAx-09) in Crouse, the site of the French migratory fishing room once known as *Champs*. We focused our attention there around the site of the fishing stage in Area C. Mélissa took charge of opening up another 30 m² or so, with the enthusiastic help of our crew. Peter organized our final season of survey and the survey crew of Peter, Mélissa, Kara and Eric identified or revisited over 20 French fishing rooms -- bringing our total count of migratory fishing sites surveyed, between 2004 and 2009, close to 50. We have a pretty good idea now of what a typical French migratory fishing room looks like. Dos de Cheval/Champs Paya remains our best example.

**EfAx-09, Dos de Cheval, Crouse**

We spent the season at EfAx-09 doing real waterfront archaeology, trying to pin down...
a feature that we knew perfectly well would be a kind of ghost: the fishing stage. We know where the fishing stage was at EfAx-09, because it is shown on a couple of 18th- and 19th-century maps, and because there is really only one place where it is safe to approach the site in a boat -- on the west side of Long Point, exactly where we make our landings every morning. But fishing stages on migratory rooms were rebuilt every year or two, so there is no one historical fishing stage to recover archaeologically -- rather overlapping and disparate traces of the many stages that occupied this site between its first use, almost certainly before 1540, to abandonment in the late 19th century. In 2007, we had identified rock ballast offshore and underwater, marking the likely location of at least one iteration of the seaward end of the fishing stage. In 2008 we projected a continuation of the Feature 51 hillside ramp towards the underwater ballast trace and did some testing just inland of the vegetation edge above the present-day open cobble beach. These preliminary tests were promising and so we continued excavation in this area, in 2009. In the end, the results were very satisfactory.

We identified several features which we associate with the fishing stage, including Feature 1414, a large post mould; Features 1431 and 1435, rock deposits apparently to solidify posts; Features 1438 and 1439, roughly circular compression scars on the bedrock near the water, which we have interpreted as the usual location of support posts; as well as a deposit of cod remains that likely marks the northern edge of the stage, at least in one season of fishing. We recovered various artifacts in association with these features -- for example, a 17th-century pipe bowl submerged in the tiny pool that filled one of the compression scars. Other artifacts recovered, including pipes, coins, Normandy stoneware (CSW), French Brown Faïence tinned-glazed earthenware (TGEW), refined earthenware (REW) date to disparate periods, indicating that the various features that we might associate with the stage do not date to the same period. We have, as expected, traces of many stages, built one after the other, over the centuries.

This year’s excavations produced a number of datable artifacts which have given us a better sense of the continual mixing of

_EfAx-09: 1412P14506, a 17th-century Dutch pipe bowl excavated from the Stage Area in waterfront Area C at Dos de Cheval (Pépé)_

![EfAx-09: 1412P14506, a 17th-century Dutch pipe bowl excavated from the Stage Area in waterfront Area C at Dos de Cheval (Pépé)](image)
strata that seems to have been an aspect of life on a muddy fishing room. These finds include some small Breton earthenware (CEW) tripod coquemar cook pots of traditional late medieval form; a Dutch pipe bowl of ca. 1650; several liards de France, the low-value copper-alloy coins issued by Louis XIV between 1640 and 1714; 18th-century Normandy CSW and French Brown Faïence with a blue and black interior decoration; late 18th-century Ligurian CEW plates; painted Pearlware REW of ca. 1815; and more Equipages de ligne buttons of the 1840s -- besides the less datable artifacts, like gun flints, Breton CEW, wooden beads, bone buttons, lead weights, piseiform jiggers and thousands of nails and spikes (hundreds of which we brought home). Preliminary analysis of the more datable finds confirms the conclusion we drew in 2008 that Area C at EfAx-09 was occupied as an open cobble beach until after 1650, at which point soils began to form around and over the rock features built and rebuilt on the site, forming the present terrace with up to 75 cm of cultural soil, overlying the beach cobble, which itself yields more or less undatable wrought nails as well as water-worn CEW.

Late in the season, we uncovered traces of one or more successive small structures, just south of the stage and very close to the water. The associated artifacts suggest a small shelter used by crews, rather than part of the productive infrastructure. We also recorded two other interesting features. One was first reported by Rita Barrett in 2008. Feature 1415 is a trace of quarrying, flagged by an iron bar wedged in the bedrock of the large outcrop which we call “The Bookend”, at the southern limit of Area C. On close examination, this rectangular wrought iron bar looks to be a stone mason’s tool, used with a feather (or wedge) to open seams in suitable rock, to produce tabular building stone. In this case the chisel part of the tool kit became permanently wedged in the bedrock. The find is important, because it suggests where crews might have obtained the tabular building stone they used to construct paths, ramps and even the bread oven. We also recorded the steady brook in Area G, south of Area C, as Feature 1436, a water source for the site.

Peter took samples of the senescent Alder and Dogberry trees in the Area D terrace, inland and above the rest of the site. Count of the growth rings suggests that these do not date back to the abandonment of the site by the French ca 1900, as had been hypothesized, but at 50 to 60 years suggest that the upper terrace remained open and free from shrubs, as long as grazing animals were kept there, until about 1950.

**Survey 2009**

Williamsport (EdBb-01) is a resettled community on the north side of Fourché Harbour. Constructed paths and a large wrought-iron mooring ring may be traces of an historic French presence, confirmed by a few finds of Normandy CSW and French Brown Faïence TGEW, from beach survey.

Squally Point (EdBb-03) lies on the south side of Fourché Harbour and was likely the more important French fishing room at Fourché, extrapolating from the thin documentary record. Any trace of that early presence was well buried when Japanese interests constructed a whaling station in the 1970s, now a rusting monument to another, later, vanished industry.

Taylor’s Point, Conche (EfAx-07) is a previously recorded French migratory site, just next door to Casey House, our home away from home in Conche. The FSHS lent us some material previously donated to them, which was uncovered in the 1970s during excavation into the beach terrace for an uncompleted house project. One find is a wrought iron fish pew or prong for unloading cod, of a typical French design. The collection also includes ground slate woodworking tools, which are surely Maritime Archaic. We were also able to photograph several Ramah chert end blades and burin-like tools, also collected in about the
same period on the Foley property.

Grand St Julien (EgAw-02) is currently the scene of intensive prospecting for copper, using heavy earth-moving equipment. Peter and Kara visited to assess rumours that workers had uncovered a “fort” but found no evidence of significant damage to archaeological resources, at this time, although St Julien’s extraordinary landscape has certainly been affected. We were able to record another large constructed cobble galet, likely relating to the French migratory fishery.

Great Brehat (EiAu-05) and St Anthony Northeast (EiAv-05) showed a few clay tobacco pipes and sherds of Normandy CSW, the last visible remnants of French fishing rooms mapped in the 18th and 19th centuries.

French Beach - Granchain Island (EiAu-03) is the site of a 19th-century livyer occupation, according to local informants and is also the site of documented French fishing rooms. The site was previously reported by Stephen Hull (2001). Our Areas B and C lie at either end of the large cobble beach and are closer to the water than the features reported by Hull. Our features include constructed cobble galets (or “bawns”) and a turf-walled structure yielding not only 18th-century Normandy CSW and wine bottle glass but also a blade or flake of what appears to be Newfoundland chert.

French Beach North - Granchain Is (EiAu-04) is well-known to inhabitants of St Lumaire as a French fishing room, used well into the 19th century. Hull previously reported archaeological material, from somewhat further east. We recorded several sod foundations, as well as the substantial remains of a bread oven. Finds of Breton CEW, Normandy CSW, French Brown Faïence TGEW and wine bottle glass support documentary evidence that a site on Granchain Island was in regular use by 1680.

Four Ears Island - Boat Point (EjAu-25), near Dark Tickle in Griquet, was identified in 2001 by Hull as a European livyer site. We recorded a number of anthropogenic features, on a terrace above the cobble beach, including a bread oven foundation, likely a trace of 19th-century French migratory crews. Artifacts collected from surface survey included Normandy CSW and Ligurian CEW, which would confirm this interpretation, with Anglo-American CSW and English bottle glass, which support Hull’s identification as well. The site is not, however, clearly recorded in the French documentation.

Four Ears Island - Thompson's Cove (EjAu-26), a short hike north of EjAu-25, was also identified by Hull (2001) as a 19th-century Newfoundland livyer occupation. Local informants confirm this interpretation but finds of Normandy CSW, French Brown Faïence TGEW and ballast flint suggest that some of the large anthropogenic features in Thompson’s Cove itself and along the shore immediately north again are earlier remnants of the French migratory fishery.

Camel Island - Eastern Point (EjAu-28), near Griquet was originally identified by Hull (2001). We expanded the limits of the site, noting a considerable deposit of ballast flint on a cobble beach west of the main part of the site, and not far from what is locally known as “Wreck Point”. The site is recorded as early as 1680, as a French fishing room. We recorded a likely bread oven mound and collected a rich sample of pipe stems, CEW, Normandy CSW, French Brown Faïence TGEW, and a wood button, eroding from the bank at the vegetation edge.

Griquet Island 1 (EjAu-29) is located on what is locally known as Alice or Ellis Island and was originally reported by Hull (2001). We recorded an anthropogenic terrace, just against a rocky outcrop, above the cobble beach, recovering pipe stems, CEW, Normandy CSW, French Brown Faïence TGEW, cod remains and a musket ball, all suggestive of a migratory French activity. The site is documented by 1680.

Griquet Island 2 (EjAu-30) was also identified by Hull (2001) as a European grave,
on the northwest side of Griquet Island, just north of EjAu-29. Our investigations suggest that there are several burials on the terrace here and we also identified another likely cross or calvaire site on a nearby summit, when our attention was caught by a patch of anomalous vegetation.

North Bay 1 (EjAu-14), near Griquet was previously reported by Hull (2001) as an historic site. We recorded two sod foundations and a possible bread oven platform, collecting green bottle glass, and wrought iron nails along with Normandy CSW, Ligurian and other CEW, which confirm the presence of migratory French crews, first documented in 1680.

Nobles Islands Island 1 (EjAu-18), in Quirpon Harbour, was known to the French as Jacques Cartier Island. From the survey of 1680 on, it is one of the best documented migratory French sites and was identified archaeologically by Hull (2001). We expanded the limits of the known site and recorded constructed paths, a possible cross site and berms, which probably echo the limits of constructed galets, often subsequently reused as gardens. Our surface collections include Normandy and Anglo-American CSW, CEW, French Brown Faïence TGEW, wine bottle glass, REW and ballast flint.

Grandmother Island (EjAu-19) near Quirpon was known to French fishermen as Ilot au marchand. An ilot is a small quasi-island, separated from more solid ground by high tides, in this case on the west side of the much larger Quirpon Island. Hull (2001) identified
the îlot itself as an historic site. Rich deposits of Normandy CEW and other material in the landwash led us to explore the adjacent terrain on Quirpon Island, thus expanding the limits of the site. We recovered Normandy CSW, French style CEW, French Brown Faïence TGEW, green bottle glass, copper and bone buttons from several features including a constructed path and a rectangular sod foundation.

Quirpon Oven 1 (EjAu-31), a few minutes hike to the north of EjAu-19 along the western shore of Quirpon Island, is the fishing station known to the French as les Îlots. It was identified archaeologically by Ken Reynolds in 2002. We collected Normandy CSW, European CEW, pipe stems and wrought iron nails, all adding further support to the documentary evidence for regular use by French fishermen, since the 17th century.

Quirpon Island - Grand Galet (EjAu-40) is now known as Ron Galet’s Cove. It is well documented in the 19th century as an important migratory fishing room for French fishermen and may be one of the five rooms on Quirpon Harbour in use by 1680. We visited first by boat, observing what looked to be anthropogenic cobble galets, suitable for drying fish. Unable to land safely, we returned, in a heroic march through the drizzle, to carry out surface survey and test pits. Although we did collect a pipe stem and some brick fragments we were not able to pinpoint any early structural remains, other than faint traces of demarcated galets.

Quirpon Island - Degrat (EjAu-42) is an unfocused occupation zone on the west side of Degrat Harbour, which itself lies on the northeast part of Quirpon Island, just north of Cape Degrat. We noted some anthropogenic berm, suggestive of constructed or at least demarcated cobble galets. We collected Normandy CSW, French Brown Faïence TGEW, REW and green wine bottle glass, suggestive of use by migratory French fishermen over several centuries. We also collected what appears to be some worked chert, which might reflect historic contact with the Inuit, who are known to have occupied nearby Degrat Island at times.

Quirpon, Point Alun (EjAu-44), on the southwest shore of Quirpon Island, was a migratory French fishing room, well documented in the 19th century. We recorded a rectangular sod depression and recovered Normandy CSW, white TGEW, ballast flint, wrought nails, a pipe stem and green wine bottle glass -- confirming the existence here of a small fishing room.

Acknowledgements

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I am happy to report that the first of two seasons of fieldwork at Snook’s Cove was an overwhelming success in terms of both obtaining primary data with which to answer the major research questions and community feedback and responses to the project.

There are two main objectives of the Snook’s Cove Archaeology Project. The first objective is to better understand the varied and geographically-situated responses of the Labrador Inuit to colonialism by focusing on an area (the Narrows region) and time period (post-18th century) that has hardly been researched, and on a group of Inuit that had a degree of autonomy and self-control over their livelihoods not found among Inuit that were living with and/or nearer settlers elsewhere in Labrador. Inuit were intimately familiar with the landscape, waterways and resources around the Narrows and Back Bay regions through centuries of use and experience, and many of them made this area home throughout the late 18th to early 20th centuries (see figure 1). In contrast, settlers favoured the western end of Lake Melville because of its proximity to productive trapping grounds throughout this time period. Given these differences in preferred settlement locations, the Inuit living in the Narrows region continued to live their lives with relatively less influence from foreigners such as the Moravians to the north and substantial seasonal and settler operations to the south.

