Parks Canada
Archaeological Activities
1992
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Front Cover


Top right: Recording raised marine deposits at Matheson Inlet, South Moresby/Gwaii Haanas National Park Reserve, B.C., 1992 (photo by D. Fedje).


Back Cover

Top: Archaeology at Dufferin Terrace, Fortifications of Québec National Historic Site, Quebec, 1985 (photo by M. Élie).

Centre: Salvage archaeology in one of the Northwest Demibastion casemates, Halifax Citadel National Historic Site, Nova Scotia, 1989 (photo by B. Stewart).

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Foreword

The 1992 report is the second annual summary of archaeology-related activities within the Canadian Parks Service, or as it is better-known and once more officially styled, Parks Canada.

The original intent was, quite simply, to provide a public record of the accomplishments of one of the Parks Canada research disciplines, to capture the nature and scope of its various activities. The report would also be a guide to Parks Canada archaeological services and the cultural-heritage-related publications produced through the Program Headquarters Archaeological Services Branch. A useful spin-off is that the report is also a convenient way to indicate to managers and planners within the organization how archaeological research contributes to their own objectives, and for the archaeologists themselves to find out in capsule form what is going on in their discipline in different parts of the agency, for it is all too easy to lose track of what projects are under way outside the confines of one’s own region or particular area of concern.

An important development in archaeological services management has been the formalizing of training sessions attended by the majority of the archaeology staff from across the system. Referred to cryptically as “Cornwall I,” the first such session was held in 1989 at the Transport Canada training facility in Cornwall, Ontario. “Cornwall II” was held in the same place in February 1992; valuable as an opportunity for extended, in-person communication, the session ensured that the same message was heard and discussed by most of the practitioners at the same time. Topics ranged from specific, technical concerns such as database management for dealing with collections and field records to issues at once philosophical and pragmatic, such as “how much is enough?” and priority setting. Increasing involvement in the environmental assessment process on the one hand, and in communicating with native groups on issues of sites and artifacts on the other, provided the impetus for sessions with presentations by specialists from outside the archaeological community.

The extent to which Parks Canada archaeologists are participants in a wide range of activities related to the development, the interpretation, and the day-to-day management of national parks and historic sites means that their work is “applied” or “mission-oriented”; to their colleagues in research or academic environments, such work may often appear mundane. For every internationally exciting site such as L’Anse aux Meadows or Red Bay, there are dozens of mitigative operations to conduct in and around late-19th- or even 20th-century structures of marginal archaeological significance, but these are the grist of cultural resource management as it is practiced, and fill up the archaeological year; individually they may have little interest, but as a whole they reaffirm a commitment to preserving and presenting the nation’s heritage. The extent and variety of such activity are summarized in this report.

In 1993 the Canadian Parks Service was returned to its former name, Parks Canada, and a restructuring of federal ministries placed it within the Department of Canadian Heritage (for which legislation is pending). The new department will incorporate Parks Canada and other heritage and cultural agencies. (Because this book is reporting activities that occurred in 1992, we have retained use of “Canadian Parks Service” within the text.)

DiAnn Herst
1 Western Region Archaeological Services: locations of 1992 activities.
Drawing by R. Lalonde
Western Region Archaeological Services

Overview

Western Regional Office Archaeological Services carried out field work in every national park and in all but one Canadian Parks Service-operated national historic site in the region during 1992 (Fig. 1). The highlights of the season are many and include:

1. Continuing inventory and paleoenvironmental work at South Moresby/Gwaii Haanas National Park Reserve with Haida archaeology crews. The work is revealing highly significant precontact sites and new information concerning postglacial sea levels;

2. Start of field research in support of development of Bar U Ranch National Historic Site, mainly involving turn-of-the-century ranch building remains and associated features, but including some interesting precontact native sites as well;

3. Start of field activities at Ya-Ha-Tinda Ranch (outside Banff National Park), run by CPS to keep horses used by park wardens. The ranch contains several unusual archaeological sites, and the area deserves an in-depth look at what it can contribute to an understanding of the greater Banff ecosystem;

4. A large number of Environmental Assessment Review Process–related projects, particularly in Banff and Jasper national parks.

Gwyn Langemann prepared the WRO submission for the 1991/92 “Annual Report of Permit Activities.” Archaeological Services completed the editing and distribution of the 1990/91 EARP report and submitted it for reproduction in the microfiche series. Langemann and Peter Francis have also been writing and editing contributions for the 1991/92 EARP report, which will be similar in size and intent to the 1990/91 report.

In addition to their field activities, staff completed several major Archaeological Research Description and Analysis reports and participated in a University of Calgary Chacmool Conference session concerning aboriginal heritage commemoration. Other tasks included reviewing several new parks management plans, managing new and existing site inventory and artifact collections, completing Dossier entries, assisting with archaeological matters on Indian reserves, and preparing for geographical information system capability. As a result of the WRO Organizational Review Task Force, M. Magne, formerly with the Archaeological Survey, Provincial Museum of Alberta, was hired as chief of Archaeological Services and a new organizational structure was prepared. Final classification and staffing actions are expected to be complete in early 1993.

Reference

Ian D. Sumpter, E. Gwyn Langemann, and Rod J. Heitzmann, eds.
1992

South Moresby/Gwaii Haanas National Park Reserve

Permits WRA92-17, WRA92-4
Held by Daryl Fedje

The 1992/93 Gwaii Haanas archaeology project included three primary components: continuation of the basic resource inventory, cultural resource management archaeology, and continuation of the paleoecology research. Permit WRA92-17 was held by Daryl Fedje to continue the basic resource inventory. He also held permit WRA92-4, to conduct impact assessment work.
Basic Resource Inventory

The 1991 investigations on the east coast of Gwaii Haanas from Benjamin Point to Scudder Point on Burnaby Island were continued in 1992 from Scudder Point/Burnaby Narrows north to Darwin Point and the south coast of Lyell Island. A few sections of Skincuttle Inlet were also surveyed. Like last year’s efforts, the focus was on the present shoreline to about 10 m above sea level.

The inventory was conducted under contracts with the Haida Tribal Society and Millennia Research. The Haida Tribal Society provided a seven-person Haida crew supervised by Bert Wilson; Morley Eldridge and Al Mackie of Millennia provided field direction and collaborated with Bert Wilson in data collation and reporting. The field project took 10 weeks.

Some 70 archaeological sites were investigated, with about 50 being newly recorded. These include Haida towns, shell middens, midden and tree burials, fish traps and weirs, concentrations of culturally modified trees, and intertidal lithic sites (Figs. 2 and 3).

Environmental Assessment Review Process/Cultural Resource Management

CRM activities were relatively few, as development initiatives in Gwaii Haanas are being kept to a minimum and levels of threats to sites have yet to be fully addressed. CRM work was conducted for the Cape St. James Lighthouse rehabilitation; Windy Bay longhouse, trail, and primitive campground facilities; and an eroding site on Arrow Creek in Matheson Inlet.

Cape St. James Lighthouse has been operating since 1914, but frequent repair and replacement of facilities due to severe weather has resulted in no structures, other than concrete foundations, dating earlier than 1960. Most “early” (pre-1940s) refuse
Western Region

4 Ian Sumpter recording stratigraphic section of raised marine deposits at Matheson Inlet, east coast Gwaii Haanas.
Photo by D. Fedje

was disposed of directly into the sea. Examination of the historic facilities and refuse areas revealed no archaeological concerns.

The Windy Bay development included construction of a new longhouse and water-supply facility, trail development, and establishment of a primitive campground area. Surface reconnaissance and soil probing initially revealed no archaeological conflicts despite proximity to the recorded Haida town of Hl’kia (795T), but during monitoring of ground disturbance an isolated burial was encountered. Work was halted and the Haida archaeology team recovered and reburied the individual off-site under Bert Wilson and Morley Eldridge’s direction. No other archaeological remains were encountered.

The Arrow Creek (sites 766T and 925T) survey and test excavations assessed site significance and degree of threat from erosion. Most effort was directed to site 766T, which appears to be highly significant in that it is on high terraces associated with relative sea levels 14 to 18 m above modern levels. Two charcoal samples recovered in association with lithic flakes during the 1990 reconnaissance were dated to 8200 years B.P., making this one of the oldest known sites in Haida Gwaii.

The site is at least 6000 square m, mainly confined to the 15-m terrace, but a small part of the 18-m terrace also produced evidence of precontact activity. Four of seven 50-cm-square tests contained stone tools and lithic debitage at depths from 30 to 110 cm below surface. Charcoal recovered in association with stone tools at 1 m below surface was dated to 5400 years B.P. This site is subject to erosion by Arrow Creek and a tributary gully, but the rate of erosion appears slow at this time. The site warrants establishment of permanent benchmarks, detailed topographic mapping, and additional excavation.

Investigation of site 925T, near the mouth of Arrow Creek, was limited to surface inspection and collection of organic samples for radiocarbon dating. Flakes and cores were found in the gravels at the base of the creek cutbank in proximity to those recovered in 1990. The Haida crew collected possibly redeposited flakes and a bear tooth from a marine clay exposure. The site is eroding rapidly and warrants further investigation to determine bounds, rate of loss, site significance, and necessary management action.

Paleoecology Program

During 1992 Daryl Fedje continued work on Gwaii Haanas paleoecology in support of the upcoming (1994/95) inventory of raised beaches and inland areas of the archipelago. This work is being focussed through his MA thesis on Holocene sea-level reconstruction. Two additional cores were collected from a pond above Skitaggetan Lagoon (Juan Perez Sound). Also, two weeks were spent between Matheson Inlet and Gowgaii Bay for preliminary reconnaissance of raised marine features (Fig. 4) and potential archaeological sites. This work underlined the need for very accurate reconstruction of the local relative sea-level history. Testing for precontact sites in the West Coast rainforest is very time-consuming, especially if a broad range of elevations must be surveyed.

Micropaleontological analyses (pollen, dinoflagellates, diatoms, and benthic protozoa) show that relative sea level rose very sharply, remained high (15 m above modern levels) from ca. 9500 to
5 Locations of 1992 excavations at Fort Langley NHS.
Drawing by R. Lalonde
timber-mill sites (566T, 567T, and 568T), hoping to collect artifacts that would enhance interpretive themes in Yoho NP. However, the surfaces in and around the mill sites had been bulldozed extensively at the time of abandonment, and the debris on the surface does not contribute particularly to elaborating interpretive themes within the park. No archaeological concerns arose during the field work.

A similar exercise of selecting cultural objects with potential for enhancing interpretation was undertaken as part of the Old Trans-Canada Highway clean-up project (Ottertail Borrow-Pit rehabilitation program). Site 169T consists of historic machinery, including a horse-drawn snowplow, a horse-drawn wagon, metal machine parts, and a concentration of metal stoves and heaters, all damaged and fragmented. As with the Amiskwi Valley mill sites, Archaeological Services is primarily concerned with ground disturbance during the course of removing selected in situ artifacts. In particular, such items as the horse-drawn wagon will require archaeological excavation and block-lifting in order to remove them intact.

The Yoho field season continued during a particularly frigid November and December, when Archaeological Services monitored subsurface disturbance resulting from the installation of a water-lift station and sewer and water pipelines within Field Townsite. A small number of historic items were recovered.

Archaeological Site Monitoring Program

During a general assessment of Kicking Horse River Campground, Archaeological Services revisited and photographed site 583T, a stone bake oven associated with the 1884–85 Canadian Pacific Railway construction camp by the Kicking Horse River and Monarch Creek. It is the only extant feature remaining from the original 19th-century work camp and the only example of that type of structure within Yoho NP. Current disturbances include vegetational encroachment, burrowing rodents, and tourists, and warrant structural stabilization and protective measures.

While inspecting the area potentially affected by resurfacing Deer Lodge Trail, Archaeological Services examined the historic Deer Lodge warden cabin. Constructed in 1904, with a kitchen added between 1920 and 1924, the cabin is one of the first warden patrol cabins in Yoho NP. Its location on the perimeter of a wet, undulated fluvial area affected by intermittent beaver activities is a cause for concern due to seasonal inundation that has submerged the structure’s lower log tiers. Given the cabin’s historical significance, its generally good preservation, and its location on a popular nature trail, complete with its own interpretive sign on site, it is essential that the building be stabilized. Regular annual monitoring by Archaeological Services and the Yoho NP warden services is also recommended.

Archaeological Services revisited precontact sites 376T, 378T, and 500T to monitor the effects of erosion on the landforms on which these sites are located. All three sites were recorded initially in 1971 and have been revisited in 1988, 1989, 1990, and 1991. All have been test excavated, producing both artifactual and faunal evidence of precontact activities. Site 500T also has an associated postcontact component. The 1992 visit was a monitoring exercise to inspect surface and cutface exposures and erosional zones. No cultural materials were found. The relative rarity of precontact sites in Yoho NP tends to focus archaeological concern on this cluster of sites near the confluence of the Emerald, Amiskwi, and Kicking Horse rivers. Erosion of the associated landforms is sufficient to continue annual monitoring.

The historic Wapta Falls cabin was recorded and photographed to document the site in detail. Recorded initially in 1971, the cabin is in a very ruinous state, with advanced wood decay claiming what remains of it. The extant remains are two log courses high and show saddle-notch construction using large local material. Roof collapse is complete and wall collapse nearly so. Documentation is sufficient mitigation for the site. No further archaeological field work is required beyond monitoring every ten years or so.

Archaeological Site Inventory Program

Wooden Bridge Remains, Beaverfoot River

While following the Beaverfoot River to its confluence with the Kicking Horse, Archaeological Services recorded the remains of a wooden bridge that had not been placed previously in WRO’s inventory of archaeological sites. Wooden footings and abutments survive on both banks as well as a three-log tier bridge support. The remains were photographed and described. Precise historical identification of the site awaits further research.
Marine Archaeology

The Marine Archaeology Section from CPS Program Headquarters, Ottawa, examined a dump in Emerald Lake where the CPR lodge was dumping material directly into the lake. The dump did not prove to be extensive, and no further recording was recommended.

Mount Revelstoke/Glacier National Parks

Permit WRA92-7
Held by Peter Francis

Archaeologists Peter Francis, Gwyn Langemann, and Bill Perry were in Mt. Revelstoke and Glacier national parks undertaking EARP archaeological impact assessments, monitoring selected archaeological sites, and recording new archaeological sites for the national parks inventory.

Environmental Assessment Review
Process Archaeology Program

In connection with the Mount Revelstoke summit area redevelopment, several development areas were assessed, and no conflicts with archaeological resources were discovered. The developments include two parking-lot expansions, Hermit Trailhead parking, Beaver Borrow-Pit expansion, Beaver Berms rock scaling, and utilities installation at the A.O. Wheeler cabin. Examination of trail expansions between Balsam and Heather lakes was inhibited by snow cover.

Also assessed was the area to be impacted by the construction of a new CPR bunkhouse at Glacier Siding (site 411T42). At the time of investigation, the CPR had completely removed the culverts by Glacier Creek, the historic wye, and the remains of an old wooden trackway leading to the snowshed. Fortunately the historic snowshed remains intact. Concerns were raised about lines of communication between CPS and the CPR when CPR projects involve the physical remains of early railway activity.

Archaeological Site Monitoring Program

First (Upper) Loop Brook Bridge (site 411T30) and Second (Lower) Loop Brook Bridge (site 411T19) consist of massive stone masonry pillars (with accompanying stone and/or timber abutments, pilings, and raised platforms) that are the vestiges of the CPR’s famous “loop system” on the abandoned 1885 main line. Both sites are threatened by ongoing fluvial erosion. Monitoring programs have been carried out annually since 1986. Disturbances include destabilization by river erosion, vandals’ defacement of the stone piers, exfoliation of the stone, and leaching of the lime in the mortar. Destabilization through fluvial undercutting in conjunction with an avalanche’s catastrophic effects have caused one pier at site 411T30 to collapse. The Lower Loop Brook crossing will require riprap protection along the east side of the river, where the flow of water is directly eroding and undercutting the stone pier. The Upper Loop Brook crossing will require the placement of a more elaborate, tiered riprap abutment against the existing timber spillover.

First Illecillewaet River Bridge (site 411T32) and Second Illecillewaet River Bridge (site 411T35), both constructed in 1906, are, like the Loop Brook crossings, part of the “loop system” on the abandoned 1885 CPR rail grade. In addition to site revisititation by Archaeological Services in 1989, 1991, and 1992, WRO’s Historic Buildings Restoration Unit visited both sites in 1989 and Architectural and Engineering Services examined their structural integrity in 1991. A&ES recommendations made for site 411T35 included placing heavy riprap against the south embankment to stem river erosion and concomitant undermining of the masonry pier.

Historic Cascade Creek Bridge (site 410T15) is a 49-m-long single-arched stone masonry span bridge that was erected in 1898 on the CPR’s 1885 main line to replace an existing wooden trestle. Manifest indicators of structural fatigue require annual surveillance. Following identification of large vertical cracks in the bridge’s east arch face in 1989, A&ES examined the structure over two years and made recommendations. Monitoring in 1992 revealed no further advancement in the cracks nor any other apparent detrimental movements of the structure. Cascade Creek Bridge is a significant historical and architectural resource warranting careful surveillance and conservation.

First recorded by WRO Archaeological Services in 1986, site 410T11 is the remains of the CPR’s abandoned snowshed No. 13, located on the abandoned 1885 rail grade at former track mile 82.4. The site currently consists of 214 linear m of boxed cribbing walls standing 13 courses high; five metre-high timber side supports (some inscribed with Roman numerals) are positioned along the shed’s south face. The architectural style of
snowshed No. 13 is seen at only one other extant site (snowshed No. 14). Its proximity to a visitor facility (a picnic area pull-off) on the Trans-Canada Highway warrants periodic surveillance to monitor possible vandalism as well as vegetational encroachment and structural deterioration.

Archaeological Site Inventory Program

At the request of T. LaBoucane, chief, Heritage Resource Conservation, Archaeological Services completed detailed recording of the Alpine Club of Canada’s “Hermit Hut.” Built in 1946, it was designated a “heritage hut” by the club. The site has been carefully mapped, measured, photographed, and described by Archaeological Services, and it will be added to the WRO archaeological site inventory. The cabin is no longer being maintained by the Alpine Club although visitor use continues. Monitoring every two years is recommended.

Acting on information LaBoucane provided, Archaeological Services investigated an exposed postcontact midden. No historically significant artifacts were found although glass and ceramic fragments suggest a deposit containing refuse materials that have a wide range in dates, probably from this century. A few glass and ceramic specimens were collected by Archaeological Services for analysis, and the exposed cutface and general area were photographed. The site should be monitored by the warden service regularly.

Kootenay National Park

Environmental Assessment Review Process Archaeology Program

The location of the proposed visitor centre at the junction of Highways 93 and 95 was assessed by Rod Heitzmann. One archaeological site was located along the eroded surfaces of a trail across the area. The site consists of a light scattering of stone chips and an arrow point. The arrow point is triangular with broad side notches and a slightly concave base and is made of a grey quartzite. Similar style points found at Head-Smashed-In Buffalo Jump, Alberta, are known as Besant Type 2 and date from approximately 2500 to 1500 years B.P. Such points are not common in the Rocky Mountain Trench area. Excavation of eight 50 cm x 50 cm shovel tests resulted in the recovery of only a single flake (from 5 cm below surface). This indicates that the site has a low density of materials and does not warrant further archaeological investigation. A final report has been prepared as part of the B.C. archaeological permit (1991-115) requirements under which Heitzmann carried out this study, since the land is currently privately owned.

Permit WRA92-1
Alison J. Landals,
Fedirchuk McCullough & Associates Ltd., Calgary

A detailed archaeological resource impact assessment of the Olive Lake picnic area disabled-access improvement was carried out. The study indicated that impacts to archaeological resources at site 358T will be minimal.

Permit WRA92-15
Held by Rod Heitzmann

Rod Heitzmann carried out surface examination and shovel testing on the south side of Olive Lake along the proposed boardwalk route. No conflicts with historic resources were identified, and the project may proceed without further archaeological concerns.

Also under WRA92-15, Heitzmann re-located the site of Dillon Homestead (368T), which continues undisturbed since last visited in 1987. A brief visit was also made to the Kootenay Crossing site (370T), the location of a construction camp of the original Banff-Windermere Highway, and later used by the Fay Mar Kay Bungalow Camp. The site had been damaged by the construction crew replacing a culvert under Highway 93. Detailed recording is recommended for 1993.

Waterton Lakes National Park

Archaeological Site Monitoring Program

The crew inspected site 572R (DgPl-10) near the entrance kiosk. The Waterton River is eroding the site’s southern margin, and a prescribed burn had been carried out earlier in the spring. The burn did not affect the archaeological resources, but the river
Western Region

continues to expose small numbers of butchered bison bone and fire-broken rock. About six bone fragments were visible on this inspection. This site should be monitored annually, as it is highly significant; if erosion exposes a concentration of bones or artifacts or a feature such as a hearth, mitigative excavations might be necessary.

Site 580R (DgPl-78), a bison kill site near the Prince of Wales Hotel, was inspected. No bone or artifacts were observed on this visit.

The Narrows site (638R, DgPl-4), a major fishing station, was excavated in 1968 and 1969. On this visit one flake was observed in the trail at the west end of the site. The central part of the site is stable and covered with shrubs. Although wave erosion has affected it in the past, the site currently appears stable. It should be monitored every five years. A visit from the PHQ Marine Archaeology Section is proposed, to survey the lake bottom near the site for any weir remains or other fishing artifacts.

Site 735R (DgPl-118) is a cairn at the northeast end of the ridge north of the Prince of Wales Hotel. On this visit an accurate site map was drawn. Site 659R (DgPl-35) is a cairn at the southeast end of the hotel terrace; that cairn was excavated in 1971. Since then the cliff face has severely slumped and eroded, and on this inspection it appears that the site area has been largely removed through erosion. This site and the terrace edge should be monitored every two years. Bank erosion there is already of concern to the warden service; however, any slope-stabilization measures are likely to have an impact on archaeological sites on the terrace and on the shore below.

In addition, a bison scapula had been collected by Rob Watt, CRM warden, near site 568R (DgPk-42), on the south side of Crooked Creek near the northeast park boundary. We inspected the area and did not observe any other exposed bone in the banks of the creek or the ditch. Several bison bones had been collected by the concession owner in the rehabilitated area on the north shore of Cameron Lake, where site 777R (DgPm-16) has been recorded. A large and beautiful biface or knife was found in the Belly River near the campground where site 1522R has been recorded.

Salvage Excavation at Emerald Bay

The Emerald Bay site (570R, DgPl-3) includes the picnic and beach areas on the north side of Emerald Bay, but the site and landform also extend to the west of the bay and include the superintendent’s yard. As a result of the heavy rains this spring, the works crew found it necessary to dig a small Y-shaped trench to drain water away from the road. Langemann placed test units in the Y trench and discovered that this portion of the Emerald Bay site is still intact. The crew then excavated a 2 m x 2 m unit to a depth of 60 cm in its east half and 150 cm in its west half. Cultural material was found from the surface to 110 cm. This lowest level was below a thick layer of Mazama volcanic ash, which has been dated at about 6800 years BP. Native ceramics, not common in Waterton, were found in the upper levels. Other precontact artifacts recovered included obsidian atlatl points, about a dozen other points, a variety of stone tools and flakes, butchered bison bone, and small square argillite bifaces or knives similar to those found at the Narrows site and which may have been used to fillet fish or meat.

The excavation shows that the undisturbed part of the Emerald Bay site probably extends as far as site 573R (DgPl-15), which is known from surface finds in the northwest of the townsite. The whole of the fan landform that Emerald Bay bounds has been a focus for precontact occupation, and its division into separate sites is largely arbitrary.

The site is highly significant, and any disturbance should be avoided. The nearby highway has probably only disturbed the site’s top levels, and intact cultural deposits may still be present beneath the road surface and sidewalks.