The second objective is to better understand how the Inuit built, used and maintained their sod-houses, and to incorporate this understanding into a typology of sod-house architecture relating to the ethnicity, or group identity, of the inhabitants. One outcome of colonialism and interaction between Inuit and foreigners in Labrador was that settlers, Inuit and Métis alike all built and lived in semi-subterranean sod-houses towards the end of the 18th and into the 19th centuries. Given this conflation between group identity and building practices, one of the initial, and perhaps biggest, problems facing archaeologists working...
on any post-18th century habitation site in Central and Southern Labrador is determining who lived there. It has recently been determined that Snook's Cove (GaBp-07), which is located on the north side of the Narrows, was home to several Inuit families throughout the 19th and early 20th centuries, and it is thought that the sod-houses there were occupied by these Inuit (see figure 1).

Indeed, after eight weeks of work involving site survey and mapping, test pitting and full-scale excavations, it appears that we hit the nail on the head. This is a far cry from other times when I have gone into the field with high expectations only to be let down by poor preservation, inaccurate surveys or historical accounts, or past people not being where they are supposed to be.

With a crew consisting of myself and fellow MUN students Eliza Brandy, Josh Keddy, Pat Lavigne and Lori Williams, close to 100 (1m x 1m) units were excavated from two adjacent houses and associated middens. House 4 is a true semi-subterranean sod-house that exhibits several traditional Inuit architectural features and is tentatively dated from about 1800 to 1860 AD. This house is cut into the ground about 40 to 50cm, has earth and sod walls that have slumped inwards since house abandonment, has (at least a partially) paved flagstone floor and raised rear-sleeping platform, and has a substantial hearth feature located in the SW corner of the house (see figures 2, 3 and 4).

Tentatively dated from about 1860 to 1940, house 3 did not turn out to be a sod-house as was initially thought based on surface evidence. Instead, it is a settler-style cabin that has large log side walls laid directly on the ground (with slumping sides giving the impression of a depression like that found with sod-houses), a front stone wall constructed of dry-laid cobbles held in place with sand, a wood-plank floor covering at least a portion of the interior, and an old drum fireplace/hearth that was likely originally a wood stove (see figures 5, 6 and 7). Interestingly, house 3 also has a partially paved stone floor and raised rear-sleeping platform.

In addition to Inuit architectural features, there is also decent material evidence indicating that both houses were occupied by Inuit families, including the use of traditional raw materials such as whalebone, soapstone, quartz crystal and slate, and the use of traditional implements such as soapstone kulliks that you would not expect to find at settler sites. Less obvious, and more contentious, evidence includes the reworking of European materials into Inuit forms such as nails worked into blades, and extensive refurbishment and re-use of artifacts such as the mending of broken ceramics and the utilization of the sharp edges of broken glass.

For her MA research at MUN, Eliza Brandy is using a zooarchaeological approach to investigate patterns of Inuit subsistence and animal use at Snooks Cove. Because of the ambiguity in sod-house architecture relating to the ethnicity of occupants noted above, it is thought that an analysis of the faunal remains will complement the architectural and material data at the site by providing an additional line of evidence with which to identify an Inuit occupation of sod-houses in Southern Labrador.

Towards this end, there was a significant amount of faunal material recovered from both houses 3 and 4 at Snook's Cove, which considering the dates of occupation of the houses, should give us a decent picture of change through time in animal use and subsistence at the site. The recent nature of the site and the sandy matrix allowed for excellent preservation of bone, and in some cases complete skulls and articulated bones were recovered. Preliminary analysis using comparative faunal collections from the Zooarchaeological Identification Centre of the Canadian Museum of Nature indicates that the inhabitants of Snook's Cove had a diet with a heavy reliance on seals and caribou, which supports the interpretation of an Inuit occupation for these
Figure 2 The light patch on the right is old, slumping sod. Notice the dark layer on the left that runs underneath the sod; this was the old surface layer that the house cuts through and was built on (Pritchard).

Figure 3 The light patch coming out from the log (back-north) wall of house 4 is the sleeping platform. Also notice the cracked flagstones at the bottom right and bottom centre of the picture, which paved the floor of the house (Pritchard).
Figure 4 Hearth feature in House 4. The linear stones on the left are part of the front wall (Pritchard)

Figure 5 Log (east) wall and stone front (south) wall of house 3 (Pritchard)
houses. Significantly smaller amounts of other animals have also been identified, such as rabbits, hares, ptarmigan, murres, and a porcupine, and some cod remains have also been found. And given the importance of dogs for life in Labrador during the 19th century, it was not surprising their remains were found as well.

As her first fieldwork experience beyond fieldschool while an undergraduate at McMaster University, Eliza was very pleased with how the season turned out and the collection of faunal materials excavated. More significantly though, she is grateful for her fantastic crew and the lasting impression left by the community of Rigolet and the spirit of Labrador.

As interesting as the architectural and material evidence are for what they can tell us about Inuit building traditions and responses to colonialism in terms of cultural continuity and change, significantly more interesting is that even though house 3 is more recent than house 4 and accordingly replaces some of the earlier Inuit features such as the flagstone floor and stone-hearth with a wood floor and wood-stove, they share an internal arrangement and logic that is impossible to ignore. In fact, the internal arrangement of both houses is so similar they are almost mirror images of the other and the only discernible difference is that house 3 is wider than it is long and house 4 is longer than it is wide.

The entrances of both houses are located in the centre of the front (south) wall, which faces the water and requires you to step up substantially (approx. 30cm) to enter the houses. The hearth and stove are placed to the left of the entrances in the southwest corners of both houses. These are substantial features with stonework radiating outwards from the cooking areas (compare figures 4 and 7). Running along the entire length of the back (north) wall in both houses are raised rear-sleeping platforms which are about 1.3m wide and are raised only about 10 to 15 cm above floor level. After the interiors were exposed, the dimensions of house 3 were determined to be about 5.1m (E-W) x 4.6m (N-S) and house 4 were about 4.2m (E-W) x 4.7m (N-S).

All told, houses 3 and 4 represent two distinct periods of time with a possible overlap around 1860 which allows me to gauge change over time in Inuit society within the context of colonialism over the 19th and 20th centuries, and there are lots of material and architectural data that can and will be used to answer the two primary research questions noted above.

As great as the archaeological potential of Snook’s Cove is, the warm reception and genuine interest in the project by people from the nearby community of Rigolet makes this research even more worthwhile. I do not believe in doing archaeology for the sake of doing archaeology and I have actively sought to publicize this research to the people of Labrador through radio interviews and community presentations. This past summer we enjoyed an impromptu visit at the site from a number of kids and parents from Rigolet who were interested in what was going on, and we had about 40 people show up (not all at once) for our post-fieldwork show-and-tell (see figures 8 and 9). Based on past experience this is a very decent turn out. With the support of the Nunatsiavut government I also sought to hire students from Rigolet to help with fieldwork, and while only one person applied last summer (and he ended up working for the Department of Fisheries instead), I have already received interest from several people about next year. I like to think this increased interest can be at least partly attributed to the reception and interest in the project by the people of Rigolet this past summer. I hope that next year’s fieldwork is as successful as this year was.
Figure 6 In-situ plank floor in House 3 abuts the base of the rear sleeping platform (Pritchard)

Figure 7 Fireplace and partially paved floor in house 3. The barrel hoop at the top acted as a base for an oven and/or stove and the soil around this area is baked from the heat radiating from it. The smaller linear stones on the left are part of the front wall (Pritchard).
Figure 8 Me explaining the site to kids and parents from Rigolet (Pritchard)

Figure 9 Post-fieldwork show-and-tell at the Rigolet community centre (Pritchard)
In 2009 Lisa Rankin conducted excavations at an historic period Inuit site (FkBq-3) at Indian Harbour, on Huntingdon Island near Cartwright, Labrador (Figure 1). The site had been briefly tested in 2006 and found to contain early historic period Inuit sod-walled houses similar to those previously excavated by Rankin at the site of Snack Cove 3, at the opposite (outer) end of Huntingdon Island. Initial indications were that the houses at Indian Harbour were slightly earlier than those at Snack Cove 3 and might represent a prior occupation by the same group of people. Plans were therefore made to conduct intensive excavations at the site when funds were available. The necessary funds materialized with the awarding of a SSHRC CURA grant in 2009. The 2009 excavations focused upon a pair of contiguous sod-walled houses that appeared to share part of an entrance passage. By the end of the six-week field season, the larger of the two houses (House 1) had been almost completely excavated, along with its large entrance passage (Figure 2). The excavated house has a roughly rectangular paved subterranean floor area measuring 5.15m from front to back and approximately 2.75m wide. There are raised, partly paved earth benches on both long sides and at the rear which are faced on the inside with upright slabs of stone. At each corner of the floor is a lamp-stand/hearth area marked by upright stone slabs. The long, paved entrance passage features a very well defined sunken cold trap immediately outside
Figure 2 House 1, Indian Harbour, after excavation (Rankin)

Figure 3 Soapstone bowl in situ (Rankin)
Southern Labrador

In June Stephen and Delphina traveled to southern Labrador. This trip was prompted by several reasons:
1. Search for further evidence of a spot find site found by Jim Tuck in Forteau in the early 1970s.
2. Search for Jim Tuck’s area 11 at L’Anse Amour.
3. Search for evidence of baleen processing at Red Bay on the Boney shore and Kelpy Cove areas.
4. Search for sites in Carrols Cove and Western Arm.
5. Explore the L’Anse au Diable area for Arrowhead Mine
6. And as always check on the condition of known sites such as Cowpath and Pinware Hill.

On the morning of June 8, 2009 we excavated 12 test pits a proposed house location in Forteau. They ranged in depth from 15 cm to just over 50 cm deep. The stratigraphy of most of the pits consisted of a thin layer of grass and decaying matter, a layer of black organic material and then a layer of fine pinkish quartzite beach sand. In some of the pits nearest the road (left side of Figure 1) there was no pink sand layer. In one pit near the beach (near bottom right corner of Figure 1) the black layer was very dense, to the point the shovel had to be used to chip away parts of the layer; this may be a midden deposit.

Numerous artifacts were found in the field including typical white wares, lots of iron nails, brick fragments, pipe stems, bottle glass, gun flint and bone. None of those artifacts would suggest a date earlier than the 19th century. There were just two artifacts recovered that may be older: a single piece of blue hand painted Tin glaze and a single piece of Normandy Stoneware. None of the artifacts were found in an undisturbed context nor were there any features found, with the exception of the possible midden.

Foundations of recent buildings were notable in the field (Figure 1, Box around test pit C4). There was also a foundation noted near test pits A1 & B1, which, we learned dur-
ing a conversation with a lady who grew up in the area, was formerly a Hudson’s Bay Company building. Just beyond this foundation was a portion of a cobblestone roadway which according to the local informant once extended from the front of the former HBC building to the nearby brook (Forteau Outside Room 1 EiBf-42) (Figure 2).

Our first task on our southern Labrador trip was to search for a site found nearly 40 years earlier. In a set of early 1970s fieldnotes Jim Tuck (Tuck n.d.) refers to finding two fragments of a stemmed projectile point across the road from the English Point Cemetery. A brief search for any trace of that site was unsuccessful.

According to a map in Jim Tuck’s field notebook (Tuck n.d.), the original survey of the L’Anse Amour area in the early 1970s resulted in the discovery of 15 cultural localities. This map does not include the L’Anse Amour burial mound. All of the areas, including the mound, were eventually lumped under one Borden number, EiBf-04. However, according to McGhee & Tuck 1975, just 14 cultural localities were found, not including the mound. Also, the map in the field notebook showing the 15 cultural localities and the map in McGhee & Tuck 1975 on page 77 showing cultural localities are different. Area 11 in the notebook and the same area in the published book are in different locations. The locations of other areas also differ. During several subsequent revisits to the L’Anse Amour area the author and Delphina Mercer have relocated several of these areas and found several new sites (all of which were given new Borden numbers). During this revisit our goal was to relocate Area 11 from the original field notebook of the L’Anse Amour area. The rough map of the L’Anse Amour localities contained in the field notebook from the early 1970s shows area 11 as being the farthest west artifact locality found. The area is described as a large blowout west of a creek with quartzite flakes and biface fragments. McGhee & Tuck
1975 gives no location information for this locality, it just records that 5 roughly ovate and crudely flaked quartzite bifaces were recovered from a blow-out. Our second task on this trip was to try to relocate Area 11.

Late in the afternoon of June 8th we set out to look for area 11. After 15 minutes of walking we crossed what we thought was the small creek referenced in the hand written field notes from the early 1970s. We found ourselves in a huge blow-out which we explored and found lots of flakes of chert that varied in colour from white, to shades of grey and black (Figure 3) spread over an area more than 100 m wide. In one area we found grey chert flakes eroding from an old in situ soil horizon. We collected two biface bases, one of white chert the other of a mottled light grey chert. They are roughly straight based with roughly parallel sides. We also collected a rough biface tip made of grey-white mottled chert (Figure 4). This material is typical of the Labrador Straits and the Northern Peninsula of the island, being found at various Maritime Archaic, Intermediate and Recent Indian sites.

Initially we thought this might be Area 11 from the field notebook but we found no quartzite flakes; all the material in the area was chert. When we finished exploring this blow-out we found another larger creek and noticed another blowout just past it. We crossed the latter and explored the blow-out and found brown-pink quartzite flakes at the base of the blow-out. Since this is the last creek on the west side of L’Anse Amour and the last blow-out on the west side this appears to be Area 11 based on the notes from the field notebook. We recovered a large light purple quartzite chopper/biface from this area. This artifact is flaked flat on one face and just flaked on the outside edge of the other face. Most of the face is still convex and covered with cortex showing that it was a round beach cobble prior to flaking (Figure 5).