Environmental Assessment Review

A number of projects are scheduled to improve the disabled’s access to picnic areas and interpretive facilities. Most of these raise no concern about archaeological resources, since they consist of improving existing washroom and garbage facilities, removing barriers on existing pathways, and installing extended tops on picnic tables, but some of the areas proposed for improvement have significant archaeological sites recorded nearby.

A highly significant precontact site has been recorded and excavated in the vicinity of the parking lot at Red Rock Canyon. Site 762R (DgPm-1) has yielded a radiocarbon date of 8270 ± 260 years, the oldest date yet obtained in the park. The defined improvements are not of concern, but if below-ground disturbances are unavoidable, the area should be tested and monitored.

The Emerald Bay picnic area is built on top of a highly significant site (570R, DgPl-3). The lake continues to erode the shore of the site, and flakes
and bone can be observed in the beach gravels on every visit there. We have no concerns with the improvements as they are defined, since they involve modifications of existing above-ground features. The site should be monitored every two years.

The Linnet Lake picnic area and landing is built on top of site 646R (DgPl-18), a significant base campsite. If the improvements are all made to above-ground facilities, there are no archaeological concerns.

Site 697R (DgPl-77) is on the southwest side of Linnet Lake, where erosion had exposed a bone scatter in the bank of the trail cut. The site was monitored this year, and no bone or archaeological material was observed in the bank.

The Pass Creek picnic area was inspected, but no archaeological concerns were raised by the planned improvements. No site has been recorded in the immediate area of the picnic grounds although sites are known about 500 m west along the creek's south bank.

Four historic campsites resulting from a Depression relief program were recorded along Akamina Highway. Most of these camps are not marked by any structural remains or artifacts and are not currently threatened by any developments. The sites are densely vegetated, and there is some visitor traffic, but it is not likely to significantly affect them. If the sites were to be developed or disturbed in any way, they should be tested in advance. For now, recording them is sufficient action.

Recording Cabins Slated for Destruction

Several structures that have been used by the warden service will be torn down, and the sites rehabilitated. These structures were photographed and recorded with the kind assistance of Randall Schwanke, fire management warden.

The Boundary Bay warden cabin is on the west shore of Waterton Lake and immediately north of the International Boundary. Precontact site 740R (DgPl-123) has been recorded on the beach there, with isolated artifacts visible in the trail exposures (no artifacts were observed on this visit). Precontact site 672R (DgPl-52) has been recorded at the Crypt Landing stable, where bone and flakes were observed on the beach, but no site has been recorded in the immediate vicinity of the stable. The fire lookout cabin is northeast of Chief Mountain Highway, near the highway viewpoint.

Archaeological Services received excellent advance notice about the destruction of these cabins, and so we were able to record them and assess their archaeological importance before they were torn down. If there are plans to tear down other structures that relate to historic park management, Archaeological Services would also record them.

Banff National Park

Permit WRA92-12
Banff NP Research/Collection Permit No. P92-026
Held by Gwyn Langemann

During 1992 a number of archaeological projects were undertaken by Archaeological Services staff. The crew was led by Gwyn Langemann, assisted by Peter Francis, Jack Porter, Kurtis Lesick, and Suzanne Twelker.

Archaeological Site Monitoring Program

Bow Valley
A log cabin and stable (site 1458R) north of Lake Louise, west of the Pipestone River, and on cross-country ski trail No. 4, was recorded in detail and photographed. The cabin likely dates from the lumbering period. The site should be monitored every ten years; there are very few loose artifacts that could be collected by hikers, but it will continue to decay.

The Christensen Site (360R, EhPw-1) was the site of an excavation in co-operation with the University of Calgary in 1991 to mitigate the effect of erosion by the Bow River and the CPR rail cut through the site. We recommended that the site be monitored annually, particularly to assess the effects of ongoing river erosion. The excavation addressed the immediate problem, but continuing erosion may eventually threaten a new part of the site and we may have to plan further excavations. On this visit the plants seeded in the backfilled excavation units appeared to have taken, and no significant concentration of artifacts or features was visible. The concrete retaining wall constructed by the CPR had not affected the archaeological deposits.

Three precontact sites — 45R (EgPu-2), 48R (EgPu-13), and 1231R — all along the high terrace north of the Bow River and near the east park gate, were monitored. A small number of flakes, bone fragments, and fire-broken rock can be found in the trail along the terrace edge and in the terrace edge. These sites should be monitored every ten years. The trail gets quite a bit of traffic, and the terrace continues to erode.
Fairholme Ranch was recorded as site 1674R. The main buildings have been removed and the area rehabilitated, but some outbuildings and a small dam on the creek remain. Archival research is needed to obtain photographs and plans of the site and to identify the original locations of buildings and features.

A precontact site on Johnson Lake was monitored. Site 352R (EhPu-9) is known from material that erosion has exposed in the power cutline and trail. Former site 353R (EhPu-10), now considered part of 352R, has been severely affected by the failure of the Johnson Lake dam and the subsequent regrading of the Chinaman's Creek coulee and trails. The site should be monitored every ten years.

The historic hermit's cabin (site 61R, EhPu-20) at the southeast end of Johnson Lake was also monitored. It has been vandalized, as there is a lot of hiking and skiing in the area. The site should be monitored every five years, as it is decaying. It has been photographed and sketched, and no further recording is necessary at this time.

Red Deer River Valley

In the course of surveying the Red Deer River valley between the east park boundary and Tyrrell Creek in advance of a proposed burn, three known sites were monitored. Site 1402R (EkPw-18), a log shelter and corral, is decaying naturally, but a prescribed burn should avoid it. Site 1403R (EkPw-19), the grave of Annie Marie Johnson, 1875-1928, has been maintained, is in good shape, and should not be burned. Site 1274R is a widespread scatter of precontact lithic artifacts. If burnt, it probably will not be harmed.

An archaeological survey was undertaken in advance of the burn to identify any historical structures that might be affected. We also took the opportunity to survey a part of the valley that had not previously been surveyed. Other parts of the valley have a high concentration of precontact sites, particularly around Divide Creek, Scotch Camp, and Ya-Ha-Tinda Ranch. The area around the confluence of Tyrrell Creek and the Red Deer River has a number of recent corrals and lean-tos, but these are not of historic interest.

On this survey a single precontact site, in a borrow pit, was recorded (1679R). A late precontact point and several dozen flakes were found in one of a series of buried paleosols. The site will not be affected by burning, since it is deeply buried. Erosion of the borrow-pit wall is having a bad effect on the site, and more testing should be carried out.

Anthracite Survey and Engine House Foundation Salvage Excavation

Permit WRA92-18
Held by Royal McKellar,
Canmore Centennial Museum

Work at Anthracite was largely in conjunction with Royal McKellar, who entered into a volunteer agreement with Banff NP. McKellar has long been interested in the history of Anthracite and other early coal-prospecting sites in the Cascade Valley. He was working with a professional surveyor to map the existing features of Anthracite mine (site 59R) and townsite (site 52R), and to relate these to historic maps and town plans.

In the course of his work, McKellar discovered several other historic features in the general Anthracite area. A log and pole cabin dug into the hillside has been recorded as site 1687R, a coal exploratory drift as site 1685R, and a large windlass and associated pits and berms as site 1686R. Two exploratory coal drifts — Moberly's Drift (site 1693R) and the drift or exploratory drilling site (site 1694R) from 1883 and 1884 — were also discovered by McKellar after he noted their location on an 1886 prospectus of the Anthracite coal fields. All five sites have been recorded, but a more systematic archaeological survey of the area should be undertaken, taking advantage of the new information from McKellar. WRO’s Curatorial Services is to be consulted about measures to preserve the windlass from further decay.

Many of the features of the mine workings at Anthracite were buried when the Johnson’s Lake dam burst in 1986 and the water swept down through the coulee where the mine entrance was located. Timbers were visible in 1992 in the west bank of Chinaman’s Creek. A 150 cm x 100 cm excavation unit (59R2A) was placed over the two northernmost timbers. Several square nails, a number of shake and lath fragments, and solidified puddles of grease testify to a structure’s presence, but give little information about construction methods. The foundation’s position suggests that it was part of the engine house, as shown on contemporary plans of the Anthracite mine workings. Erosion is exposing other artifacts in the creek banks, both in the coulee and at its mouth, around the coal slack heaps.

McKellar also noted two wooden cemetery markers from the Anthracite cemetery (site 1634R). It appeared that the grave markers had been disturbed by road construction. Since they were disturbed and rapidly deteriorating, they were removed and sent to Curatorial Services in CPS’s
Prairie and Northern Regional Office for
conservation. Some lettering in faint relief could be
observed on one of the markers, and conservation
may be able to bring out the lettering enough to read
it. Replicas will be made for installation in 1993.

Lougheed House Development

Lougheed House has stood on three villa lots at 137
Spray Avenue, Banff Townsite, since its construc­
tion in 1906. A developer’s plans call for moving the
house and constructing nine more houses around a
central driveway. Because of the historic signifi­
cance of the house and its inhabitants and because
the site is one of the last examples of the villa lot
pattern that was important in Banff Townsite’s
development, Archaeological Services expressed
concern with the plan.

Shovel testing did not uncover any precontact
remains. A detailed recording of the site was
accomplished by careful photography of the entire
lot, the exterior of the house, and the interior, with
the developer’s permission. Particular attention was
paid to the two verandahs, since these were not
going to be moved with the house. Ideally, the house
should be left standing in its original location. A
structure’s context and surroundings are part of its
historic value, and these should also be considered
in evaluating development impacts.

Rimrock Hotel Dump

The former Hot Springs Hydropathic Hotel and its
associated dump have been recorded as site 1109R
(EgPv-10). The 1905 hotel had been used as staff
quarters by the modern Rimrock Hotel and was
removed during recent expansion of the Rimrock.
The dump has been mined by collectors over the
years. A collection was made by Archaeological
Services in 1986. This year, as part of a recontouring
of the Sulphur Creek crossing, the dump was
capped. Before this happened, Gwyn Langemann
took detailed photographs to document the dump,
the pot hunters’ trench, and the scattered artifacts on
the surface. Some artifacts were collected to add to
the reference collection.

Capping the dump has been done carefully and
with minimal damage to the site itself. Now that it is
capped it will be less obvious to hotel residents and
hikers. The dump should be monitored every two
years in case erosion begins to expose artifacts or in
case illegal collectors are digging into the site again.

Disabled-Access Improvements

Improvements are being designed to allow the
disabled better access to several picnic and
campground facilities. Most of the suggested
improvements do not involve substantial ground
disturbance and are therefore of limited archaeo­
logical concern. These include the precontact site
77R (EhPx-13), the Storm Mountain picnic area,
Castle Meadows Group Campsite, Johnston’s
Canyon Campground, and the Redearth Creek
Trailhead corral. In addition, examination of the new
Lake Louise Daycare Centre site (construction was
under way) revealed no artifacts.

Marine Archaeology

The PHQ Marine Archaeology Section completed
their inventory and assessment of the submerged
historic sites in Lake Minnewanka, Banff, including
Minnewanka Townsite and a series of dams. The
work was done in concert with a local Calgary
diving group that has long had an interest in the site
and has documented most of these sites on video and
still photographs. The Marine Section’s recom­
mendations cover some of the most pressing threats
to the submerged sites.

Other Permit Holders in Banff NP

In addition to the above permits, two other permits
were issued for field work in Banff NP.

Permit WRA92-16
Held by Les Gorham,
Department of Archaeology, University of Calgary

Les Gorham, an MA student, revisited sites in the
Bow Valley known to be quarries of Banff chert,
looking for information to support the analysis he is
undertaking for his thesis work on lithic material
from the excavations at the Christensen Site (360R).

Permit WRA92-19
Held by Brian Vivian,
University of Calgary

Brian Vivian had previously carried out a survey at
Top Of The World Provincial Park, B.C., that
identified ceremonial sites associated with a
high-altitude quarry in the park. He sent an
unsolicited proposal to Archaeological Services
requesting support for a similar survey of previously
unsurveyed high-altitude areas within Banff NP. We
funded part of his project, and some funding also came from the Archaeological Society of Alberta and the Banff NP CRM budget. The project found some two dozen new sites; although none of them were ceremonial, this has been a valuable overview of some remote areas of the park.

Ya-Ha-Tinda Ranch

Archaeological Site Monitoring Program

Permit WRA92-10
Held by Peter Francis

In 1970 the University of Calgary, under agreement with the then National and Historic Parks Branch of the Department of Indian Affairs and Northern Development, undertook an initial archaeological survey of Ya-Ha-Tinda Ranch. The resulting inventory of 50 archaeological sites was published by the principal investigator (Elliott 1970-71). Since that time relatively little additional archaeological field work has been conducted within the Crown leasehold except for some rescue excavation at two sites along the blown-out edge of the terrace on the east/northeast side of Scalp Creek. Survey work in 1992 by Peter Francis initiated a new look at Ya-Ha-Tinda Ranch, significant since its Front Range, mid-elevation meadow character provides environments not well represented in the mountain parks.

The terrace edge is not only eroding, but is eroding in a manner that is particularly detrimental to the eight recorded archaeological sites on the landform. Lithic artifacts and animal bones can be seen in the eroded terrace face, ca. 10 to 50 cm below the terrace surface, some sites clearly indicating more than one discrete occupation. Francis, Jack Porter, and Kurtis Lesick established 22 survey stations to map all sites and features along the terrace edge. The 1993 archaeological field work at Ya-Ha-Tinda Ranch should continue activities initiated in 1992 along the terrace east of Scalp Creek, and some mitigative excavation at sites subject to erosion is recommended in order to bring into sharper resolution the nature of the archaeological resources that are being lost and to recover data prior to permanent loss.

Archaeological Site Inventory Program

The remains of a wooden corral are located on the terrace above Scalp Creek. Ranch manager Cal Hayes (1992: pers. com.) dated the feature to the time when the Brewster family still held the land for horse pasturage. Due to Hayes’ attention, the corral is relatively well-preserved given its age, function, and wooden construction. It was constructed entirely from single-saddle-notched, axe-hewn spruce logs, and the extant remains are approximately 16 m in
Western Region

It is the only obvious historical feature pertaining to the earlier history of the ranch along the present access road.

General appearance, construction technique, and extensive orange-coloured lichen coverage on some of the log tiers tend to support Hayes' identification of the feature as relating to the earlier history of the Ya-Ha-Tinda operation; however, a secure temporal association with "Bony" Thompson's tenure at the ranch (ca. 1910) has yet to be established. Hayes' practice of discouraging the scavenging of wood from the site should be continued enthusiastically, and all current and new ranch employees should be apprised of the site's historical significance. The site should be monitored on regularly, probably biennially.

During the course of the surveying and mapping, a more or less linear series of generally circular, shallow depressions were observed along the edge of the terrace on the east side of Scalp Creek south of the access road to the ranch compound. These phenomena may be natural, the result of weathering processes on the soft aeolian soil mantle or part of the mass wasting process that affects the terrace at the eroding edge of the valley. The features range from 3 to 5 m in diameter and 20 to 30 cm in depth; they are generally circular or subcircular; there are no associated berms around the depressions (a common indicator of intentional subsurface excavation to construct pithouses or roasting pits); they are located on the level ground of the terrace overlooking the broad Scalp Creek flood plain; they are arranged more or less linearly so that the locus of each depression provides an uninterrupted view of the flood plain below; they are not found farther inland, away from the terrace edge; they are located on a landform where several precontact sites have been identified already.

The depressions are rather small to be pit-house features, although those identified to date within the Red Deer River Valley in Banff NP are not appreciably greater in diameter. Their size is more suggestive of roasting pits or, more probably, cache pits. Test excavations should be undertaken in 1993 to investigate them more thoroughly.

Reference

Elliot, Jack
1970–71
"Jasper National Park and Ya-Ha-Tinda Ranch Archaeological Survey." Manuscript Report Series, No. 44. Parks Canada, Department of Indian and Northern Affairs, Ottawa.
main viewpoint area, Maligne Canyon day-use area and viewpoint, Wapiti Campground, Sunwapta Falls day-use area, Wabasso Campground, Whistlers Campground, Palisades picnic area, Pocohontas Campground, and Snaring Campground. Assuming that the disabled-access program will involve very little subsurface disturbance, there are no particular archaeological concerns about these areas.

The proposed route of a water pipeline at the Palisades centre was examined. The route will extend from the existing pumphouse to various buildings and wardens' residences behind the principal conference building (i.e., around the abandoned greenhouse area). The entire route proposed for the pipeline involves ground that has been previously disturbed. There are no particular archaeological concerns.

Jasper Townsite Housing Project

Archaeological Services conducted field work following appraisal by the project surveillance warden (M. Wesbrook) and, later, by the consulting planner (R. Southwell, Delcan Western Ltd.) of sites within or adjacent to Jasper Townsite and selected for possible housing development. Ultimately the consultants selected 11 such sites. Proposed sites 1, 2, 3, 4, 5, and 7 are high-potential areas for cultural resources likely pertaining to the townsite's early history. Discussions with lifelong residents of Jasper (e.g., the fire chief) provided information about historic land use and recollections about buildings and features now removed from these localities. Inspection in some cases provided visual confirmation in the form of depressions and other very vestigial remains. If any of these proposed infill sites within Jasper Townsite are scheduled for housing development, then a more detailed program of field work should be implemented before development starts. Archaeological investigations should include subsurface testing.

Development site 6, Snape's Hill (site 939R), is the location of some 20 extant stone and earthen features representing building remains that date to the townsite's establishment and early occupation. The building remains, refuse dumps, and pits of undetermined use are largely the vestiges of the divisional engineer's headquarters for the Grand Trunk and Pacific Railroad, Mountain Section, occupied during the construction of the GTPR, ca. 1911–14. This site was part of Fitzhugh, which began as a major construction camp and later served as a divisional point for the GTPR (mile 112 on the GTPR west of Wolf Creek). It was renamed Jasper on 1 June 1913.

The principal archaeological/historical/heritage significance of the site on Snape’s Hill, more accurately called Fitzhugh Park, relates to both GTPR history and the earliest history of Jasper Townsite itself. Fitzhugh Park is probably the only integrated group of structural remains surviving today within Jasper NP to commemorate GTPR history on the Yellowhead Historic Route. Thus, the archaeological remains are potentially nationally significant. The Mountain Section of the GTPR was of considerable importance in the economic and political history not only of the GTPR, but also of western Canada. Fitzhugh Park is also the nucleus from which the town of Jasper developed.

A historical/archaeological assessment of Fitzhugh Park was undertaken by B.O.K. Reeves in 1979 (Reeves 1979). In July 1992 Archaeological Services's reassessment included detailed descriptive and photographic documentation as well as a complete inventory of extant features. (At least two structural remains have been destroyed since Reeves' field work by housing built adjacent to Snape's Hill on its southern perimeter.) Each extant feature was drawn to scale, and four 50 cm x 50 cm test units were dug within the perimeters of three features. Only in one feature were cultural remains recovered: the remains of a log house that was occupied by GTPR staff engineers and, subsequently (ca. 1916–18), by J.B. Snape. A few historic artifacts were recovered from a single test unit, including some pulled-wire nails, fragments of brown bottle glass, a small iron fragment that may be the back of a button, a small fragment of sawn bone, a whetstone fragment, and several fragments of mortar. Such material evidence from a single test unit suggests that thorough excavation would be productive.

CRM concerns about the site were conveyed by Archaeological Services staff to Jasper NP EARP Warden M. Wesbrook and D. Chambers, chief, Realty and Municipal Services, Jasper NP. At that time, and on several occasions during subsequent visits to the townsite, the strong concerns of local residents and the Jasper Yellowhead Historical Society that the site be protected from any development were made known to Archaeological Services. Such concerns were also passed on to Jasper NP Heritage Resource Conservation and Heritage Communications staff.

The interpretative value of the historic archaeological remains on Snape's Hill is extraordinarily high. In addition to the physical remains, there are historic photographs, oral
histories, and artifacts available for interpreting the site's role, first within the context of GTPR history and subsequently as the first residential community within the town of Jasper. Effort should be made to ensure Fitzhugh Park's protection under the relevant CPS codes. An annual program of archaeological excavation on the site could inform the visiting public about a variety of CRM concerns that CPS addresses under its mandate in addition to the central interpretive theme, "Jasper Began Here."

Proposed development sites 8S, 8N, 9, and 10 are larger tracts immediately adjacent to existing residential districts within the town or just outside the existing town boundary. Collectively they can be viewed as potential medium- and long-term sites for housing development. Site 8S requires additional assessment should it be selected. At site 8N is a Canada Dominion Lands Surveys benchmark (CCM 736103) consisting of a brass plate set into a circular concrete base and dated 1973. Three test units produced some 25 fragments of chert debitage, at different depths within the soil, suggesting more than one occupation there. At site 9 no cultural remains were recovered from the 20 test units. At site 10, Archaeological Services conducted a judgmental survey on foot; no subsurface testing was done. Industrial debris and many unidentified cultural depressions were observed, and more intensive and systematic field work, including subsurface testing, is recommended in advance of any future land development.

Lake Edith Cottage Subdivision

Archaeological Services inspected seven lots within the Lake Edith cottage subdivision in advance of sewage system upgrades resulting from the 1988 amendments to the National Parks Act and the recently approved (1991) Leases and Licences of Occupation Act, which removes restrictions on the period of occupancy for summer cottages in resort subdivisions within the national parks. Much construction work had taken place prior to the archaeological examinations. During investigations, several conversations with longtime leaseholders resulted in useful information about local environmental conditions going back to the 1920s. One leaseholder, Mrs. Webb, showed us several late 1920s and 1930s photographs of the vicinity of her cottage. Such oral history and photo documentation are useful adjunct sources of information for archaeological field work.

There are no particular archaeological concerns about the proposed locations for sewage upgrades on the leaseholds examined. The proposed area of impact on the Rodger leasehold should not affect the known precontact site (site 1035R), located 20 m to the east. Each leasehold will have to be dealt with case by case as far as EARP archaeological investigations are concerned.

Archaeological Services also examined land in advance of service-line trenching at the subdivision. The land that will be impacted by the cable installation on the Baldwin leasehold has been disturbed previously, and there are no particular archaeological concerns.

Archaeological Site Monitoring Program

In July Archaeological Services attempted to replace the grave marker at the Robert Mathers grave site (site 293R). The original marker was a simple wooden cross with the inscription "Robert Mathers 1911" engraved on a metal plaque affixed above the crosspiece. No outline of the original grave was evident on the grass-covered sand dune. A replica of the original cross and inscription had been made by WRO Curatorial Services.

When Archaeological Services staff arrived at the site, a wholly different grave was in evidence. Not only had a new wooden cross been placed there, but also a variety of novel furnishings had been added. The new cross is not a replica of the original; it is painted white, and the affixed metal plaque presents the brief information in a different layout. A colour photograph of the original cross has been sealed within plastic, nailed to the top of the cross, and sheltered by a small metal awning that is also attached to the top of the cross. The perimeter of the grave has been edged; white marble chips have been placed over the mound, and a white wire garden-edging-type fence encloses the grave. A rough (natural) headstone lies within the fencing (the cross has been placed outside the fencing). The final touch is a potted marigold in the middle of the mound; water has been placed in a large plastic bottle 2 m from the grave with accompanying written instructions to water the plant if its soil is dry. The "new and improved" site was recorded descriptively and photographically by Archaeological Services, and the replica of the original marker was taken to Jasper NP Heritage Communications.

Concern should be raised about the lack of communication between those responsible for embellishing the grave and CPS. Archaeological Services remains uncertain that the new perimeter is accurate in position or dimensions. Nothing was visible on the landform surface to provide any clues.
Site 89R (FdQI-1) was revisited in July. It is a precontact campsite on the existing flood plain of the northeast side of the Athabasca River. Identified originally and tested by Elliott in 1970 (Elliott 1970–71) and inventoried later by Anderson and Reeves (1975), the site had been revisited by Archaeological Services in 1991. Its precise area has not been determined, but on the basis of surface evidence, an estimate of 90 m (E-W) x 35 m (N-S) is suggested. Cumulative collection of surface materials prior to 1992 shows that a variety of lithic types had been chipped there, including quartzites, several chert types, and siliceous siltstone. Two test units provided cultural materials in the form of large quartzite debitage, some heavily charred fire-broken rock, and a thumbnail scraper.