The next task on our list was to search for evidence of baleen processing at Red Bay on the Boney Shore and Kelpy Cove areas.
Cindy Gibbons, a Parks Canada employee in Red Bay, found a couple of whale skulls in the area near Kelpy Cove last fall. As part of the process for World Heritage designation Cindy requested that the areas be tested for evidence of baleen harvesting. It is suspected that this process would be done near where the whale skulls now rested. It was originally thought that the skulls would be dragged ashore at high tide, and then towed out of the water using a capstan. We carried out testing in this area and on the Boney Shore to see if we could find any evidence of the whole baleen extraction process.

In the Kelpy Cove area we dug nine test pits and found the ground was still frozen in most of the pits. We also found more whale bone than just the skulls and ribs on the surface, including several vertebrae and possible jaw bones. None of the test pits contained any trace of baleen processing. It is interesting to note that there is a lot of whale bone in the area (including at least one skull) under the sod; of particular interest is that the area is ~70-80 m from the salt water. The Basque wouldn’t have needed to drag the skull that far from the shore for baleen processing. There is evidence for Thule/Inuit in the Red Bay area, but again why would they need the whale remains so far from the shore? Surely they could process the remains closer to shore. The area is very low; it is not much more than one metre above current sea level. Perhaps the remains were washed ashore during a storm?

In the afternoon we went to the Boney Shore where there are two visible concentrations of whale skulls (Figure 7). We excavated...
Several test pits in each area.

In the first area which has 15-16 skulls we dug seven test pits looking for baleen processing evidence. All of the test pits were 50cm². No cultural material was found in any of the test pits however, two contained post cranial whale bone.

The second bone concentration has six to seven skulls visible on the surface. We excavated six 50cm² test pits, all of which contained post cranial whale bone including unfused vertebral discs and jaw bones. One pit had a small piece of cut wood in the same area as whale bone. After widening the test pit and further excavation nothing else cultural was found.

In the morning of June 10, 2009 we boarded a small speed boat and headed to Carroll Cove which is approximately seven kilometres south west of Red Bay (Figure 8). This little cove has a long history of European occupation. It is possible the cove was fished by Breton fisherman around 1510. In fact the later arriving Basques referred to the cove as Port Bertan or Breton. The cove was mentioned in a 1575 law suit between two Basque whaling captains and on 24 December 1584 Joanes de Echaniz wrote his will in Port Breton. Carroll Cove was also known as Port Balleine by the French Basques (Barkham, 1982; Encyclopedia of NL V1: 1981). The cove was continuously used by fisherman up to the mid 1980s.

We were in Carroll Cove because Cindy Gibbons had recently noted red roof tile thrown up in the back dirt pile from a groundhog hole. Upon arrival we tied up our boat at the small wharf used by cabin owners in Carroll Cove and walked from the head of the cove along the southern shore to Carroll Point looking for Cindy’s groundhog hole.

While walking out to the end of the point we noted several places just back from the shoreline with various foundation-like depressions including three circular depressions in a row that looked like Basque tryworks. Test pits in these depressions revealed no cultural material. At the eastern tip of Carroll Point we saw a recent capstan and noted a whale skull just behind it. A test pit behind the skull contained no cultural material.

On our walk back to the bottom of the cove we dug several other test pits in some of the depressions. At about midway between the

Figure 8 Showing the location of Carroll Cove in relation to Red Bay (PAO)
point and the bottom of the cove a test pit dug just outside one of the depressions contained whale bone, a possible piece of tin-glaze ceramic, red roof tile, burned bone and a Ramah chert flake. We dug four more test pits in each of the cardinal directions three metres from the first test pit. The first (north of the original test pit) and fourth (east of the original test pit) contained more roof tile. The second (west of the original test pit) contained more whale bone. The third (south of the original test pit and closer to the depression) contained a considerable amount of historic material. We found Pearlware and whiteware, square nails, an orange CEW small pot base fragment with an honey coloured glaze on the inside, a kaolin pipe bowl fragment, green bottle glass, a piece of cut ivory, red roof tile, strap iron, fish bone and charcoal. The test pit was 40 cm deep; the first 20 cm was thick with roots and the last 20 cm was a mix of dark earth and mussel shell. At the bottom was a layer of red coarse quartzite sand.

Arriving back at the wharf near the cabins we found a groundhog hole in one of the gardens used by the cabin owners. There, in the back dirt pile of the groundhog hole, was a large amount of red roof tile. A test pit in the garden near the groundhog hole found more roof tile and a piece of coarse earthenware.

Jim Tuck visited Western Arm in 1980 and recorded both historic and precontact occupations. His historic occupation consisted of sod structures which produced historic material that he thought may date to the late 18th or early 19th century. Jim suspected they may be the location of a French sealing station dating from the 18th century (Tuck 1981:76). Without realizing it we probably test pitted the same sod structures EkBc-04 on the south shore of the arm in Buckle Cove finding square nails, CEW with crizzled honey glaze, a pipe stem with a narrow bore and a seal bone.

Of the three precontact occupations in the Arm, Jim only described a location for one.
noted any blowouts was at the head of Buckle Cove which is in the south west end of Western Arm.

We also spent some time on this trip looking for the Arrowhead Mine site in the L'Anse au Diable area. We ended up finding four probable Maritime Archaic sites, one of which is likely Arrowhead Mine and one which is very significant in terms of having very high research potential.

Arrowhead Mine 2 is a small site located near the highway in a sand blow-out. It is made up of scattered white & clear quartzite flakes, grey slate flakes and a few fire-cracked rocks.

At the Arrowhead Mine 3 (Figure 11) site we initially thought we had found another small quartzite exposure site, however the more we searched the larger the site became and we soon realized we were in the midst of a large Maritime Archaic site. The site is ~ 60x20m =1200 m² with lots of large intact areas and flakes eroding out of context. There are also several large cobbles of quartzite sitting on the surface varying in size from just under volleyball to baseball and softball size; some were visibly flaked. This may indicate the site is some form of lithic workshop (Figure 12).

Very near the PAO coordinates for Arrowhead Mine we found our fourth site which we believe is some portion of the Arrowhead Mine site. It was a small but dense concentration of various quartzite flakes and cores we found on the lip of a large blow-out. What remains of this site looks like a small lithic workshop with several worked cobbles.

Upon returning to St. John's we took a closer look at Tuck n.d. and realized there were several localities to this site and that the notes contained a rough hand drawn map of the site. It is likely we visited just one of the localities.

Figure 11 The Arrowhead Mine 3 (Quarry 2) site extends from where the picture is being taken back to Delphina on the right and to the left side of the photo (PAO)
If our interpretation of the map is correct we were at Area A where Tuck found a small pit in 1973 that contained 6 bifaces and 3 fully channeled gouges.

The final task for this year’s southern Labrador trip was to revisit two known sites. At the Pinware Hill site we noted that the hearth we found in 2005 is almost completely eroded.

No other cultural material was found.

The Cowpath site is basically in the same condition as last year, showing some disturbance but mostly intact. This site has significant research potential with intact material. There is blown-out material, but there are definitely intact areas. Using the GPS we were able to estimate that cultural material was exposed over an area of more than 600 m², much of which has never been archaeologically investigated.

**Inspector Island**

In July the Stephen Hull traveled to the Boyd’s Cove Beothuk Interpretation Centre to give a presentation to the general public on the *Historic Resources Act*. Laurie McLean also gave a presentation on the Beaches site. We also planned to revisit Inspector Island (DiAq-01) since we were in the area and because the site has not been revisited since 1990.

The site is located on the south side of Inspector Island in Dildo Run, Notre Dame Bay (Figure 1). It is a multi-culture, multi-
component site spread across at least two beach terraces. The upper terrace contains a Maritime Archaic occupation as well as a probable Groswater occupation as indicated by 2 artifacts in Pastore 1987. The lower terraces contain a Little Passage occupation below a brief Beothuk occupation.

During the excavation of the site in 1987 Dr. Pastore constructed a ~ one metre high and ~ 13 metre long retaining wall along the western edge of the site to protect it from wave and ice damage (Figure 15). The wall was made of large stones (>30 cm) which were wrapped in chicken wire with large wooden posts (~2m) driven into the ground in front of the stones.

After a short search of the beach we were quickly able to relocate the wall (Figures 16) and noted that it is still in good condition and protecting the site. There are even Juniper trees growing on top of the wall. We were however disappointed to realize that someone had built a cabin on the upper terrace of the site and cut down several trees that were growing out of one of the housepits. The cabin appears to have no subfloor so it may not have impacted the site. However, there is no way to tell if the felling of the trees turned over the soil in the house pit. An inspection of the entire beach, especially in front of the retaining wall, did not reveal any artifacts or any erosion of the site. It appears that Dr. Pastore’s wall is protecting the site from the natural elements.

Southern Cat Island

In October of 2008 the Provincial Archaeology Office (PAO) was sent pictures of several private collections in the Lumsden area and photos of what appeared to be a series of features at a possible new archaeological site on Southern Cat Island, just off shore from Lumsden. In August of 2009 the author traveled to Lumsden to investigate both the private collections and the possible new site.

With the assistance of Mr. Rex Gibbons the author spent the evening of August 12th visiting local individuals with private col-
One of the people we visited was Mr. Jim Goodyear. He has an extensive collection of precontact and historic artifacts from Southern Cat Island (See Figure 19, top photo & Figure 20). Mr. Goodyear was somewhat hesitant to lend his collection for cataloguing but in the end he did acquiesce. His collection was taken to St. John’s, catalogued and has since been returned to him.

As impressive as Mr. Goodyear’s pre-contact collection is his assortment of European artifacts from Southern Cat Island is even more extensive; most if not all of it dates to the 19th century. The collection includes the typical variety of 19th century ceramic fragments. There is also an assortment of small brass pins and 10-15 sewing thimbles of various sizes and styles. All of the latter were surface collected from one small area on the island. The European portion of the collection was not borrowed for

Figure 15 Retaining wall just after construction (Pastore 1987) (PAO)

Figure 16 Two digitally merged photos taken in 2009 from a slightly different angle than the 1987 photo showing the same area as Figure 2. The 5 or 6 trees in the centre foreground of the 1987 photo appear to have been cut down (PAO)
Figure 17 Map showing the location of Southern Cat Island and Cape Island (PAO)

Figure 18 The collection of Mr. Baxter Andrews of Lumsden from the Cape Island and Cape Freels area (PAO)

Figure 19 Top two photos are private collections. Artifacts in the top photo belong to Mr. Jim Goodyear of Lumsden, they were borrowed for cataloguing and returned; the middle photo artifacts are in the possession of Mr. Frank Vincent of Valleyfield, they were not borrowed, some of the collection is from Cape Island; the bottom photo shows one of the features on Southern Cat Island (All photos Rex Gibbons) (PAO)
The next morning was spent investigating the features on Southern Cat Island. All five are located on the south east tip of the island and built directly on top of the beach (Figure 21). Four of the five had a complete or almost complete single ring of quartzite cobbles (~ head sized or smaller) around their exterior. Features 3 and 4 had partial or incomplete rings. Feature 5 had no ring but there were enough quartzite cobbles loosely strewn around to say all three would have had complete exterior rings of quartzite cobbles prior to being deflated. The interior of all the features were visibly filled with beach sand, pebbles and a lot of periwinkle, barnacle and mussel shells.

The beach area around the features was littered with various European 19th century and more recent artifacts. Just to the west (See Figure 21 area marked A) was where Mr. Andy Gibbons collected his Groswater knife and Mr. Jim Goodyear said that he also collected various precontact artifacts (Recent Indian) in the same area. He also related that he had never found an artifact on the surface of the features. The beach around the features also contained a lot of black slate cobbles in various states of fracture. This material, according to Mr. Rex Gibbons who has a background in geology, is not indigenous to the area. So the surrounding environment gave little hint as to who created the features.

It was decided to quarter feature 1 because it looked to be the least disturbed. It was hoped it may reveal artifactual evidence to suggest who made the features or when they were made. When the quartering was completed this was expanded to halving the feature.

The stratigraphy of feature 1 includes a layer of shell fragments which are mixed with beach sand and pebbles in the top five to six centimetres. Below this is a layer of ten centimetres of sand that has some organic marbling throughout. At 14-15 centimetres there were some small pieces of deteriorated wood and just below this is a one centimetre thick black organic layer. Beyond this is pure beach sand. Large cobbles similar to those that compose the outer ring were found inside the feature as well.

No artifacts were found on top of the features during a visual inspection by the author. No artifacts were found in Feature one during the excavation and there was no charcoal, fire cracked rock, or burned sand noted below the feature. Feature three was also prodded by Mr. Goodyear; no artifacts were found there either. It was originally thought by the PAO that these features were hearths but the lack of any burned material would seem to preclude this thought.
Mr. Goodyear told us that he had been collecting artifacts from the island since the 1992 cod moratorium and in that time the island has undergone severe changes due to wind-blown sand. As we walked back to the boat he pointed out several areas that since 1992 had been changed drastically due to wind-blown sand. He explained how he collected most of his artifacts by visiting the sand-covered island after particularly bad storms and in the spring of the year when the artifacts would be washed out. He also explained how he would conduct his search of the beaches by dragging a stick along behind him so he would know where he had and had not looked.

In the end we were not able to determine who made the beach features, when they were made or why they were made. Given the wind blown nature of the environment constantly covering and uncovering material and the on-going regular collecting of material from the island it is unlikely the site would repay any long term investigation.

Table 1 Measurements of the 5 features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Size (cm)</th>
<th>Distance (cm)</th>
<th>Height (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>115x140</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>190x190</td>
<td>210 from Feature 2 to 1</td>
<td>15-20</td>
</tr>
<tr>
<td>3</td>
<td>190x190</td>
<td>80 from Feature 3 to 2</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>180x170</td>
<td>200 from Feature 4 to 3</td>
<td>20-25</td>
</tr>
<tr>
<td>5</td>
<td>160x140</td>
<td>380 from Feature 5 to 4</td>
<td></td>
</tr>
</tbody>
</table>

Figure 21 Location of the features on Southern Cat Island and where Mr. Andy Gibbons picked up his Grosnwater biface the day before our arrival (A) (Rex Gibbons; photo) (PAO)
Karen Ryan, formerly an archaeology student at MUN and now an employee of the CMC. She informed us that a colleague of hers, Stephen Augustine, an Ethnology curator at the CMC, stopped at a park near Rose Blanche where some machinery was bulldozing a walking path. He saw lithics falling out of the cut edges that he described as Groswater.

In October Ken Reynolds traveled to the area and confirmed the site location. Though a small part of the site is disturbed the terrace is large enough to contain in situ remains. Testing of this terrace and other potential areas in close proximity is required.

**References**

McGhee, Robert and James A. Tuck

Tuck, James A.
n.d. MUN TXT-46 Southern Labrador.

The general objective of the 2009 field season was to continue investigating the area outside the western perimeter of Houses 17 on the upper terrace of the Dorset Palaeoeskimo site of Phillip’s Garden (Renouf 2009). Our particular aims were to look for evidence of exterior activities by uncovering and delineating features, mapping artefact distributions and taking soil samples for multi-chemical analysis. Results of the 2008 excavations showed that there were multiple features exterior to and potentially associated with House 17. In the 2009 field season we extended our excavation northward to encompass the full extent of the area outside the western perimeter of House 17 (Figs. 1-2).

Over 100 features occurred in the 2009 excavation area, including: small, medium and large post-holes (singly or in pairs); flat-bottomed pits; areas of soil anomalies; areas of pea or angular gravel; rock pavements or concentrations, and midden deposits. Of particular note were: a gravel platform measuring 2.3 x 2.2 m (Fig. 3); an axial feature (Fig. 4), a 2.5 x 1.5 m oval area outlined by small shallow, or deep, stakeholes (Fig. 5); a 1.2 x 0.5 m oval outlined by larger and deeper stakeholes (Fig. 6).

Fifty-nine m² were excavated in 2009, bringing the total area excavated outside House 17 to 93 m². Once the sod was removed we collected soil samples at 50 cm intervals over the excavation area using a soil sampler. As in previous years, the location and outline of all features was recorded with the total station and mapped by hand. Artefact locations were shot in with the total station and flakes and faunal were collected by level within unit.
Figure 3 Gravel platform outlined with pink string (Renouf, Wells, Lavers)

Figure 4 Axial feature. Nails at 1 m intervals (Renouf, Wells, Lavers)
Figure 5 Oval area outlined by shallow stakeholes; each is flagged with yellow (Renouf, Wells, Lavers)

Figure 6 Oval area outlined by medium-sized, deep post-holes (Renouf, Wells, Lavers)
6) and a line of large and medium-sized post-holes at the terrace edge (Fig. 7). These and other features remain to be analyzed for patterns and associations.

Conclusions

Together with 2008 excavations, the 2009 field season at Phillip’s Garden uncovered evidence of a complex palimpsest of features outside House 17 that indicate a wide range of structures and activities outside this, and no doubt other, houses at the site.

References

Renouf, M.A.P.
2009 2008 field season at Phillip’s Garden, Port au Choix National Historic Site. Report to the Provincial Archaeology Office, Department of Tourism, Culture and Recreation, Government of Newfoundland and Labrador.

Figure 7 Line of large, shallow post-holes at terrace edge (Renouf)
Archaeological survey was undertaken on First Pond, Second Pond, Little Bear Cove Pond, and at the mouth of Thwart Brook in the Indian Bay Brook drainage between July 10 and July 15, 2009.

Investigation of Second Pond was boat-based and involved ground investigations at 35 testing locations, with 68 testpits excavated at 10 of those. Survey of First Pond involved ground investigation of 17 testing locations, with 73 testpits excavated at 9 of these, and survey on Little Bear Cove Pond involved ground survey at 9 locations, with 6 testpits excavated at 2 of these. The mouth of Thwart Brook was accessed on foot from the Indian Bay campground and one testpit was excavated at a single testing location here.

Four archaeological sites were recorded during the course of the survey. These include one Bowater logging camp and a separate sawmill site on the northern shore of Second Pond, another Bowater camp on the southern shore of First Pond, and a possible precontact site at the western end of First Pond. This last is represented by a single chert nodule recovered from the shingle and cobble beach at the inflow of Indian Bay Brook. This piece displays waterworn cortex and has been battered and possibly worked at one end. It may therefore represent a core fragment; whether or not it has been worked, the material is exotic, unlike anything observed on beaches in the study area, and has likely been introduced by human activity.

The disappointingly low level of evidence for early historic and precontact occupation may be attributed to the effects of logging activities in the area and the subsequent forest fire in 1961. All of the ponds investigated were dammed and flooded during commercial logging activities which continued until the 1961 fire. These dams have since deteriorated and water levels are currently below the maxima reached during the height of logging, though levels remain several feet higher than they would have been prior to the 20th century.

Other lakes in the Bonavista Bay hinterland, including Gambo Pond, have similarly been subjected to flooding, and also to the effects of the 1961 fire. However, the impacts on First Pond, Second Pond and Little Bear Cove Pond appear to have been particularly severe. The shoreline along these lakes, particularly on First and Second Pond, is characterized by stands of birch established on what are essentially boulder fields from which virtually all soil appears to have been stripped away. This leaves little opportunity for testing, or for the preservation of in situ archaeological remains. It is not clear why flooding impacts were so much more severe in this area than on Gambo Pond, but it does appear that the shorelines here were not only flooded, but severely scoured by moving water and/or ice.
Archaeological survey was undertaken on Birchy Island, Sivier Island and Camel Island in the Bay of Exploits between July 16 and July 17, 2009.

The objectives were to revisit the sparsely-documented archaeological site recorded by Helen Devereux at Birchy Island Tickle (DiAr-07) and to survey nearby portions of Birchy, Sivier, and Camel Islands. During the course of the survey, the shoreline of the study area was tracked by boat, with ground survey focused on the high-potential beaches, necks, and points of land between rocky promontories. There are many such attractive, high-potential locations within the Study Area. Virtually all of these are now cabin sites, surrounded by extensive and carefully-manicured lawns. Consequently, while 21 testing locations were investigated in all (three on Birchy Island, one on the mainland side of Shoal Tickle, fourteen on Sivier Island, and three on Camel Island), subsurface testing was undertaken only on Camel Island where there has been no cabin construction on the eastern beach. All testing locations, however, offered eroding banks and other natural and artificial surface exposures around cabin sites that could be investigated by visual inspection alone.

In all, seven sites were recorded during the course of the survey, including the previously-reported DiAr-07.

Birchy Island Tickle (DiAr-7)

The site originally recorded by Helen Devereux in 1965 occupies a long sandy point projecting out into Birchy Island Tickle from the south side of Birchy Island. Although the point is occupied by a number of cabins and likely was an historic European settlement as well, it is the pre-contact component that is of greatest interest. A light but continual scatter of flakes and artifacts was noted along 200m of eroding bank on the southwestern margins of the point. The few diagnostic pieces in the collection appear to indicate a Dorset occupation. In addition, two unusual features were noted. First was a small deposit of very fine calcined bone fragments (bone mash) with some flakes observed on the edge of the eroding bank. Deposits of this sort are more commonly associated with Recent Indian occupations in Newfoundland, though no Recent Indian diagnostic artifacts were observed or collected at the site. The second feature of interest is a line of three shallow depressions ranged...
along 50m on the southwestern side of the point. The depression nearest the tip of the point has been partly lost to erosion, while the remaining two are as yet unaffected. All are approximately 5m in diameter and 0.5m deep; in the long grass it is difficult to determine with certainty whether they are circular or subrectangular. The associated artifacts might imply that these are potentially Dorset winter houses. Preserved Dorset semi-subterranean houses are not common on the northeast coast of Newfoundland, and if Dorset, these remains might be highly-significant; while the location would be classified by Pastore (1986) as “Outer Coastal” and therefore a possible site of Dorset winter occupation, it is nevertheless sheltered deep in the Bay of Exploits archipelago. Alternatively, the depressions may pertain to a Recent Indian occupation of the site not evident in the artifact collection, but suggested by the presence of the bone mash deposit further along the bank. It may be significant in this regard that “Sandy Point on Birchy Island,” likely the same location as DiAr-07, was reportedly the site of an encounter between one of John Peyton’s men and a group of Beothuk who were encamped in at least one wigwam. The story of this encounter was relayed by Thomas Peyton to James Howley (1915: 284; cited in Marshall 1996:267)

**Eastern Harbour 2 (DiAr-14)**
A smaller, higher neck of land anchors a rocky promontory on the northern side of Eastern Harbour, opposite Pine Island. A small scatter of chert flakes and sherds of historic ironstone ceramic was noted exposed on the surface at the base of the bedrock outcrop. Inspection of surface exposures atop the outcrop and on two successive levels along the neck (ca. 0.5 and 3m a.s.l.) failed to reveal the source of these cultural materials. This is an historic site with a precontact component of indeterminate cultural affiliation.

**Western Harbour 1 (DiAr-10)**
Two opposing points of land form a narrow constriction in Western Harbour. The eastern point, a more-or-less flat-topped bedrock outcrop, is the site of a cabin, and two waterworn chert flakes were collected from the gravel paths around this cabin. The beach gravels for these paths were almost certainly brought here from elsewhere so there are probably no actual *in situ* archaeological deposits at this location. The source of the gravels cannot be identified for certain, but the multicoloured gravels resemble those found along Birchy Island Tickle more than the uniform grey slate shingle found on beaches in Western Harbour, so it is suspected that this material came from the extensive beach at DiAr-07.

**Western Harbour 2 (DiAr-11)**
A neck of land on the northwest side of Sivier Island connects two rocky hills. Two cabins presently occupy this neck, which like many other such landforms, is open and grassy. One root cellar half-hidden in a clump of spruce indicates earlier historic settlement in this location as well.
Shoal Tickle 1 (DiAs-12) (Schwarz)

Shoal Tickle separates Birchy Island from the mainland. Both the Birchy Island and mainland sides of the tickle are marked by cliffy shorelines ending in rocky points of land topped by grasses and heath. Surface inspection of a small gravel exposure atop the cliffs on the Birchy Island side revealed a few flakes and a chipped and ground burin-like tool of Cow Head Chert, indicating Groswater occupation. The potentially-habitable area here at the southwestern tip of Birchy Island is large, though inspection of numerous small exposures across the point revealed no other cultural material. The point on the mainland side of the tickle was also surface-inspected, with negative results.

References
Devereux, H.

Howley, J.P.

Marshall, I.

Pastore, R.T.
1986    The Spatial Distribution of Late Palaeo-Eskimo Sites on the Island of Newfoundland. Palaeo-Eskimo Cultures in Newfoundland, Labrador and Ungava. Reports in Archaeology 1, pp. 125-134. Memorial University of Newfoundland, St. John’s.
Pinware Hill (EjBe-10) was initially reported by Dr. Elmer Harp during a survey of the Labrador Straits in 1949 (Harp 1963). The site, later revisited and partially excavated by Jim Tuck and Bob McGhee in the early 1970s, represents the type-site for the “Pinware Hill Class” of projectile points, the earliest culture-historical unit in the Archaic sequence they defined for the Strait of Belle Isle (McGhee and Tuck 1975). Pinware Hill thus appears, on the basis of radiocarbon dating, artifact seriation, and site elevation, to be the earliest recorded archaeological site in the Province, dating as early as ca. 8000-9000 BP.

Today the site consists of several large sand blowouts over a large area that periodically expose scattered white & yellowish quartz and quartzite flakes and an occasional artifact. The Provincial Archaeology Office (PAO) began monitoring the site in 2003 and has revisited the site four times, in 2003, 2005, 2008 and 2009 (Hull and Mercer 2003, 2005, 2009), noting ongoing erosion at the site each year. In 2005, PAO investigators found a large intact hearth with charcoal and white quartz/quartzite flakes and cobbles within the hearth. Charcoal collected from the hearth was dated to 7400 +/- 130 BP (Beta–210314). In 2008 and 2009 it was noted that most of the hearth had eroded away. PAO determined that salvage of the remaining portions of this hearth, along

ARCHAEOLOGICAL SALVAGE EXCAVATIONS AT PINWARE HILL (EjBe-10), LABRADOR SEPTEMBER 5-8, 2009 09.42
Fred Schwarz
Black Spruce Heritage Services

EjBe-02 (Area 1) before excavation. Note the dense scatter of quartz debitage eroding onto the orange hardpan from the exposed margins of the buried A Horizon (Schwarz)
Consequently, archaeological salvage excavations and surface inspection were undertaken at EjBe-10 between September 5 and September 8, 2009 by Dr. Fred Schwarz, with the assistance of Mr. Walter Bolger of Capstan Island. The work included five elements:

- salvage excavation at the eroding hearth reported by PAO investigators in 2005 (designated Area 1);
- test/salvage excavation at a nearby area of eroding bank of undetermined archaeological potential (designated Area 2);
- surface inspection, recording and mapping of the blowout in which Area 1 and Area 2 were located;
- surface inspection, recording and mapping of the larger blowout to the north of the Area 1 and Area 2 blowout; and
- other incidental field survey in the Pinware area.