The site is unfortunately located within a picnic/day-use facility and thus is subject to considerable pedestrian traffic and erosion. Temporally/culturally sensitive artifacts may indeed be present. The site should be monitored annually, because of the volume of pedestrian traffic through it. Additional subsurface testing is warranted to determine the site’s extent and to bring into sharper resolution the cultural/temporal identification of the occupation(s) there.

Archaeological Services revisited site 344R (FgQm-57), a precontact multiple-activity locus that was scheduled for further subsurface testing. Erosion-exposed precontact materials can be observed for 150 m. Four deep test units were excavated. While the soil profile is well developed and deep, no cultural materials were recovered. Additional testing is warranted as the terrace erosion appears to be quite active. Likewise, site 243R (FgQm-59), located approximately 500 m eastward on the same terrace, should receive similar attention. Such testing should be scheduled for the 1993 or 1994 field season.

Jasper House (site 230R) was revisited to continue the annual monitoring of this archaeologically and historically significant fur-trade post. Extant remains of (the second) Jasper House consist of several foundations and associated chimney mounds, a cemetery, four trails, and several depressions of probable cultural origin. Archaeological Services conducted extensive field operations at the site in the mid-1980s (see Pickard 1985; Pickard and D’Amour 1987). Examination of the site in 1992 revealed no evidence of natural erosion, except along the riverbank, and no indication of vandalism. The cemetery is a source of concern with regard to the latter, although there are no longer any surface indicators of its presence. Neither the surrounding picket fence nor individual grave markers that are visible in 19th-century photographs and described in several historical accounts of the site have survived. The uninformed casual visitor would not be aware that a cemetery existed, but its location can be inferred from a variety of published sources.

Jasper House is a national historic site. It is currently stable in terms of natural and human impacts, and visitor activity is low. Nonetheless, Archaeological Services recommends annual monitoring, to be carried out by the Jasper NP warden service, and site posting should be considered as a means of protecting the site from vandalism.

Additional archaeological field work had been recommended by CPS archaeologists in 1986. Such work would include additional excavations involving features not examined during the 1985 initiatives (i.e., structures in operations 4 and 6), dendro-chronological sampling for dating purposes, and resistivity studies within the cemetery to delineate buried features (e.g., coffins, etc.).

In July and August Archaeological Services returned to four small-scale precontact sites that had been scheduled for revisitation and raised no particular archaeological concerns about them.

Archaeological Site Inventory Program

The remains of a log cabin by Keith Lake were observed by Warden E. Robert during aerial reconnaissance to monitor bear activity near Jasper Townsite. The cabin is constructed from local trees, sawn to length and saddle notched by axe. Extant remains are five logs high (maximum height 1.25 m), with no evidence that a roof had ever covered the structure. Likewise, there is no evidence for a wooden floor. Associated artifacts consist of several very rusty tin cans that litter the entranceway and adjacent areas. The tin cans are too deteriorated to reveal either manufacturer or contents. Archaeological Services staff recorded the site in detail both descriptively and photographically; no subsurface testing or surface collecting was undertaken.

The cabin remains are in moderately good condition although general decay will continue apace; the lack of a roof will hasten the process. A prescribed burn in the general area would destroy the structure as the surrounding woodland is full of deadfalls and the cabin sits with trees on three sides. Apart from a burn’s impact, there are no particular archaeological concerns about the site. It should be monitored by Archaeological Services every five years.
In July Archaeological Services staff surveyed the entire landform associated with the precontact multiple-activity locus designated site 344R (see above). Another site, 243R (FgQm-59), had been identified in 1983 some 500 m east of site 344R on the same terrace. There are many erosion faces along the edge of this (the lowest) terrace, several of which have an impressive amount of lithic debitage and some faunal bone fragments. Some cultural materials are still embedded within the erosion faces, and some have fallen out of stratigraphic context. Cultural materials discovered during the survey were recorded but not collected.

A further precontact site (244R) has been identified on the third (uppermost) terrace above the river. The site consists of a scatter of chert and siltstone flakes and a chert scraper. This site, and the abundance of chert debitage being eroded out of the lowest terrace, may indicate that the landform includes a lithic raw material source. The third terrace is characterized by large rock outcroppings with horizontal veins of embedded siliceous minerals and surface scatters of large, eroded blocks of rock and pebbles. The possibility of a lithic raw material source, or indeed a quarry, should be investigated.

Marine Underwater Archaeology Survey

The PHQ Marine Archaeology Section conducted an underwater survey of Patricia Lake from 22 to 26 October 1992 under M.-A. Bernier’s direction and with assistance from local dive groups. The survey was designed to initiate the Patricia Lake resource inventory and assessment, and prepare a management statement for the principal known cultural feature in the lake, the remains of the World War II refrigerated aircraft carrier prototype known as Habbakuk.

Habbakuk was designed to resemble a large iceberg. Made of a mixture of ice and wood pulp, it was intended to allow large aircraft, such as bombers, to refuel in mid-Atlantic. The idea stemmed in part from the observed resistance of icebergs to deliberate attempts to destroy them. However, Habbakuk was a complicated combination of shipbuilding and refrigeration engineering, so that construction problems, costs, and an inability to meet the demands of the war led to its abandonment on Patricia Lake.

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Bar U Ranch National Historic Site

Permit WRA92-14
Held by Rod Heitzmann

Rod Heitzmann and Bill Perry carried out a preliminary archaeological inventory and assessment at Bar U NHS of features of historic archaeological value, native sites within the area purchased for Bar U Ranch NHS, and the historic landscape as it has changed through time. In addition, they are assessing the significance and value of the historic features, native sites, and cultural landscapes as well as making recommendations for the long-term preservation and protection of significant archaeological features.
Historic Archaeological Features

Approximately 100 archaeological features are associated with the historic Bar U. They include the remains of building foundations and associated features such as middens, pathways, plantings, and roadways (see Figs. 6 and 7). Such features are also associated with most of the standing buildings on the site. All of these features have considerable potential to assist in determining the evolution of the ranching industry as represented at the Bar U.

Native Archaeological Sites

Three previously unrecorded native archaeological sites (1668R, 1669R and 1671R) were located within CPS lands at the Bar U. One additional site (1684R, EcPn-11) had been previously recorded and was identified in 1978 during evaluations of impacts associated with the Alaska pipeline. Consultant David Finch, who is researching the oral history of the Bar U, stated that site 1684R may be considered sacred by some native peoples (23 January 1993: pers. com.).

Cultural Landscapes

Analysis of historic photographs and archaeological features such as roadways and tracks provide preliminary indication of the changing landscapes of the Bar U headquarters. These changes will assist the understanding of land/people relationships at the site.

Significance

Many of the historic archaeological features at the Bar U are directly related to the historic commemorative themes at the site. These are of level 1 significance and need to be managed carefully to ensure their long-term preservation.

The native archaeological sites, while not related to the commemorative themes, must also be considered during the site development stage to ensure their protection. Preliminary indications are that two of these sites have the archaeological potential to provide additional data, but further assessment is required. No assessment was made of site 1684R in 1992 due to extensive hay cover. This area is possibly related to native ranch hands’ camps. Further determination of this site’s aboriginal significance is required.
Recommendations

Additional assessment of Bar U historic features is required, especially at locations where our initial analysis indicates the presence of a former building or where confirmation of archaeological materials is desired. Efforts will include:

1. Confirming the presence of archaeological remains at the former locations of the southeast stable, early sod-roofed barn, early sod-roofed cabin, bunkhouse, early root cellar, original location of the post office, sheds, and cook’s house.

2. Determining the nature of archaeological materials associated with buildings likely to receive stabilization. These include the Percheron barn or box stalls, pigsty, the remaining bunkhouse, feed mill, and storage sheds.

3. Archaeologically testing in detail the native archaeological sites 1668R and 1669R to determine their archaeological significance through identification of function, age, stratification, and density of cultural materials.

4. Archaeologically assessing site 1684R to determine its nature and extent. Additional informant interviews are needed to confirm its sacred nature.

Elk Island National Park

Environmental Assessment Review
Process Archaeology Program

Permit WRA92-9
Elk Island NP Research/Collection Permit 92-13
Held by Peter Francis

In September Peter Francis and Gwyn Langemann spent a week in Elk Island NP doing field work to determine the effects of development or management projects on archaeological sites. An isolated find, site 472R, had been recorded at the Shoreline Trail bison-handling fence. Two pieces of debitage (chert and quartzite) were found at the site when it was recorded in 1989. On this visit no artifacts were observed.

A prescribed burn at Tawayik Lake successfully burned an area about 100 m x 100 m down to mineral soil. The burn is close to site 470R and several other sites that have been recorded at Tawayik Narrows, which was a major focus of precontact occupation; however, no artifacts were
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observed. Burned areas offer good chances to identify the large quartzite artifacts that are typical of Elk Island sites, and it is easier to survey an area that has had the undergrowth cleared out.

Archaeological Site Inventory and Monitoring Programs

Site 1660R is an isolated find, discovered during the archaeological impact assessment of the new Flyingshot Lake bison-handling facilities in 1991. On this visit the facilities were inspected during construction. Several fences had been removed in the area of site 1660R, but no further artifacts were visible. Site 1647R was recorded in 1991 in the buffalo-viewing paddock, on the northwest edge of the road. Worked quartzite cobbles were being exposed by erosion in the road ditch. On this visit no new artifacts were observed in the walls. There are presently no concerns about the site.

While inspecting the burned area, sites 470R, 523R, and 524R were examined. They are on the west side of Tawayik Narrows and are best understood as parts of a larger focus of precontact occupation that occupies the whole of the narrows. Erosion is exposing artifacts in the bison wallows. On this visit several fire-broken rocks and one large quartzite split cobble were observed. There are no new archaeological concerns; wallows continue to affect the sites, and the best way to deal with this problem is to continue to monitor the sites. A large site, 521R, occupies the entire eastern half of the narrows and should be monitored next year. Site 597R was inspected, but no further artifacts were visible.

Two sites on the south Shoreline Trail were monitored. Site 473R, a campsite with a variety of lithic tool and material types, is on a terrace south of the trail and immediately east of the maintenance road leading to the tool garage. Bison wallowing on the west edge of the site often disturb artifacts from the site, but no artifacts were observed on this visit. Site 474R is about 100 m south of 473R, in the open area east of the maintenance road. Native pottery has been recovered from test excavations at this site. On this visit a retouched quartzite flake, a petrified wood flake, and two bone fragments were collected from the bison wallow there. The wallow continues to be used, and the site should continue to be monitored.

Archaeological Resource Inventory

In 1992 the WRO inventory of archaeological resources grew by 95 to a total of 2820. Additionally, 132 previously inventoried sites were reassessed as part of the ongoing site-monitoring program, requiring updating of site records according to new observations and field procedures.

The most significant development in resource inventory management during 1992 was the development of a GIS capability. Unfortunately, hardware problems kept us from using the system for anything more than general familiarization. For the record, compatibility difficulties in the mix of AST 386 hardware, IBM's OS2, and SPANS prevented the GIS program from running properly, or at all. Rental of compatible hardware has temporarily relieved the problem. However, Kevin Montgomery (site data co-ordinator) and Bill Perry (CRM co-ordinator) received SPANS GIS training in Ottawa in preparation for using GIS as a resource management tool; Perry also attended one of the excellent GIS courses at the Banff School for Management. At the same time, Archaeological Services provided archaeological resource data for several park-based GIS projects. Although GIS is costly and, as with all high-end software, must be approached cautiously, commitment to it is becoming essential for interacting with National Parks' growing applications. Plans for 1993 include a pilot project in site prediction modelling in Waterton NP.

During 1992 Montgomery, in consultation with all other staff, redesigned the archaeological resource data inventory form to better meet resource management needs, as well as to become more compatible with Alberta and B.C. archaeological standards. The latter has become an increasing priority, and an agreement has been reached between Archaeological Services and both provinces for data transfer between the three inventories. A direct result of the site-form redesign is the requirement to restructure the WRO archaeological resource inventory database (RTFAX) to support this new data-collection scheme. The database restructure will be accomplished in 1993 with the implementation of Paradox for Windows as the database engine for RTFAX. In preparation for the new software's release, Archaeological Services has designed a simplified user interface for RTFAX to allow staff easy access to data.

Archaeological Services took the opportunity provided by the Co-op Student Education Program and hired a student to help clean up problems with the archaeological resource data inventory. Although
valuable input was accomplished, the experience has shown that an archaeological background is essential in identifying inventory inconsistencies and solving them. In late 1992 an experienced consultant was contracted to continue this process and, at the same time, convert existing archaeological data to the standards set on the new data-inventory form.

Archaeological Collections Management

During the past year Collections Management, under the supervision of Bruce Morton, ably assisted by Suzanne Twelker, processed and catalogued all 1992-excavated archaeological specimens. Staff provided support to regional archaeological staff on all projects from which archaeological materials were recovered. This included continuing to review and repackage WRO artifact collections, identifying and removing dangerous specimens (e.g., explosives, corrosive materials). At the same time all human remains in WRO archaeological collections have been identified and set aside.

With assistance from COSEP students and with additional contract work, WRO continued input of archaeological artifact information into the Dossier database. Complete entry of WRO’s collections is eagerly anticipated for 1993. Review of alternative database systems is continuing in order to evaluate options to more effectively deal with WRO collections.

In addition, Collections Management staff set up a field laboratory and instructed field staff on cataloguing and Dossier procedures in support of the Fort Langley field school. Twelker, in consultation with staff archaeologists, continued work on a map-cataloguing system to track and control all archaeological site maps and report illustrations. A short-term service contract was let to begin the entry of WRO photo information into an electronic database.

Other Activities

Ozada Prisoner of War Camp

The Ozada POW camp, mainly for German officers, was built on the Stoney Reserve, west of Calgary and east of Banff NP, and occupied for most of 1942. When the prisoners were moved to other camps in southern Alberta, the camp was dismantled; however, a lot of barbed wire and other debris were left on the site, and a large dump is still present on the banks of the Kananaskis River. The Stoney nation would like to see this material cleaned up. Archaeological Services provided advice about the archaeological significance of the cans and artifacts in the dump and about ways in which the material could be sampled as it is cleaned up. A consulting architect’s report has been presented to the Stoney Council, and any decisions about the clean-up and disposition of the artifacts will be up to the chief and council. A sample of the material is to be obtained for our comparative reference collection.

Cluny/Blackfoot Crossing National Historic Sites

No field work was carried out at Cluny this year by Archaeological Services. An archaeological consultant, Bison Historical Resources, did an impact assessment of the proposed interpretive trail along the top of the coulees and around the cemetery and the old Historic Sites and Monuments Board of Canada cairn near the last encampment of Crowfoot (Isapo-muxika). We provided some advice to this consultant about possible archaeological work needed when bones were discovered outside the cemetery boundary, but the trail was rerouted and no work was needed. Field work may be needed next summer, depending on HSMBC recommendations about development of interpretive facilities at Blackfoot Crossing.

Archaeological Research Description and Analysis Reports

Archaeological Services is nearing completion of ARDAs for all parks in Western Region. These comprise complete inventories, assessments, maps, and general analyses for all archaeological sites within national parks and historic sites. In 1992, ARDAs for Elk Island, Yoho, and Pacific Rim were completed. These are in addition to those already completed for Banff, Kootenay, and Jasper. Those for Waterton, South Moresby, Mt. Revelstoke/ Glacier and all national historic sites remain to be tackled.

Management Plans, Directives, and Guidelines

Archaeological Services participated in reviews of the draft Elk Island NP strategic management plan,
Western Region

Gulf of Georgia Cannery management plan, McLean Mills management plan, and Broken Group Islands area plan (Pacific Rim NPR); participated in the Beaverhills ecosystem workshop; and reviewed the Gwaii Haanas draft strategic plan, as well as that for Pacific Rim NPR.

Gwyn Langemann is working on the archaeological component of the Banff CRM plan, which Ian Clarke is preparing in Banff. This will identify priorities for archaeological resource management activities in Banff NP and create a long-term plan.

In addition, all staff commented on PHQ’s draft archaeological collections management directives and archaeological management guidelines.

**Presentations and Interpretive Displays**

At the request of Perry Jacobsen, chief, Heritage Resource Conservation, Rod Heitzmann gave a presentation about cultural resource management to Conservation staff of Kootenay NP; staff assisted in preparing interpretive displays at the Olive Lake picnic area and McLeod Meadows, Kootenay NP; and Gwyn Langemann is assisting Banff Heritage Communications staff with research and advice, as well as trail impact mitigation, towards development of the Vermilion Wetlands interpretive trail.

Outdoor displays will feature an ecosystem perspective on the wetlands and will integrate the evidence archaeology brings to ecological history with that provided by natural environmental data. Also in Banff, Langemann assisted staff of the Whyte Museum with interpretive materials.

**Professional Outside Contacts**

At the Twenty-Fifth Annual Chacmool (University of Calgary Archaeological Association) Conference in November 1992 at the University of Calgary, Peter Francis organized and chaired the nine-paper session, “Cast in Bronze: Changing Perspectives in the Commemoration of Aboriginal Heritage.” Peter is now co-ordinating the submission of these papers to the editorial committee of the conference proceedings for publication.

Several Archaeological Services staff as well as other WRO staff presented papers in this session. Gwyn Langemann and Richard Forbis presented “Commemorating Cluny; Reflections on Four Decades of Archaeological Interpretation,” which summarized recent initiatives by the Siksika Nation to have Blackfoot Crossing as a whole commemorated by the HSMB and to interpret the Cluny Earthlodge Village as a part of this larger commemoration. Rod Heitzmann, Marjorie Huculak (Rocky Mountain House NHS), and Eric Nystrom (Rocky Mountain House NHS) discussed interpretation of aboriginal culture at Rocky Mountain House NHS; Daryl Fedje’s paper concerned Haida demography and village locations; Bill Yeo’s paper overviewed commemoration as a whole in CPS; and Jack Porter described the history of archaeological research at Fort Langley NHS.

**Outside Reports and Publications**

**Heitzmann, Rod**

1992


**Porter, Jack**

In press

“Archaeological Investigations at Fort Langley National Historic Site, 1992, Including Evidence For An 8,000 Year Old Occupation in the Lower Fraser Valley.” *The Midden*. Vancouver.

**Sumpter, Ian**

1992


Compiled by Martin Magne

Reports and publications produced through the Publications Section, Archaeological Services Branch, Program Headquarters, Ottawa, are listed in the “Reports and Publications” chapter.
Overview

Just as 1992 was a year of transition for the Canadian Parks Service and Environment Canada in terms of new strategic directions, it was particularly so for the Archaeological Services of Prairie and Northern Regional Office with the arrival of a new chief from outside the service. William (Bill) Fox accepted the position of chief, Archaeological Services, in January following a 20-year career with the province of Ontario. Changes were made in the organization structure in order to clearly articulate the function’s commitment to serving the archaeological resource management needs of all CPS operations.

Three sections were established: National Parks, Historic Sites, and Archaeological Information Management, supervised by Gary Adams, Kevin Lunn, and Jennifer Hamilton respectively. New staff were hired to address the needs of the government’s Green Plan initiative and new parks establishment in the North. An environmental assessment archaeologist position, filled by David Hems, was created in order to regularize the application of federal environmental assessment legislation to archaeological resource management on those lands managed by CPS and by Environment Canada as a whole. The northern and new parks archaeologist position has been situated in Yellowknife to provide more direct communication with all clients across the Arctic. It was staffed with the first Inuit professional archaeologist in Canada, Deborah Webster.

PNRO has a long tradition of high-quality cultural resource management work, and program changes have been more in emphasis than in direction. Service to CPS field managers through the development of accurate and accessible archaeological databases has been a top priority, as are plain-language products. These objectives are reflected in the following project descriptions.

Grasslands–Fort Walsh
Precontact History Study

The Northwestern Plains precontact history study addresses issues that had emerged during park planning. The Fort Walsh management plan clearly identified that the area’s precontact history had to be better understood and interpreted to the public, and the proposed Grasslands National Park has literally thousands of sites that need to be evaluated and interpreted in a regional context. Both parks have commitments to integrate their information and messages on native history within a larger context that includes local bands and provincial agencies. The Historic Sites and Monuments Board of Canada may recommend that the precontact resources are of national significance.

The project contractors, Western Heritage Services, are to determine the precontact history of an area lying between the South Saskatchewan River on the north, the Yellowstone River on the south, the Rocky Mountain foothills on the west, and the Missouri Coteau on the east. They are examining all of the information on precontact sites within the area, which includes both parks, and once the sites have been identified and mapped, they will relate them to the overall precontact history that has been developed for the area. The primary objective is to refine and elaborate the region’s precontact history by incorporating the specific cultural resource information. The contractor elected to provide the information in an electronic database built on Hypercard on a Macintosh to create an interface that works somewhat like a geographic information system interface.

Each government agency responsible for managing archaeological information within the study area has been contacted. The combined site inventories have been reviewed, and any site for which there is diagnostic information (date, cultural affiliation, or special use) is being added to the database. Additional information is being added through research into the ethnographic records, archaeological reports, ethnobotanical studies, historic archives, and other related sources.
When the database is completed in 1994, any user should be able to define a set of resource-related criteria — sites with 20 tipi rings, sites from the Avonlea Complex, sites located along the Milk River, etc. — and obtain graphic, site-specific, and general information as well as an annotated bibliography and related data files such as native toponymy, ethnobotanical resources, lithic quarry sites, and historical information. This integrated information retrieval system will enable CPS managers and site staff to relate their cultural resources to other such resources within the region. With these links established, we will have new capabilities to inventory, evaluate, interpret, integrate, research, and synthesize the region's precontact resources.

Archaeological Resource Inventory of Grasslands National Park

Permit 92-03
Held by Gary Adams

Through the summer of 1992, CPS conducted its third season of archaeological inventory in Grasslands NP in southwestern Saskatchewan. Gary Adams and Peter Filopoulos were the principle investigators. The project objectives are to inventory surface sites and to evaluate their research value, interpretive potential, and condition. This information is being transferred to various CRM databases and to the evolving park GIS and will
provide a basis for considering cultural resources in any future park developments.

During 1992 the investigators, aided by a volunteer, Jordi Malasiuk, concentrated on surveys in the East Block, increasing the sample there by 542 sites, while another 233 sites were added to the West Block. This brings the survey to 1869 sites recorded on 110 sections of land; approximately 30 sections are in the East Block. This past year, researchers encountered some very distinctive features, new settlement patterns, and interesting sites.

Of the 775 sites that were added to the inventory, 732 were precontact, including one possible Altithermal Period site, two Oxbow, three McKean, six Pelican Lake, five Besant, one Avonlea, and five Late Side-Notched sites. There were two bison drive lane complexes, two vision-quest features, 45 complex sites with ceremonial features, and another 13 sites with only ceremonial features.

Some highlights of the 1992 survey’s precontact aspect include the following. One of the drive lanes in the East Block appears to be virtually intact and is over 14 km long. One large, predominantly lithic site contains mid-19th-century historic artifacts, a very unusual stone circle feature, and an obsidian flake. A stream valley in the East Block yielded diagnostic projectile points in a half-dozen areas, all of them related to the Middle Prehistoric Period and one possibly from the Mummy Cave Series.

Initial indications are that settlements were not overly concentrated on the Frenchman River Valley, but were equally distributed among the many small, temporary creeks in the East Block and in the plateaus around Wood Mountain. The only noticeable difference is that eight out of nine
drive-lane complexes are in the uplands adjacent to the Frenchman River and its tributary valleys.