The preliminary results of archaeological field activities are summarized below.

**Area 1 Salvage Excavation**

The principal objective of the 2009 work at EjBe-10 was to complete salvage excavations at the remainder of the eroding hearth feature first recorded by PAO in 2005. Salvage involved excavation within an approximately 8m² area, some portions of which had already been partly or wholly-deflated by wind erosion. Beneath an overall veneer of windblown sand, excavation revealed a buried peat layer 1-5cm thick; this layer was discontinuous, and interspersed with miniature “blowouts” filled with grey sand or windblown orange sand. Beneath the buried peat lay whitish-grey sand generally 5-10cm thick, with numerous quartz artifacts and scattered flecks of charcoal. This in turn overlay a grey-pink sand mottled with grey, again generally 5-10cm thick, resting on an reddish-orange sand which in places formed an indurated reddish-black hardpan. Cultural material, including quartz flakes and artifacts, and charcoal flecks, was found throughout the grey and mottled sand, and even embedded in the top of the red-orange sand and hardpan.

Excavation to the top of the mottled sand layer exposed a grouping of rocks including two head-sized heat-disintegrated rocks and three angular slabs. Though these do not form any obvious pattern, the grouping is interpreted as the remains of a cobble hearth 1.3m wide east to west; the north-south dimensions...
of the hearth cannot be determined, though the number of cobbles scattered at the base of the blowout below Area 1 suggests the feature once measured at least this length north-south as well. Some 30cm west of the hearth a 20x20cm cluster of Vienna sausage, sardine and kippered snack tins along with some bread-bag plastic was found at the same depth; these appear to have been buried in a small pit excavated through the buried peat layer but fortunately this disturbance seems to have narrowly missed impacting the hearth feature itself.

Numerous samples of scattered charcoal were recovered from both the grey sand and mottled sand layers, in addition to several more concentrated samples. Associated artifacts consist almost entirely of white and crystalline quartz debitage but appear to include a number of finished artifacts, including biface fragments, pièces esquillées, scrapers and other unifaces. Several projectile points have been recovered, and on preliminary inspection appear to consist solely of “Pinware Hill” forms (per McGhee and Tuck 1975), with thinned, concave bases.

**Area 2 Test Excavation**

Although no cultural material had previously been noted eroding from Area 2, excavation was undertaken in Area 2, 3.5m from the eastern edge of Area 1, to determine whether cultural deposits related to Area 1 continued to the east. A total of 3m² was excavated in Area 2, following removal of up to 1m of windblown-sand overburden and buried peat. The stratigraphy was similar to that in Area 1 but thinner, with a 2.5cm layer of grey sand with charcoal flecks underlying the buried peat and overlying a 10-15cm layer of pink-grey mottled sand grading to orange sand and blackish-red hardpan. Excavation revealed that quartz debris and finished artifacts, including several biface fragments, are indeed present here, though the cultural deposit was notably sparser than in Area 1, with a light scatter of quartzite flakes limited to the grey sand and charcoal layer; unlike in Area 1, the mottled pink-grey sand was sterile. Flakes and artifacts were collected, as were several samples of scattered charcoal. The Area 2 excavation results
may indicate that though the most conspicuous cultural deposits here are discontinuous and concentrated in dense loci around hearth features which show prominently when blown out (as in Area 1), there may nevertheless be a thin veneer of cultural material across the entire area, even when this is not apparent in blowouts.

**Area 1-2 Blowout Survey**

The Area 1-2 blowout was surface-inspected in its entirety and the blowout margins and all quartz debitage finds were mapped using hand-held GPS. Nothing was noted actively eroding from any of the vegetated margins of the blowout but five flake scatters were noted within the blowout. Three of these lie in low central areas and may have formed as post-depositional accumulations (the blowout apparently floods to the top in spring, and flakes may tend to gravitate to the lowest levels, in the remnant pools of late spring and early summer). However, the remaining two scatters lie closer to the vegetated margins of the blowout. One is the dense 10x2m scatter of quartz flakes at the base of Area 1, clearly a product of erosion from the Area 1 hearth. The second lies near the southern edge of the blowout on the path leading from the house which stands in front of the site. Although nothing was noted actively eroding here, the scatter of flakes at the base of the bank suggests there may be *in situ* deposits preserved here, between the blowout and the house.

**Survey of the Blowout North Of Area 1 and Area 2**

The large blowout north of Area 1 and Area 2 was surface-inspected in its entirety, and the blowout margins and all quartz debitage

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*Excavation in progress at EjBe-02 (Area 2). A meter of vegetation and aeolian overburden has been removed, exposing 3m² of the buried A Horizon. At this stage, 1m² has been further excavated to the sterile B Horizon (Schwarz).*
finds were mapped using hand-held GPS. Nothing was noted actively eroding from any of the vegetated margins of the blowout. Eight isolated flakes were recorded in various locations the middle of the blowout, along with one sparse deflated flake scatter measuring 4x7m.

**Incidental Survey in the Pinware Area**

Because the work required completing the necessary salvage and recording at EjBe-10 was relatively extensive for the time allotted, there was little opportunity to revisit other sites recorded in the Pinware area or to undertake additional survey. However, one new site was recorded 1 km north of EjBe-10, in a large blowout/borrow pit on the western side of the road leading north to Red Bay. Here, a small, sparse scatter of quartz flakes 2-3m in diameter, apparently deflated *in situ*, was noted some 15m from the nearest vegetated bank at the edge of the blowout. Two pieces were collected, including one crystal biface/projectile point tip and a white quartz biface fragment. Although this scatter, designated Pinware North 1 (EjBe-86), is entirely deflated, and no cultural material was noted anywhere along the vegetated margins of the blowout, the find may be significant in that it lies at approximately the same elevation as EjBe-10, or perhaps even a few meters higher. Its presence 1 km north of EjBe-10 suggests that additional early Maritime Archaic loci may potentially be found anywhere along the 30m a.s.l. elevation at the base of the rocky hills northwest of town, from Gary Butt’s house all the way to the Park boundary.

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Excavations in Placentia were underway again this summer, continuing to search and uncover more of the British New Fort and the French Fort Louis. The season took place between the beginning of June and the end of August. This season was a continuation of David Fry’s and Steve Mills’ work over the past several years. As in the last several years there was a team of eight dedicated and keen excavators, a lab supervisor, and the archaeologist.

Two areas of excavation were opened up with three targets in mind. On the east side of the site, the larger of the two trenches, measuring 107²meters, was opened up. Here, it was hoped to uncover the New Fort’s gate and guard house. The second excavation on the west side of the site measured 5x5m (25²meters). The aim here was to expose a 5m length of the New Fort’s rampart wall.

As with the previous seasons, once a certain depth was reached a water pump was vital. The pump was required to run eight hours a day just to make the trenches manageable. By August it became very tricky managing two flooding trenches with one water pump. On days after heavy rain, it could take up to three hours to pump out one trench. Thankfully to an understanding council, a second pump was supplied and all of sudden life in the trenches became so much easier.

**New Fort’s Gate and Guard House Trench**

The gate foundations were uncovered quite early on in the season; only ten centimetres or so of silica and turf overlaid the foundations. The west side of the gate’s stone foundations was quite easy to define. It consisted of several courses of neatly laid large squared stone. Abutting this was the 1740’s rubble layer the British deposited to raise the ground level. Integrated into this section of the foundation was a curious feature. Approximately half way up the wall, there is a 40 centimetre wide lip in the wall. This lip extends for 11.2 meters at which point runs under the edge of the trench, as a result only one end of the lip has been excavated. The lip terminates at a point that more or less corresponds to the northeast corner of the gate’s foundations on the opposite side of the wall. The lip is most certainly functional and affiliated with the gate but its purpose remains uncertain.

On the same side of the wall as the lip, there is a change in the stones used in the construction of the walls. The wall is primarily made up of large squared stones. However, there is 4 meter section of wall where the stones are considerably smaller and narrower. Two courses of these stones are required to meet the height of one course of the larger stones. Its position within the wall, an equal distance from either corner of the gate’s foun-
dations and immediately above the lip, suggests it is a part of the gate and possibly an indication on the width of the opening of the gate, about 4m.

The east side of the gate foundation was much more difficult to define. This area had suffered serious damage in the last 40 years from construction of a water main and the softball field. However, both corners of the gate foundations were eventually located. By the end of the season the whole of the gate’s foundation was exposed. The gate measured 9.4m long, 7.4m wide, and survives to 1.10m in height. The gate’s foundations were constructed entirely out of stone and appeared to be mostly un-mortared though patches of mortar were recorded in the south east corner of the gate. Unfortunately, any paved surface, cobble stones or crushed stone for example, for marching through the gate has long been lost.

The search for the guard house failed in that a guard house was not located. However, a feature was discovered, unrelated to the guard house. What was found was an exceptionally large squared wooden post. It measured 18x18 centimetres square and over 45 centimetres high, and had a rebate on the top. This was set in the east end of a trench that contained smaller more crudely fashioned posts. This trench continues for approximately two meters before it turns south for 30 centimetres or so. There is a 1.10 meter gap and then a second trench begins and continues to run south for over two meters and underneath the edge of the excavation. Both the post and trenches were sealed by the British rubble layer of the 1740’s suggesting this set of features

Figure 2 Arial view of gate foundation and guard house trench. The large wooden post is visible off center towards the bottom right (Simmonds)
may be affiliated with Fort Louis and the French. Its function remains unclear.

Within this area was a deposit of branches, twigs, and poorly preserved fish bones. Underneath this there was a thick concentration of fish bone. This is most likely remnants of a fish flake.

**Rampart Wall Trench**

Stones of the rampart wall, as in the other trench, were quick to be exposed as they were just underlyng the grass in places. Once the edge of the wall was defined, the use of a backhoe was kindly provided by the Town of Placentia. Two days with the backhoe saved weeks of back breaking labour excavating through the rubble deposit of the British occupation in the 1740's. As soon as the rubble layer was removed the backhoe was called off as the potential of sensitive cultural deposits was high. The rubble butting against the wall was manually removed and it was immediately apparent that the rampart had two phases of construction.

The latter phase consisted of two courses of large, roughly squared, dry laid stones. The earlier phase was made up of mortared rubble with some larger stones laid in a disorganized fashion. This earlier phase may be

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**Figure 3** The west side of the gate's foundations showing the lip in the wall. Highlighted in red is the area containing flatter stones believed to be an indication of the width of the gate's passage (Simmonds)

**Figure 4** The wooden post and associated ditches running from the post towards the right hand side of the photograph and from the top of the photograph to the top of the 1 meter scale (Simmonds)

**Figure 5** Close up of wooden post showing the rebate and beveled edges (Simmonds)
evidence of the French repairs made to the fort in 1705. The French had real troubles maintaining the wooden walls of Fort Louis. So in 1705, stone masons were brought in to make repairs to the interior of the fort (Archives Nationales de France, Colonies C11C, ff. 275-275v; National Archives of Canada Reel F-501). The second phase is most likely associated with the British construction of the New Fort.

The positioning of this trench just managed to clip what is possibly one of the most exciting features of this summer. In the north west corner there was an orangey-red clay that was quite hard, as if baked by heat, and contained small amounts of charcoal. This may be a hearth. Alongside this feature consisting of a two rows of vertical side by side posts were revealed. The wood has long since decayed leaving behind circular bark rings. There are two rows of these, both around one meter in length before they run under the rampart wall and the edge of the trench, and together they form a corner.

Inside this feature there were a number of different stratigraphic layers. These layers consisted of thick peat and sand deposits. The peat deposits are of importance for the richness of artifacts they contained. In the peat layers the preservation of organic artifacts was exceptional. There were over 200 pieces of off cuts of leather, fragments of leather shoes, wooden shoe heels; several wooden buttons; a comb; and other unidentified wooden objects found in these peat layers. Other artifacts include pewter buttons; various sizes of lead shot; twisted lumps of pewter and lead; clay tobacco pipe fragments; and numerous small fragments of tin glazed pottery. This season we excavated a total of 3891 artifacts. 32% or 1251 artifacts of these artifacts came from the layers inside this feature.

Large cobble stones surround the base of this feature. With water constantly eroding the soils on the low lying areas, extra precautions had to be taken to protect dwellings and other infrastructure. Perhaps placing large cobble stones around the base of structures was one way of doing this. Perhaps this protected the posts and the soils from erosion, while at the same time added extra weight around the base of the structure to help support it.

There is also a ditch associated with this structure. The ditch runs roughly from the corner of the two rows of bark rings towards
the south and continues under the edge of the trench. The ditch appeared to have been lined with small cobbles and has since filled up with sand. This ditch and fill may simply be a simple drainage ditch as flooding has always been an issue in Placentia. In the south end of the ditch a pile of large rocks were deposited into the ditch. Concreted to the bottom of one of these rocks was one half of a chain shot. Numerous gun flints and musket shots were excavated this season and, though associated with military use, may have also been used for hunting. This half of a chain shot is the only artifact to be excavated this season that is purely military/naval.

Evidence suggests these features pre-date the construction of Fort Louis. The structure is stratigraphically older than the rampart wall. If the first construction phase of the rampart wall is the 1705 French rebuild of Fort Louis, then the structure was built sometime before 1705. Furthermore, when they repaired the fort wall in 1705, it is unlikely that they altered the position of the original rampart wall enough to build over an existing building. If they had they probably would have dismantled the building first. This suggests that this structure was quite possibly built before Fort Louis, therefore, before 1691. Before Fort Louis, there probably would have been buildings, either French or Basque, associated with the cod fishery on this beach. It is possible that this feature is one of these buildings. The construc-
tion of this feature also resembles the French style of building known as 'picque' or 'poteaux-en-terre' (post-in-ground) construction (Fisher 2008:490).