Perhaps the most intriguing site was on the bank of Morgan Creek. Buried in redeposited silts and gravels, a metre below the surface, were 13 *Bison bison* scapula. There was no perceived arrangement to them, no markings nor signs of use, but there were also no other faunal remains present. A carbon-14 date indicates that they were deposited approximately 300 years ago. The site likely represents some form of human activity, perhaps ceremonial.

Postcontact sites encountered this season were dominated by small homestead sites that have long been abandoned. The 43 sites included 17 homestead and ranch sites; the remainder were associated historic-feature sites such as isolated cellars, corrals, and artifact finds. The native site with 19th-century artifacts has yielded the earliest European artifacts so far encountered in the park. The most notable site is at a crossing of the Frenchman River, just north of the U.S. border. Extant buildings there date back to the early-20th-century ranching period, and one is reputed to have been occupied by an RCMP officer in the 1930s. There is a rock alignment resembling a very old horse brand; an early North West Mounted Police patrol station; a fur-trade fort; and a line camp from one of the large ranches. We have both historical and traditional evidence for these sites.

The information CPS staff collected over three field seasons may form the largest body of archaeological information on the area.

**Wager Bay Archaeological Survey**

Wager Bay, in the District of Keewatin, is being considered for establishment as a national park. To further assess the proposed park’s cultural resources, both archaeological and historical, the archaeological survey of the region begun last year was continued for two weeks in late June and early July of 1992. During this period the field crew resurveyed much of the area covered in 1991, including the north end, south shore, and narrows of the bay, the Quarnak and Piksimanik rivers, the south shore of Ford Lake, and the coast of Roess Welcome Sound located within the proposed boundaries. The survey was conducted primarily by helicopter by Karlis Karklins, CPS special projects archaeologist based in Ottawa, and Deborah Webster, northern and new parks archaeologist at the CPS office in Yellowknife. Occasional help was also provided by David Tuktudjuk of Repulse Bay,
Prairie and Northern Region

11 Southeast corner of the Old Octagon, exposed in 1992 archaeological excavations. Photo by B. Ebell

Elizabeth Scale of CPS Yellowknife, and Dyan Gray, a volunteer from Manotick, Ontario.

The 1992 field work located 153 new sites, bringing the total to 497. Of the new sites, 152 are precontact/postcontact Inuit and one is European. Stops were made at 35 sites to identify and record the types of features present, assess their research potential and vulnerability to tourist visitation, and estimate their ages. Tent rings and meat caches, some dating back to the Thule Period (A.D. 1000–1600), were predominant, but several rare features were also encountered. Among these were a large (7.3 m x 7.9 m), roughly circular festival structure on the coast of Roes Welcome Sound and two possible Thule semisubterranean winter houses on the Qaurnak River. A relatively recent qarmat (an autumn house) was found near the mouth of the Piksimanik River.

The single European site consisted of the remains of a self-propelled, cast-iron and steel vehicle with two large parallel hollow bullet-shaped cylinders with spiralled ribbing. The cylinders turned in opposite directions, the ribs dug into the ground, and the vehicle pushed itself across the tundra. It apparently dates to the 1920s.

York Factory Project

Permit 92-05
Held by Peter Priess

In 1992, archaeological mitigation continued at York Factory National Historic Site in conjunction with the Depot restoration. Excavation to install insulation and a drainage system around the exterior and in the courtyard of the Depot revealed further significant structural remains of the “Old Octagon,” the fortress-like facility constructed between 1788 and 1795 (see Fig. 11). A continuous organic layer containing a heavy concentration of artifacts thought to relate to the Octagon was exposed. The organic layer is the remains of refuse casually disposed of around the Octagon’s walls, probably discarded through windows. A layer of sand covering the deposit in some areas suggests an attempt was made to reduce the odour of the decaying wastes. Some of the more noteworthy artifacts from the organic layer include clothing (such as hats and 18th-century shoe buckles), butchered faunal remains, ashes, dishes, clay smoking pipes, tools, musket parts, etc. Three bear claws, perforated for use in a necklace; a brass casting of a clay pipe; and three badly decayed human molars were also recovered. In 1993 further work will be carried out inside the Depot in conjunction with floor reinstallation, and further
Octagon remains are anticipated. A detailed report is planned following the 1993 field season.

Chilkoot Trail National Historic Site

Permit 92-02
Held by David Hems

The summer of 1992 was the fifth year of a long-term archaeological inventory and assessment program CPS has undertaken at various nodes along the Chilkoot Trail; this year’s research completed the inventory of Lindeman City, a tent community that flourished during the winter of 1897/98. The work was directed by David Hems and Peter Nieuwhof.

Lindeman City, on the southeast shore of Lake Lindeman on a level but rocky promontory at the mouth of Moose Creek Canyon, was one of the main wintering camps on the Chilkoot Trail. It grew into an overcrowded boatbuilding centre during the winter of 1897/98 and was largely abandoned by the fall of 1898. Crude boats were hurriedly made here to carry would-be prospectors down the Yukon River to Dawson and the Klondike gold fields.

As in previous field seasons the focus was on recording and inventorying the archaeological resources to enable CPS to make knowledgeable heritage impact assessments for future site development. This was combined with the additional goal of using the archaeological data to assist in interpreting and enhancing site themes and to lay the foundation for a long-term CRM plan.

The 1992 field season marked the culmination of three previous seasons of archaeological research at Lindeman City. Preliminary work in 1977 by then CPS archaeologist Rodney Vickers identified 226 features and the possibility of residential and commercial clusters within the temporary town. Subsequent investigations in 1984 and 1989 expanded his work only slightly — 33 features were identified in 1984 and 46 in 1989. This year 259 additional features were identified, verifying that residential and commercial clusters existed within the community.

The general topography of the site was very important for tent placement and was in part responsible for shaping community organization. The site contains many gullies that served as refuse areas. The most clearly defined tent platforms, generally consisting of level areas enclosed by cobbles or earthen mounds, are situated along the ridge tops. In general, relatively small, level, cobble-enclosed features were designated “tent platforms” and were assumed to be residential features. Large level areas, often showing some structural debris and high artifact concentrations,
were thought to represent areas of commercial or public activities. Other features consisted of coursed-rock caches, rock piles, causeways between gullies, and depressions.

The archaeological remains indicate that Lindeman City had spatial divisions. The city core appears to have been on the “flats,” where the most transient inhabitants would have camped. These sites required very little alteration, were relatively small, and because of poor cobble outline definition were considered to be multiple-use tenting areas. These features seem to align roughly with the historic main street through Lindeman, indicating their association with its commercial district.

Other distinctive areas include quays along the north shore. They were associated with substantial buildings related to water transport of goods to Bennett Lake, a wagon road and warehouse district at the southern end of the site, a NWMP compound, and outlying residential areas.

The types of impacts and the CRM issues that exist at Lindeman are different from those identified at Bennett in 1991. These differences are largely due to the relatively flat nature of the Lindeman site, in spite of its numerous gullies and ridges, as compared to the steep hillside at Bennett. The tent-platform construction at Lindeman is very different. The ridges could have been used as roadways, and areas where tents were to be located had to be cleared of cobbles. The cobbles were used to hold down the tent sides or were stacked away from the tenting areas. At Bennett the tent platforms were carved into the hillside. At Lindeman the impacts are more likely the result of cobbles being moved deliberately rather than through inadvertent erosion by foot traffic. The cobble substrate that predominates at Lindeman is more stable than Bennett’s sandy slopes, with the resulting impacts from foot traffic being less severe.

Fort Walsh National Historic Site
Salvage Excavation

Permit 92-08
Held by Olga Klymko,
Western Heritage Services, Saskatoon

Over the past 20 years, CPS staff have noted erosion-exposed artifacts in the creek bank that borders the Fort Walsh townsite. The town had flourished from 1875 to 1883 when the neighbouring NWMP fort was occupied. Concern about erosion escalated when floorboards and joists were seen in the bank in 1986. In 1992 CPS contracted Western Heritage Services to salvage the building remains and assess the resources along the creek bank.

Only 23.5 square m of excavation were needed to expose the building remains, which consisted of charred foundation sills, floorboards, and joists, with fallen chinking bordering the building. Although the structure measured 3.6 m in width, its length exceeded 4 m (the western end had been entirely eroded). An entrance at its east end was revealed by a landing of two planks and the presence of door hardware. A window on the south wall is indicated by distributions of window glass. Significant artifacts included an iron meat-hook, a baking-powder tin (as well as numerous unidentified food tins), harness parts, a medicine bottle, a necklace of glass beads, a NWMP button, and a mortar round from a nine-pounder muzzle-loading rifle (a field gun) found against the outside wall. From its form and the wide variety of artifacts associated with it, it would seem to have been a storage building.

Two 10 m x 0.5 m trenches were excavated southeast (toward a cellar depression) and east from the building, but the only features encountered were structural remains associated with the depression.

The creek bank north and south of the building remains was surveyed with a proton magnetometer in an effort to identify buried features. Magnetic anomalies were tested with 11 1-m-square units. The anomalies were most often caused by concentrations of historic artifacts in trash piles. A fence line was also encountered, as was one late-precontact hearth. No significant resources are at present endangered by erosion, although continued monitoring is essential.

Frenchman Butte National Historic Site

Permit 92-07
Held by Biron Ebell

Frenchman Butte NHS is located approximately 143 km northwest of Fort Battleford, Saskatchewan. A brief battle occurred there in 1885, shortly after the Battle of Batoche, between Canadian government forces and the Cree led by Big Bear (Mistahimaskwa). The site consists of pits excavated into the wall and bottom of a narrow coulee. The pits were probably intended as cover for an anticipated ambush of the Canadian troops as they followed the trail along the coulee bottom, and later the pits protected the Cree from the troops’ rifle fire.
A week-long heritage-resource survey was conducted commencing 9 September 1992. Ninety-eight rifle pits were recorded by Biron Ebell and Deborah Webster from PNRO Archaeological Services and heritage recorder Maurice McCracken and surveyor Jim Thompson from Public Works Canada. A description of each feature included a condition report and a stereo photograph, and a detailed map was created and submitted to the regional superintendent at Fort Battleford, along with interim management guidelines. No further research is anticipated.

Cultural Resource Management Projects

Following the completion of databases for Ivvavik NP and Ellesmere Island NP, archaeological resource database projects were begun to upgrade and correlate all available site data for Wood Buffalo NP and Kluane National Park Reserve. When the projects are completed, information on the location, description, research history, and evaluation of the resources of each site in these two parks will be available on the Dossier CRM module for planning and management purposes. Also, a draft report on the inspection of newly discovered native sites in the Donjek River Valley, Kluane NPR, was prepared.

Vuntut National Park (Proposed)

Two contract studies were initiated concerning the proposed Vuntut NP, near Old Crow, Yukon Territory. One was a paleoenvironmental background project conducted by the Circumpolar Institute, University of Alberta. Its main objective was to create a computerized bibliographic database of research conducted in the Old Crow Basin and relating to glacial and postglacial ecosystems. In addition, the project developed conceptual models for a future joint effort involving the Circumpolar Institute, CPS, and other partners to synthesize the scientific data and make them more accessible to the public.

The second study was an archival information project to develop a database on Vuntut's human heritage for CRM purposes. This involved identifying all previously recorded archaeological sites within the park boundaries and upgrading existing site documentation, and was conducted by Dr. J. Cinq-Mars of the Archaeological Survey of Canada.

Aulavik National Park

On Banks Island, in PNRO’s Western Arctic District, consultant Marc Stevenson began the first of a proposed multiyear heritage inventory to document the area’s human history and current indigenous use. The research is to provide ethnological and archaeological data for cultural resource management and for developing interpretive themes and management objectives for the new park. The study includes a review of past investigations, development of an inventory of known heritage resources, and involvement of the Inuvialuit of Sachs Harbour in recording traditional knowledge. This information will be brought together in a report.

Environmental Assessment Review Process Archaeology Field Projects

Reports outlining recommendations and mitigative measures for Caron House at Batoche and the Fort Battleford parking lot, which received impact assessments in 1991, have been sent to the respective national historic sites. Analytical information for these projects is on file with Archaeological Services, PNRO. The regional impact assessment archaeologist, Mike Zywinia, also conducted two major assessment projects during the 1992 field season: at Klondike NHS and Motherwell Homestead NHS. In addition, Kevin Lunn, senior historic sites archaeologist, conducted one short-term assessment project at Fort Battleford NHS.