During the season five test pits were excavated on adjacent properties. Three test pits to the south of the site revealed significant finds. Test pits three and four were just meters apart and within ten meters of the site’s boundary while the fifth test pit was on the far side of the property on a high ridge of land. In test pit three, less than 50 centimeters under the surface, a large dry laid stone wall was uncovered. This wall is at least one meter wide and one meter high. The wall contains at least five courses and two ledges. The wall is east/west aligned and appears to line up with the foundations of the British governor’s house, though at present it is believed to be a separate building. Numerous pieces of 19th and 20th century ceramics were found in the top half of this test pit, but towards the bottom 17th and 18th century ceramics, tobacco pipe fragments, and several wine glass stems were prominent. The abundance of wine glass stems and the construction and size of the wall suggest this structure is of importance, perhaps housing someone of significance. There are no structures in this location on any of the British maps of the New Fort indicating that the wall predates the 1740s and is quite possibly affiliated with Fort Louis.

Test pit four was similar to test pit three in that about 50 centimetres below the ground, a large stone corner of a wall was discovered. Three stone courses, possible mortaried, were exposed but the base of the wall was not reached. As there was no inside corner exposed, this is believed to be a part of a defensive wall rather than a wall of a building. Its different alignment to all of the known British structures of the New Fort suggests it is associated with Fort Louis. In fact, its position and alignment closely line up to a corner of a rampart wall of Fort Louis illustrated on several French and British maps. The size of the wall also supports this. If this proves to be a part of Fort Louis, along with the lower part of the rampart wall exposed this season, they would be the first evidence of Fort Louis discovered to date. If this can be verified then it would help determine the size of and plot the precise location of Fort Louis on the ground, which remains relatively unknown at this time.

Test pit five also contained a wall. This wall consisted of one course of dry laid stone resting on top of earth. Excavations reached approximately 50 centimeters below the bottom of the wall with no more masonry work encountered. The only artifacts recovered were modern plastics. However, the construction technique resembles that of the other British stone built walls from the 1740s. Its location on the edge of what is suspected to be a section of the New Fort’s rampart wall implies that this is a defensive wall that would have lined the top of the rampart wall.

Overall, this past season was a huge success. We now have several exciting features to target and many questions to try and answer over the next couple of seasons. As long as the dry summers and water pumps hold up the next couple of seasons should be as productive as this past one.

References

At the request of Parks Canada, an archaeological investigation was carried out at Castle Hill National Historic Site, Placentia, Newfoundland. This was a joint project between Parks Canada and the Town of Placentia.

In July 2007, three cultural features were identified by Parks Canada archaeologist Ms. Jenneth Curtis while assessing damage caused by a trail. These features included the La Fontaine Battery, possibly the Horseshoe Battery, and a third area with three linear stone features. For three weeks in October 2009, archaeological investigations were carried out on these cultural features. Prior to this, no archaeological testing had been done in these areas.

Each morning for three weeks, the first task at hand was to hike up the steep hillside which was often slippery as a result of the rain. Despite having to take a spell after the march up the hill to catch our breath every morning, a total of 18 test units were excavated. These varied in size from one square meter to six square meters.

The first area tested was the furthest one up the hill and the possible location of the Horseshoe Battery. A week was spent in this location and eight test units were excavated.

The general topography of the area matched the name of the battery and the location matched that of the French maps. It was a natural, horseshoe shaped, flat plateau that had a commanding view of the bay, the settlement of Placentia, and the La Fontaine Battery. It would have been easily supported by the Detached Redoubt above. The plateau was also easily defended; behind it was a vertical cliff face and the bank of the plateau was steep except to the northwest, where a linear stone feature probably served as a defensive role.

The investigation of this linear feature revealed that it may be remnants of a crudely constructed defensive wall (See figure 2). It is
situated where the plateau is less naturally defended and faces the direction an enemy force would likely approach from. Underlying this, was an earlier ditch with the possible remains of a bank on the downward slope of the hill. This may be an earlier defensive entrenchment. No further testing was carried out on this feature. Much of it was under thick vegetation and to gain a better understanding of the feature, clearing away the vegetation would be necessary. This was not possible at this time as we had to keep the impact on the vegetation to a minimum.

The remainder of the test units revealed little of the battery. However, they did show the plateau was naturally formed rather than manmade. Other than a modern boot heel, no other artifacts were recovered from this area.

The second area intensively investigated, which involved less of a climb, was in a clearing on a quite a steep hill. Here the attention was focused on, but not restricted to, three linear stone features. Two of these features lined two of the edges of the clearing, while the third was set back from the clearing and in the trees. The third was perpendicular to the other stone features and appeared to connect to one of them. At the top of the clearing there was evidence of a small vegetable garden. Ten test units were opened in this area. Only modern beer bottle glass and a spent shotgun cartridge were found.

Of the two linear stone features lining the edge of the clearing, one was extremely ephemeral while the other, which was under thick vegetation and difficult to access, appeared to have at least one defined
edge. With the numerous test units in the clearing and across these two stone features it was concluded that these features were possibly the result of an attempt to increase the size and yield of a nearby vegetable garden. Similar stone arrangements can be seen on the other side of Freshwater Cove less than one kilometre away. The third stone feature was different from the others. It had no apparent relationship with the clearing, was perpendicular to the other stone features, had extremely well defined edges, and at least one definitive beginning. Broken ‘stubby’ beer bottle glass was found within this feature. The low height of the wall and the insufficient amount of stone downhill from it suggests the wall was not built up much higher than at present, making it inadequate to be defensive. It is unlikely to be of military origins, though its function remains uncertain.

The removal of a bench and handrails associated with the trail were also monitored in the area of the La Fontaine Battery. There were two sections of handrails with a total of ten posts. Each post hole was investigated as was the minor disturbance caused by the placement of the bench. Cultural materials and deposits were absent. A French map from 1709 depicts earthworks in the area of the handrails; however, this area has been subjected to heavy erosion.

The following paragraphs report on archaeological research completed in July 2009 as part of M. Stopp’s CURA research component. The five-year project “Understanding the Past to Build the Future” is funded by the Social Sciences and Humanities Research Council and the other members of the multi-disciplinary team include archaeologist Lisa Rankin (lead applicant in the funding proposal); Hans Rollman of MUN’s Department of Religious Studies; anthropologists John Kennedy and Evie Plaice; Labrador genealogist Patty Way; together with Greg Mitchell, a researcher for the Labrador Metis Nation. Our mandate is to examine Labrador Inuit presence along the coast south of Hamilton Inlet and to make results available to both an academic and community-based audience.

Until the 1980s, it was generally assumed that the Labrador Inuit resided no further south than the mouth of Hamilton Inlet and that their presence further to the southward was an ephemeral, largely archival phenomenon that was tied to the acquisition of European goods either through trade or by scavenging at fishing stations. In 1980, an important series of articles advanced documentary, cartographic, toponymic, and a small body of archaeological data to argue that Inuit were present as far south as the mouth of the St. Lawrence by the sixteenth century (Martijn and Clermont 1980). In 1986, in a further effort to consider the extent and timing of Inuit presence in southern Labrador, Reginald Auger tested a number of sod houses on both shores of the Strait of Belle Isle (Auger 1991, 1993). A key outcome of his work was that sod houses of the region were replete with European artifacts, and that many dated well into the period of European settlement, begging the question of who inhabited these structures. Were sod houses inhabited by Inuit, by Europeans, or by Inuit-European couples, and how can they be differentiated?

Archaeological surveys of The Unknown Labrador (John Kennedy’s name for the coastal stretch between Chateau Bay and Sandwich Bay) in 1991 and 1992 resulted in the identification of over 200 sod houses (Stopp 1997). As with Auger’s results, these structures...
were difficult to assign to any particular culture group. Some appeared to date to the late nineteenth/early twentieth century, some to the late eighteenth century, and a very few to an earlier period. In an effort to begin the process of identifying Labrador Inuit presence along this coast, Stopp (2002a) considered the combined archaeological and archival data, suggesting that there was indeed evidence of Inuit settlement in southern Labrador that pointed to both cold and warm season settlement. The evidence further suggested that trade or scavenging for European goods fitted in with a wide spectrum of other Labrador Inuit resource exploitation activities and that Inuit had probably begun to settle the coast south of Sandwich Bay by the sixteenth century. Two lists of sites were proposed as a way of structuring further research into distinguishing Labrador Inuit presence from European or Euro-Inuit during the early settlement period. One list consisted of sites with a high probability of being Labrador Inuit based on diagnostic artifacts and/or features. The second list consisted largely of cobble beach features and some sod houses at lower elevations that were possible evidence of Inuit presence but would require further research.

In July 2009, the authors and three further expedition members began testing at two sites, Great Caribou Island 1 and North Island 1, both thought to have a high probability of being Labrador Inuit. Test pits placed in 1991 yielded only European material. In the case of Great Caribou Island 1, that material suggested a late eighteenth century/early nineteenth century date, while the small collection from North Island 1 suggested a somewhat earlier period. The purpose of the 2009 field program was to test these sites more extensively and to delve deeper into the identification of Inuit along this part of the coast.

Several 1x1 m test units were placed inside each house and in the middens outside the entrances. Excavation and collection were by 10 cm layers per quadrant and all soil was screened through ¼ inch mesh. Surface maps for each layer and soil profiles of completed test unit were maintained, and overall maps of houses were also prepared. Faunal samples, soils samples, wood, radiocarbon, and shell samples were collected alongside various artifact categories and all await analysis.

**Great Caribou Island 1 (FbAv-13)**

This site is situated on a raised cobble beach that arcs around Green Cove, a sheltered cove on the west side of Great Caribou Island. This large island at the mouth of St. Lewis Inlet has a long history of human habitation, as far back as the Palaeoeskimo period. It became especially important in the early historic period because of the well-known mooring known as Battle Harbour on its eastern and seaward side. The site consists of two sod houses, one at each end of the cove. Each house is associated with collapsed stone fox traps on the relict cobble beach and small pit features set into the cobbles that were probably used for storage. Another relict cobble beach in the neighbouring cove contains further large and small pit features that are probably associated with Inuit settlement in the area and their storage-related subsistence strategies (Stopp 2002b). The houses are readily identifiable by a perimeter of mounded sods marking the remains of house walls, and by tall grasses that grow out of organically enriched soils inside the dwellings, along the entranceways, and in the midden deposits.

The analysis of materials and architecture has hardly begun but some preliminary statements can already by made on the basis of field observations. The entryways of both houses angle to the southwest and slightly downslope, and do not face directly towards the mouth of Green Cove. Entrance passages are not demarcated by mounded sods but by an oblong formation of large cobbles that were visible on the surface and only partially buried. These were initially interpreted as being part of the entryway floor but it is more likely that they served as hold-down rocks on the en-
trance roof. There is no obvious entrance well, but the downslope trajectory of the entrance passage may have served that purpose. Raised sleeping platforms have not yet been identified and may be found in future excavations. Middens were outside each entranceway and yielded the bulk of the faunal material from this site, consisting chiefly of seal bones but one possible pig tooth also seems to be present.

The walls are only of sods, with no rock and/or wood foundation as is found in many nineteenth century structures along the coast. The height of the sod perimeter averages 30-50 cm in height. There is little sod overburden within the structure, begging the question of the nature of the superstructure. It is possible that sods or perhaps a wooden superstructure were removed and re-used elsewhere. A thin sod overburden made excavation relatively easy and the living floor was distinguished by a thin, dense, dark organic layer with artifacts immediately atop bedrock.

The artifacts from both structures are wholly European, with the exception of some whalebone planking, noted below. For both structures, ceramic wares are of the same age and type as those collected from the late eighteenth century site of George Cartwright’s Ranger Lodge, in the nearby community of Lodge (Stopp 2004), suggesting contemporaneous habitation.

House A yielded very fragmented ceramics that included shards of fine white earthenware from a single vessel; shards of blue and white Chinese export porcelain that also appear to represent only a single vessel. Repair holes drilled into one piece suggest re-use, a trait sometimes found at Inuit sites. A small quantity of glass trade beads ranges in colour from blue, red/white, and white. Some small lead shot was recovered, and pipe fragments are from only a small number of pipes. One intriguing architectural feature that appeared in the interior test trench was two sections of worked whalebone planking. These extend across the end of the trench and into both baulks and will have to be exposed in a future field season.

House B artifacts resemble those from House A, suggesting that the two houses are relatively contemporaneous. When this structure was first recorded in 1991, one corner had been looted by local people intent on collecting “arrowheads” (they had actually amassed a small collection of gunflints). There has been no further damage and the earlier disturbance is now overgrown. The first find from the interior of House B was a chert flake and many more were found thereafter. Although very exciting, these probably belong to the earlier Dorset presence in the area (a Dorset site was recorded in a cove to the west in 1991). Ceramics are represented by a few small shards of Chinese export porcelain, three shards of tin-glazed earthenware, and small fragments of kaolin pipe. There are also gunflints, lead shot, and clear and green-tinted thin glass shards.

North Island 1 (FeAx-03)

This site is located on a raised terrace overlooking Schooner Cove, a small, protected cove on the northern side of North Island, one of the Dead Islands group at the mouth of St. Michael’s Bay. Schooner Cove is well known as a protected harbour, and is shielded from the rough open waters of the Atlantic by the high landmass of North Island. First recorded during the 1991 survey, North Island 1 was also inhabited by Dorset Palaeoeskimo but there is no evidence of other settlement, neither Aboriginal nor European.

The site consists of two sod houses, both located on the same terrace approximately five meters apart, east to west. Slightly raised, mounded walls mark three sides of each house. The Inuit inhabitants took advantage of the natural topography by constructing the southern wall of each house into the hillside, making the houses somewhat indistinguishable from the natural lay of the land. Similar to the houses of Great Caribou Island 1, these structures are also defined by tall grasses growing in...
the interior, the entranceways, and middens, denoting the presence of enriched organic soils. Also like Great Caribou Island 1, the entrances extend downslope, and the House A entrance is characterised by large cobbles on the surface. The entryways point in opposite directions, one to the east and the other to the west. This could be a structural element influenced by topography or it may reflect allocation of personal space in this very small cove.

The walls of both houses are constructed wholly of sod and there appears to be a moderate amount of overburden located within each structure from post-abandonment collapse. Artifactual evidence of collapsed sod rooftops is supported by the recovery of several chert flakes and one Palaeoeskimo microblade discovered within the sod overburden.

Excavations within House A failed to uncover a discernable sleeping platform, but in House B there appears to be a collapsed sleeping platform on the western wall. More extensive excavations of both House A and House B will be needed to further investigate the location of these platforms.

The middens, which were located outside each entranceway, yielded a wealth of faunal and artifactual material of exceptional preservation because of a matrix of chiefly mussel shells. Fauna included caribou, seal, bird, and cod. Extensive mussel beds line the shore of North Island I and are easily accessible at low tide. The substantial amounts of mussel shell in each midden suggest that the inhabitants of FeAx-03 readily exploited this resource. Different dumping episodes were evidenced by 5-10cm of soil in between each shell level, to a total depth of 30-40cm below surface. The

![A complete bone handle found in the midden of sod house #2 at North Island-1 (Stepp, Jalbert)
lowest level of the House A midden, which yielded crystal quartz and chert flakes, was likely part of the Palaeoeskimo occupation in this cove.

Preliminary analysis of the artifacts recovered at North Island I suggests a date of the late-sixteenth or early-seventeenth centuries. The combination of ceramics, the minimal presence of European objects, and the recovery of a moderate number of Inuit artifacts suggest an earlier occupation than at Great Caribou Island 1.

The ceramic artifacts recovered from both House A and House B included shards of unglazed dark brown stoneware, most likely originating from a single storage vessel, red earthenware exhibiting a poorly bonded white tin-glaze with blue decoration, and a slipped coarse red earthenware. Two ceramic shards from an eroding slope that formed part of the House A midden include a white tin-glazed buff earthenware, believed to be delftware, that retains two bored repair holes; and a piece of buff earthenware with a poorly bonded brown oxide glazing. Other European artifacts included one blue trade bead, a lead seal, two fragments of clear glass, possibly from a cup, and a small number of shards of green bottle glass.

Inuit artifacts consisted of a whalebone handle, two pieces of worked bone, one of whale, the other possibly caribou, all recovered from the midden at the entrance to House B. A complete whalebone section with four pairs of bore holes and one hole at one end was found within House B near what is believed to be the sleeping platform. Soapstone artifacts were also recovered.

**Western Arm 1 (EkBc-04)**

Cindy Gibbons, manager at Red Bay National Historic Site, requested our help to re-locate sod houses first recorded in the 1970s by Dr. J. Tuck in nearby Western Arm. In the final week of the field season, four days were spent in Red Bay to search for these features and to complete our field records. The sod houses were quickly located on the eastern side of the arm. Tremendously high grasses prevented an exact identification of several mounded features in this area. A number of interesting finds were made in our test pits including a collection of bird bones that we hope to have identified as curlew; a section of worked whalebone resembling a sled runner; a roof tile fragment; a fragment of red tin-glazed earthenware with white decoration on a blue background; and a fragment of red earthenware with a repair hole. This collection of material is very reminiscent of Inuit presence and probably dates to the late 1600s-early 1700s.

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Martijn, C.A., and N. Clermont, editors

Stopp, M.P.


Introduction

The MV Polar Star left Reykjavik, Iceland on September 9, 2009 on the Viking Trail Expedition bound for St. John’s NL via southwest Greenland, Iqaluit, Labrador, L’Anse aux Meadows and the northeast coast of Newfoundland. Included on shipboard staff were two archaeologists/cultural historians, Callum Thomson and Jane Sproull Thomson, and a historian, John Harrison, who served as lecturers, shore guides and zodiac drivers. A representative of the Nunatsiavut Government, Robert Harris, joined us from Iqaluit to Hopevale. Thomson and Sproull Thomson have spent many years in Labrador and the Canadian Arctic engaged in archaeological field work and have participated in Polar Star’s Viking Trail expedition cruise and other similar cruises for other companies down the Labrador coast and elsewhere in the North Atlantic, Arctic and Antarctica (Thomson and Sproull Thomson 2006). John Harrison, likewise, has participated in this and other similar cruises in Labrador. Robert Harris was familiar with some of our landing sites and provided local information and gun-bearing services when necessary.

On board lectures prior to reaching Labrador highlighted the region’s archaeology, cultures and history, as well as geology, wildlife and other topics, and illustrated some of the locations we planned to visit. Passengers were reminded about heritage resource legislation and conservation, and staff (numbering nine in...
total, including Robert Harris) on shore ensured compliance to the best of our abilities. We made six landings in Labrador between Ramah Bay and Groswater Bay, visiting as scheduled four archaeological sites, leading a tour of additional sites during an evening hike in Saglek Bay and interpreting other sites as we passed by on the ship. No new sites were recorded; where new observations were made on site condition, a site record form update was completed.

**September 20, 2009, morning: Ramah Bay**

We arrived at the mouth of Ramah Bay in the early morning and lecture staff pointed out the Ramah chert beds and quarries on the north side of the bay, reminding passengers of the significance of this material to most of Labrador's pre-contact cultural groups over the past 6500 or so years. We steamed down to near the west end of the bay and, like so many Moravian supply ships before us, dropped anchor off the Moravian Mission station site (IfCt-03) located on a low, grassy terrace (Figure 1) with a permanent waterfall at the east end and facing south for maximum sunlight. The Mission was founded in 1871 and closed in 1908, but was never successful in attracting a large number of Inuit as permanent adherents, a pattern apparently extending back over most of the prehistoric period (Kaplan 1980) with the exception of exploitation of the Ramah chert outcrops (Lazenby 1980). We scouted the shore by zodiac to search for bears that might pose a threat, and then brought our 75 passengers and staff ashore.

After an introduction, each boatload was encouraged to visit three locations connected with the mission, with staff available to interpret the Mission objectives, the Inuit sod houses (Figure 2), Mission ruins, cemetery and the sparse prehistory of this bay complex (Kaplan 1980). Passengers and staff then scattered around the terrace and hillside above the mission to explore further. The Inuit sod houses remain well vegetated with no sign of looting. Several flakes of Ryans quartz had been collected by a previous visitor from an unknown source nearby and left on a rock near the cemetery. The site remains in good condition with little visitor disturbance evident.

**September 20, 2009, afternoon: Shuldham Island and St. John’s Harbour, outer Saglek Bay**

We landed on the cobble beach below Shuldham Island-9 (IdCq-22) near the southeast corner of the island. IdCq-22 was initially recorded in 1977 and tested in 1978 during the Torngat Archaeological Project undertaken by the Smithsonian Institution and Bryn Mawr College (Cox 1978; Fitzhugh 1980). Two semisubterranean sod houses and a tent ring dating to the terminal Late Dorset sequence between 700-500 BP were subsequently excavated by Callum Thomson between 1980-1982 and pro-
duced a unique assemblage of soapstone amulets as well as clear evidence of a continuation of the Late Dorset culture on the Labrador Quebec Peninsula several centuries longer than traditionally acknowledged by most archaeologists in the rest of the Canadian Arctic other than Ungava (Plumet 1979; Thomson 1981, 1982, 1983, 1988).

Passengers and staff landed and were given an introduction by Callum to the site’s history and significance. Houses 1 and 2, excavated almost thirty years ago (Thomson 1981, 1982, 1983, 1988) and subsequently backfilled, have grown over well in the interim, with complete re-vegetation (Figure 3), soft excavation outline, minimal presence of artifacts on the surface and no evidence of looting.

Thomson, Sproull Thomson and Robert Harris then led a hike across to the east side of Shuldham Island, interpreting other sites and structures en route including an extensive complex of robust tent rings, caches and a possible grave (IdCq-21) at the head of the bay on which IdCq-22 is located; another site further round the bay to the east (IdCq-20) where there is continuing erosion of Middle Dorset artifacts down the bank and where we had been shocked in 2008 to discover that all of the nangisat slabs noted in 1980 had been removed (Figure 4) for use in recent tent rings apparently used by Parks Canada as a base camp at the entrance to the Torngat National Park (Robert Harris pers. comm.).

Nangisat – an alignment of flat slabs or sometimes two parallel lines set on the ground surface and extending for
as much as 100 m or more - were used by Thule Inuit and most likely the Dorset Palaeo-Eskimos before them in a game to test balance, strength and stamina. The damage to this site highlights the need for education and monitoring as visitation in the adjacent Torngat National Park increases.

From here we walked over a ridge to a new site on the east coast of the island overlooking Western Harbour, the narrow channel between Shuldham and Handy islands. This site (IdCq-60) was first reported in 2008 during a similar hike guided by Thomson and Sproull Thomson, during which no GPS was available for site recording. This year, we obtained GPS coordinates for the three prominent features at the site: a very large circular tent ring or meeting house with an outer ring of large guy rocks and two Thule chamber graves on a higher terrace above the tent ring. F-2 was noted by Nunatsiavut guide Robert Harris to have a relatively narrow inner chamber, possibly indicating use as a foxtrap; however, the overall size of the structure is more typical of a grave than a foxtrap. F-3 contains human skeletal material. We had a few minutes to interpret these structures and then had to head back to the landing beach for return to the ship. This site shows no sign of visitor disturbance.

On our way out of Saglek Bay, we steamed south down St. John's Harbour, a 5 km long fiord cutting deep into the mountain range south of Saglek Bay and opening up to a broad plain often populated by caribou. As we entered the fiord we interpreted from the ship two extensive Pre-Dorset sites (ICcq-08, ICcq-10) with successive habitation features running parallel to the shore on the east side for over 400 m, a location both sheltered from the effects of the Labrador Sea and hidden from view from the main part of Saglek Bay. These sites were found, tested and partially excavated in 1981 and 1985 by Thomson and his field parties and were found to date to the same period as the Maritime Archaic Rattlers Bight phase, about 3600 BP (Thomson 1982, 1986). These sites and a similarly large Pre-Dorset site on the Harp Peninsula at the mouth of Hebron Fiord (Fitzhugh 1984) are sandwiched in between large clusters of late Maritime Archaic sites at Nulliak Cove (Fitzhugh 1981), White Point (Thomson 1989; Wolff 2007) and Saglek Bay (Tuck 1975), perhaps indicating a struggle between the Maritime Archaic and Pre-Dorset over several generations to control resource use, movement and occupation at this northern limit of longstanding Maritime Archaic settlement and exploitation of the prime Ramah chert quarries as the early Palaeo-Eskimo southward exploration of Labrador began about 4000 years ago. We turned the ship at the end of the bay where a facility consisting of a building and unsightly scatter of equipment within a fenced compound has recently been constructed as the Parks Canada Torngat Mountains base camp (Brake 2008). A black bear was observed grazing among the abundant berry patches.

**September 21, 2009: Hebron Mission Station (1830-1959), outer Hebron Fiord**

In the morning we landed on a bedrock ledge below the blubber yard on the seaward edge of the Moravian Mission settlement established in 1830, had a brief introduction by historian John Harrison to the Mission and its eventual closure in 1959, and then the passengers scattered across the landscape under the supervision of staff, visiting the Inuit sod houses (IbCp-17) south of the church, the main mission building (which unfortunately was all boarded up preventing access to the interior), the outlying Hudson's Bay Company and RCMP buildings, Mission residences, sealing facilities, gardens and the three burial areas north of the mission.

The burial areas include numerous Thule stone chamber graves (Figure 5), the Mission staff cemetery with stone slabs marking the remains of the mostly-German missionary families, and the Inuit/Settler cemetery, which is in very poor shape with collapsed fence and deteriorating wooden grave markers.
Despite the prominence of the 19th century Inuit sod houses and at least two episodes of testing and excavation in 1977-78 (Kaplan 1980, 1983) and 1990 (Loring and Arendt 2009), no evidence was noted of any recent looting; however, the number of Mission-related artifacts and Inuit material visible on the surface diminishes each year due to heavy visitation (Loring and Arendt 2009: 46).

The buildings adjacent to the church built by construction workers as a residence, workshop, kitchen and storage area during the ongoing restoration project all burned down recently, leaving ugly scars and piles of burned debris. The fire narrowly missed burning the historic church and in retrospect might suggest that locating kitchen facilities and woodstoves so close to was probably not a wise decision (Figure 6).

No new sites were noted.

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**September 21, 2009: Mugford Tickle area**

The wind was too high for the planned zodiac cruise as we sailed through Mugford Tickle in late afternoon. We passed and interpreted from the ship two sites recorded by Thomson and Sproull Thomson on the east side near the south end of the Tickle during previous expedition cruises, one consisting of a sod house or cabin foundation and an adjacent outcrop and quarry of green chert, favoured by Early Dorset and Pre-Dorset Palaeoeskimos (Lazenby 1980: 630), and the other a complex of several lushly-vegetated sod house foundations. Because of the unfavourable conditions for a zodiac cruise, we continued the ship's cruise instead into McDonald Bay noting numerous raised beaches, five black bears, many caribou trails and a group of seals on an iceberg, suggesting plentiful resources available and several areas of archaeological potential.
(Figure 7).

**September 22, 2009: Hopedale**

Our few hours in Hopedale included the opportunity to gather in the church for a talk on the history and continuing work of the Moravian Mission by the Mission curator, David Igloliorte, and a tour of the Moravian Mission museum, visits to the Amos Comenius Memorial School and the Labradorite processing plant and free time to wander the quiet streets. No archaeological sites were visited.

**September 23, 2009: Rattlers Bight and Indian Harbour, Groswater Bay**

We had a day available for landings in outer Groswater Bay and decided to land at Rattler’s Bight (GeCi-7), a Maritime Archaic site excavated by William Fitzhugh in 1967-68 and described in his 1972 monograph “Environmental Archeology and Cultural Systems in Hamilton Inlet, Labrador” (Fitzhugh 1972).

The site, which became the type site for the terminal Maritime Archaic tradition in Labrador and lent its name to the phase and its distinctive artifact assemblage (Fitzhugh 1972), still has some deflated sand areas where, no doubt, Fitzhugh excavated, but otherwise the site is vegetated with berry plants (Figure 8). There is no sign of any recent excavation or looting. A few tool making flakes of Ramah chert and slate are visible on the surface (Figure 9). We obtained GPS coordinates from the centre of the terrace and then walked around the area, noting a boulder terrace about 500 m southwest of GeBi-7 with several faint depressions, possibly old caches, near a cabin. Insufficient time was available to collect additional details or confirm the interpretation as
an archaeological site, so no site form has been prepared.

In the afternoon we landed briefly at Indian Harbour, an old fishing settlement on the north side of the mouth of Groswater Bay and the location of Sir Wilfred Grenfell’s first hospital. Due to the heavy rain and rising winds, the visit was curtailed after a brief tour of the settlement and interpretation of its geology by Kerstin Brauneder, staff geologist (Figure 10). No precontact or Inuit archaeological materials were noted.

**Conclusion**

From Groswater Bay, we continued south to visit the historic sites at Battle Harbour and Red Bay, crossed the Strait of Belle Isle to St. Anthony for a visit to the Grenfell properties (where we found black and white photographs of the Indian Harbour settlement) and L’Anse aux Meadows, down the northeast coast of Newfoundland to Bonavista and completed the cruise in St. John’s. As always, the variety and beauty of archaeological and historic sites, the friendly communities, the ancient and highly visible geological features, the stunning landscapes and the opportunity to...
view wildlife in its natural setting provided many memorable highlights of this voyage from Iceland to St. John's, following the wake of the Vikings 1000 years earlier.

**Photo Credits**

Photographs were mainly obtained from the Log CD “In the Wake of the Vikings”, Polar Star Expeditions, Halifax, compiled by staff, September 9-27, 2009.

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Coastal erosion is a constant threat for individuals and communities living by the sea. The retreat of the coastline can result in damage to property, loss of livelihoods or even loss of life. Similar risks apply to archaeological resources situated adjacent to the modern coast. Erosion causes the sediments enclosing archaeological material to be dispersed and the material to be scattered across the shoreline and intertidal zone. This can result in not only the loss of potentially invaluable and unrecoverable information, but the destruction of cultural landscapes and the heritage of coastal people.

There are many examples of currently eroding coastal archaeology around the world (e.g. Fitzpatrick et al. 2006; Carrasco et al. 2007; Erlandson, 2008; Jones et al. 2008; Kimball & Monaghan 2008) and it is likely that the number of threatened sites will increase if global sea-level rises and storm activity intensifies, as predicted by the majority of climate scientists. Therefore, to effectively preserve and manage coastal archaeological resources it is essential to consider where these changes will have greatest impact and determine where archaeological material and cultural resources will be at risk in the future.

We developed a simple landscape evolution model that assesses the vulnerability of coastal landscapes to inundation and erosion over the next century and classifies known archaeological sites according to their risk exposure. We applied the model to segments of the Newfoundland coast where the magnitude of future sea-level rise is low to moderate (c. 0.4-1m over the next century) and the archaeological record is rich but varied. Only the main conclusions and implications of our study are presented here. For detailed results please contact the first author.

There are three stages in the execution of our coastal landscape evolution model. The first step is to combine output from regional models of glacio-isostatic adjustment with appropriate rates of global eustatic sea-level rise to determine the relative sea level projection for the next 50-100 years. Next, these data are integrated with existing information on coastal landscape characteristics (e.g. topography, surficial geology, erosion rates) to assess coastal sensitivity to sea-level rise. At this stage...
the model can identify coastal areas of potential, though as yet undocumented, archaeological significance that may be vulnerable to inundation or destruction. These areas may be recognizable as locations of high archaeological potential because of their landscape setting or their proximity to existing sites. Finally, overlay of known archaeological resources identifies those sites at greatest risk from destructive coastal changes.

Sea-level will rise possibly by up to a metre over the next century around Newfoundland, though it will be slightly reduced in the northwest. This implies that archaeological sites situated in the intertidal zone or adjacent to the high water mark whether documented or unknown to date will be highly vulnerable. This is particularly true of prehistoric sites consisting of loose material buried within unconsolidated sediments. More substantial historic structures, such as buildings, piers and fishing stages, may be more resilient to the impending rise, but the degree to which they are will depend on the strength of their structure and foundations and any mitigation efforts.

The vulnerability of archaeological resources inland of the modern high water mark is strongly dependent on topography, with lower slopes and unconsolidated sediment characterizing areas most at risk. Overall, we should expect that areas over 100 m inland of the modern coast will be relatively safe from long-term sea-level rise, though the impact of storm surges could extend much farther inland, by up to several hundred metres on low-sloping shorelines.

With respect to the specific case studies - South Bonavista Bay, L’Anse aux Meadows and Port au Choix - most sites (63%) are not at immediate risk, and will probably remain at low risk over the next century. Nevertheless, there are some (20%) that are at risk over the next 15-50 years, and which will see their sensitivity to coastal erosion increase as sea-level rise and surge activity increases. These include the most important sites within the study areas – L’Anse aux Meadows and Phillip’s Garden. Both sites are adjacent to the modern coast and situated on low-lying topography. Though not in immediate danger, this analysis suggests that they may be threatened from 2050 onwards.

Possible actions that could be initiated on the basis of these results are monitoring of sites predicted to be at high to moderate risk from future SLR or prioritizing surveys of high risk areas. This would be facilitated for sites such as Philips Garden and L’Anse aux Meadows by virtue of the fact that they are situated within designated National Historic Sites and as such, fall under specific national protection guidelines. Alternatively, survey and monitoring could be driven by local communities as in the Shorewatch program run by the SCAPE Trust in Scotland (Shorewatch website: www.shorewatch.co.uk). This type of approach would be most applicable to locations outside national stewardship where local heritage societies (e.g. the Burnside Heritage Foundation; www.burnsideheritage.ca) play an active role in documenting and managing coastal archaeological resources. There is a strong incentive in that many such communities derive economic benefit from these resources, particularly in terms of tourism revenue. Therefore, it is likely that many would be willing to participate in a community-based program of monitoring.

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Kimball, M. J. & C. M. Monaghan

Figure 1 Example of a general coastal vulnerability map for Port au Choix overlaid with estimates of individual archaeological site vulnerability. The vulnerability classification of the coastline may help establish future survey priorities (Westley)
Last summer, the three of us—Wolff, Erwin, and Holly—began a new research collaboration building on work at Stock Cove (CkAl-3) during the summer of 2008 (Wolff, et al. 2009) and, prior to that, studies conducted by Robbins (1981, 1985) (1981, 1985) and McLean (2006). Our goal was to learn more about the cultural and depositional history of the site and assess if there was a good record of transitional periods between Newfoundland Dorset and Recent Indian groups, and between the Beothuk and Europeans. Our main research interests concern the cultural and environmental dynamics during these transitions to better understand the historical trajectories that led to abandonment and extinction of the Dorset and the Beothuk on the island. This research has broader implications for our understanding of regional cultural history, the nature of human-environment relationships, cultural contact, and economic competition and organization.

Fieldwork at the site centered around a location identified the previous summer that contained a lens of animal bone and black greasy soil that Wolff believed to be part of a midden (Figure 1). This part of the site was chosen because of the bone and the possibility it may answer questions about seasonality and subsistence at the site, left mostly unanswered by Robbins (1985). We decided to open up a larger excavation area at that location to assess the limits of the faunal deposits and learn more about their context. We opened up a total area of six square meters at that location, which we designated the ‘Western Block’, to a depth of

Figure 1 Linear Distribution of Faunal Remains (Light Brown) at Western Block (Wolff, Erwin, Holly)
between 60-65 cm. There are still underlying cultural deposits below that depth, probably containing further Dorset, Groswater, and possibly Maritime Archaic materials.

The stratigraphy in the Western Block is divided into five broad categories: 1) Level A, a peat and root mixture that is mostly sterile except in parts of the site with historic materials; 2) Level B, a dark brown to black soil matrix with many small rocks that appears to be an interface lying just above the densest cul-

tural deposits, but containing flakes and some Recent Indian artifacts; 3) Level C, a layer of large cobbles and smaller rocks with charcoal and Recent Indian materials found throughout. This appears to be a relic cobble beach; the base of the stratum is a black soil and looks to be an earlier soil horizon. This layer contains a very rich deposit of Dorset artifacts, with some Recent Indian materials near its upper interface with Level B. We are still trying to determine whether these upper deposits represent contact or are intrusive due to post-depositional processes; 4) Level D, a layer of smaller rocks, many of them fire-cracked and dark black soil. This stratum has very dense artifacts and terminates at architectural features that appear to be part of a Dorset structure (figure 2). Detailed stratigraphic maps are being digitized and the spatial organization and strata are currently being analyzed and will be published in detail later this year.

When we reached the bottom of Level D, we decided to end our excavation for two main reasons; first, we had collected a large number of artifacts and decided we did not simply want to continue to accumulate more data without a better understanding of the site, and secondly, we wanted to preserve the Dorset architecture in place so we can open up a larger area in the future and see the structure in its entirety. Because this site is reported to have
a Dorset longhouse (Robbins 1981, 1985), an architectural type not found anywhere else on the island of Newfoundland, we wanted to make sure we preserved in situ any other Dorset structures for comparative analyses and to maintain its integrity until it could be fully studied. However, in this small excavation area we recovered a substantial amount of artifacts and faunal remains to be analyzed that will keep us busy until next summer when we hope to continue research at the site (Table 1).

One of the most interesting discoveries was the high percentage of projectiles recovered in the Western Block, particularly the high percentage of endblades recovered in such a small area (see Table 1). However, until a larger area is excavated it is difficult to assess the reasons behind these numbers because it could have been a specialized activity area (e.g. hunting preparation) that is not representative of the larger site area.

The faunal remains we recovered from the Western Block indicate a range of subsistence behaviors. For the most part they are highly fragmented, many of them calcined. In all we recovered over 4000 skeletal elements and fragments. These include a large number of seals, which was to be expected with the Dorset; however, whether the species present in the assemblage are migratory or annual species has yet to be assessed, the results of which will greatly affect our interpretation of the subsistence activity that took place at Stock Cove. We also recovered a significant amount of bird and small mammal bones that are just beginning to be analyzed to identify their species and

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Figure 3: Photo of Site Location (Wolff)
frequencies. So far, we have not positively identified any larger terrestrial mammal bone, particularly caribou, in the faunal assemblage. The absence of caribou, if confirmed, is interesting because the position of this site so far away from the historical ranges of the largest harp seal herds has been used to infer that the Dorset at Stock Cove may have used that location to access the interior caribou herds (Robbins 1985). The assessment of subsistence strategies of Stock Cove residents is in its early stages, and further laboratory analyses, excavation, and sampling is needed.

In addition to our excavation at the Western Block, we conducted test excavations across the known site and surrounding areas. Near the northeastern margin of the site, between the eroding beach and steep hillside, we noticed pipe stems eroding from the beach face. Because much of the interest in the Stock Cove site relates to the possibility this is one of the locations described in accounts made by John Guy, the first official Governor of Newfoundland, and members of his crew in 1612 when they were exploring Trinity Bay and trying to establish trade connections with the Beothuk (see Gilbert 1990), we decided to test that area looking for late 16th century and early 17th century materials. With the help of Steve Mills, who stopped by for a visit, we discovered a significant amount of historic materials in that area of the site, which we termed the “Eastern Block”. Unfortunately, it appears that much of the cultural material that was at that location may have eroded away due to exposure to the active surf and it appears to post-date the 17th century; however, there is potential to find out more about the historic occupation and use of this site in historic period in that area, which will likely be part of our future research.

Relating to the possibility of early contact materials at the site, during a survey of the hillside of the small cove adjacent to the main site, Holly discovered historic materials in a shallow test excavation. This site has been named Stock Cove West 1 (CkAl-10) (Figure 3). After further testing of the area, a small amount of historic and Beothuk materials that could date to the early 17th century were found (e.g. modified ballast flint, Beothuk projectile points, iron nails, pipes, and ceramics). This may relate to Guy’s voyage, or other contact between Beothuk and Europeans, but much more work needs to be done to assess these possibilities, and a grant to do this as been submitted by the authors, with others to follow.

Further test excavation up the hillside of Stock Cove West 1 was also conducted and over 90% of the 17 test pits in that area revealed cultural deposits, the majority of which were Dorset, but also included Recent Indian and historic materials. What these tests and all of our research have revealed is that the occupation of the Stock Cove area is much larger than earlier thought and may have been a large Dorset aggregation site. Much more work is needed to determine the extent of the site and the nature of the relationship between the various cultural groups that occupied it.

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