Klondike National Historic Sites

Permit 92-01
Held by Michael Zywinia

At the Commissioner’s Residence the area identified for a new utility building was 30 percent excavated. An additional 40 percent of the affected area was examined when the trees were removed from inside the remains of the greenhouse. With two exceptions, cultural material did not extend below 25 cm. The exceptions were a post hole that had been excavated down to 72 cm, where the ground was still frozen, and the remains of a wooden sewer drain and metal pipe associated with the ca. 1913 construction activities on site.

Areas identified in the site development plan were also tested. These included a parking lot for the
disabled that is planned for the rear (east) of the project area, a proposed walkway and access ramp to the south of the new building, and the locations for the proposed underground power, sewer, and water lines. Recoveries in these areas were minimal and appear to be related to the 1950s occupation of the structure.

At Bear Creek three locations proposed for development were examined: the vault of the Gold Room, where gold was refined and poured into bars; the shed attached to the Gold Room; and the area where a very large pump referred to as Big Alex's pump was being relocated. All three were surface examined and shovel tested. The results yielded only minimal recoveries, none of which warrant delaying development.

Motherwell Homestead National Historic Site

Permit 92-09
Held by Michael Zywina

The newly acquired land on the north, west, and south sides of the site was assessed. This land has been deep-tilled for at least the last 20 years.

Proposed use for the 10-m strip on the north and west sides is as a site buffer and fire break from the adjacent properties. The lane there is currently used as a vehicle-access road to different parts of the site and as a wagon-ride trail. The north and west strips were mapped, and artifacts were located and identified and collected where they were being significantly affected by site activities.

The land acquired along the south side of the property is 75 m wide and has been used as an overflow parking lot as well as for vehicle access and wagon rides. Proposed use of the land includes a parking lot relocated from its current site, the visitor reception centre, the maintenance workshops, the gift shop and restaurant, a picnic area, and a septic field connected out of the historic zone. Mapping and collecting of significant artifacts was carried out.

Artifact recoveries on all three sides were minimal and reflected sheet refuse commonly associated with prairie farmsteads. One Knife River flint side-scraper was located on the south side. Surface examination and limited testing around the find spot indicated that it was an isolated find. No further work will be required in these areas.

The second component of the project was shovel testing sites proposed for development within the historic zone: a proposed fire-line corridor, the second option for the main septic field, and a smaller septic field for servicing the staff offices located in the hired men's cottage. The second option for the main septic field should cause minor concern; however, installation of both the smaller septic field and the fire line will affect cultural resources. Once development plans are available, the extent to which cultural resources will be affected can be examined. Monitoring is recommended during any construction.

Fort Battleford National Historic Site

Permit 92-04
Held by Kevin Lunn

In May Kevin Lunn, with assistance from two Saskatoon volunteers, undertook excavations to locate evidence for an 1870s-1880s-period vegetable garden and cold frames once located adjacent to the commanding officer's residence at Fort Battleford. Having only scant historic documentation for the garden, the site superintendent requested that Archaeological Services test the suspect location for evidence as well as provide an impact assessment in the event they should proceed with a replica garden. Unfortunately, no stratigraphic or other evidence was found to identify the garden's precise location. Soil samples were collected, but have yet to be submitted for flora analyses. A short report, "In Search of the Commanding Officer's Garden: Results of Landscape Archaeology at Fort Battleford NHS," was submitted to the site and to complete records for the environmental assessment review process.

Material Culture Research and Collections Management

In 1992 PNRO’s Archaeological Services’ Archaeological Information Management Section experienced a busy and productive year despite several months’ disruption for preparing for and moving to its new facilities at the Customs Examining Warehouse in downtown Winnipeg.

Jennifer Hamilton, Mary Ann Tisdale, Debbie Cochrane, and David Elrick prepared archaeological artifact displays, edu-kits, and accompanying background information for parks and sites. For Kluane NPR, artifacts were assembled to create a display, "Archaeology and Native Culture History," as a planning tool presenting a sample of available items for interpretive programs. Artifacts recovered during stabilization of the Caron Sr. house were
Prairie and Northern Region

returned to Batoche NHS this past summer for use in interpreting Caron family and community history. Reused and country-made artifacts recovered from York Factory NHS are in an exhibit titled “Country-Made at York Factory,” scheduled to be installed in early 1993 in the Manitoba North District Office visitor reception centre in Churchill, Manitoba. Lower Fort Garry NHS adaptively reused artifacts and artifacts recovered from the north-wall excavations have been assembled for a series of rotating displays at the site. The section provided Prince Albert NP interpretation staff with 1.5-day orientation to native culture history resources, as an aid to professional development and interpretation program planning. A selection of precontact and NWMP artifacts from Fort Walsh were prepared for an interpretive “dig box” to allow visitors to experience archaeological methods and techniques and to learn about the park’s history.

Eighteen volunteers in the CPS volunteer program logged 1448 hours on 12 different archaeology field and lab projects.

**Yukon Territorial Government**

**Artifact Transfer Project**

A collection of artifacts excavated by CPS archaeologists in the 1970s from areas near Klondike NHS was inventoried and prepared for shipment to the Heritage Branch, Tourism, Yukon Territorial Government, Whitehorse.

Reported in the 1991 CPS archaeological activities report, this project is now complete; the final 55 boxes of artifacts, field records, slides, and maps have been sent to Whitehorse.

**Threatened Collections Project**

The largest single project undertaken was a collections management initiative known as the “Threatened Collections Project.” Begun in 1991, it focussed on assessing and upgrading the artifacts and records from York Factory and Lower Fort Garry excavations.

York Factory, located near the mouth of the Hayes River in northern Manitoba, was once a major centre of the Hudson’s Bay Company fur-trade industry. Seven seasons of archaeological investigations recovered more than 400,000 artifacts, most of which have been inventoried and extensively analyzed by CPS staff. The York Factory collection is a comprehensive assemblage of artifacts relating to most aspects of the Western Canadian fur trade between 1788 and 1957. It is one of the most significant in Canada and the best collection in PNRO in terms of its research capacity and interpretive potential. It has been dealt with extensively in the management plan and has been identified as a dynamic collection that should be expanded, documented, conserved, and managed according to the strict guidelines CPS has established.

Under Jennifer Hamilton’s direction the York Factory Threatened Collections Project involved the condition assessment and upgrading of the entire York Factory artifact collection to current collections management standards. The central focus of the year involved organizing the collection in terms of accessibility, storage, packaging, assessment for conservation needs, and database upgrade. These duties were addressed by Lori Dueck, Paul Morrissette, and Stephen Toews, with assistance from five summer students — Lorna Gelowitz, Lori McKinnon, Geo Robson, Marc Saurette, and Jennifer Schulz.

The culmination of the project involved selecting artifacts for a reference collection of representative items that reflect the interpretive themes identified for York Factory NHS. These artifacts were organized within the identified themes on the basis of a functional classification system and made more accessible by means of indexed finding aids. Once finalized, the reference collection will be a valuable resource tool for future research and park interpretation.

Lower Fort Garry was established in 1830 and is one of the largest concentrations of fur-trade structures remaining in Canada. It is situated on the west bank of the Red River, immediately north of Winnipeg. Occasional archaeological investigations spanning more than 20 years have yielded an extensive artifact collection that correlates closely with the York Factory collection. Approximately one quarter of the Lower Fort Garry artifact collection housed at PNRO was cleaned, sorted, and packed in a manner consistent with the York Factory collection. The Threatened Collections crew is scheduled to process the remaining portion in the new year, again endeavouring to meet collections management standards and ensure processing consistency within and between related fur-trade sites.
Outreach Projects and Professional Outside Contacts

Gary Adams presented the paper “Site Locations and Predictive Modelling in Grasslands National Park” at the 25th annual meeting of the Canadian Archaeological Association in London, Ontario, in April, and “Unusual Sites from the 1992 Survey in Grasslands National Park” at the Saskatoon Archaeological Society monthly meeting in December.

Also at the 25th annual meeting of the Canadian Archaeological Association, Bill Fox presented “Where East Meets West: The New Copper Cultures” and “The Serpent’s Copper Scales.” He also participated on a panel on archaeology and

aboriginal people in Quebec that was held by the Association des archéologues de Québec in Montréal on April 24th.

In November CBC Radio Saskatchewan interviewed Kevin Lunn regarding what can be learned of people from archaeological investigation of privies. The interview focused on lifestyles of various ranked NWMP, based on artifacts and fauna excavated from different privies at Fort Walsh. The CBC interview was follow-up to their airing an interview with a West Virginia collector who digs up old privies for bottles. The CBC contacted Kevin after being encouraged to do so by a professional archaeologist in Saskatoon. The topic was picked up by CBC “Morningside,” which in turn interviewed
Joe Last of Ontario Region Archaeological Research Section on his current research at Fort Wellington.

In August at the Whitehorse Public Library David Hems and Peter Nieuwhof gave a presentation on surveys of Bennett and Lindeman, two tent cities on the Chilkoot Trail. The presentation, given to an audience of 15 including students from Yukon College, was followed by an enthusiastic question-and-answer period.

“How Green is Your Garden?,” a slide show, was presented by David Elrick at the Winnipeg Real Estate Board’s awards night. The event, held each summer, showcases architectural design excellence in landscape. His participation included judging duties, representing CPS, along with judges from the University of Manitoba’s Department of Botany and Faculty of Architecture, and various media representatives.

The Forks National Historic Site
Public Archaeology Program

Visitors to The Forks NHS continue to support the public archaeology program with an enthusiasm that remains unabated after four consecutive field seasons. From 1989 to 1991 the program focussed on investigation of historic-period occupations, including the late-18th- to early-19th-century fur trade, mid-19th-century agricultural and light-industrial activities, and late-19th- to mid-20th-century railway developments. The 1992 season saw a shift in focus to precontact cultural horizons. A total of 36,000 visitors braved the inclement weather to view excavations of Archaic deposits between 3000 and 4000 years old. Volunteers took part in 53 days of excavations. Their efforts revealed evidence of long-distance trade and use of The Forks by both prairie- and forest-adapted peoples who gathered at the junction of the Red and Assiniboine rivers to meet, trade, and harvest the rich natural resources of the river and surrounding parkland.

Outside Publications

Fox, William A.
1992a

1992b

Hancock, R.G.V., and W.A. Fox
1992

Spence, M.W., and W.A. Fox
1992

Compiled by
Jennifer F.A. Hamilton

Reports and publications produced through the Publications Section, Archaeological Services Branch, Program Headquarters, Ottawa, are listed in the “Reports and Publications” chapter.
Ontario Region Archaeological Research Section

Overview

Archaeological research in Ontario Region in 1992 was conducted at four national parks, seven national historic sites, and four locations at our heritage canals (Fig. 14). Twenty archaeological research permits were issued; 18 of these went to Canadian Parks Service staff.

While the bulk of the Ontario Region workload is usually mitigating impacts of specific construction, development, or maintenance activities on archaeological resources or, in the context of the Environmental Assessment and Review Process, assessing resources before the proposed activity takes place, some work this year was directed at longer-range studies of parks and sites. Inventories and problem-specific studies took place at St. Lawrence Islands National Park and at Atherley Narrows on the Trent-Severn Waterway.

In conjunction with repair and stabilization projects, mitigative investigations were conducted at four British forts — Fort George, Fort Malden, Fort St. Joseph, and Fort Wellington. These sites played active roles during the War of 1812, forming a defensive link along the Great Lakes, which connected the British forts in the interior with Montréal. All but Fort Wellington were severely damaged during the conflict: Fort George was left a smouldering ruin by a punishing bombardment of hot shot and shell by the Americans, Fort Malden was torched by its own retreating garrison, and Fort St. Joseph was burnt by the Americans in July 1814.

Other mitigation projects took place at the Battle of the Windmill site, which saw its military action during the Rebellion of 1937, at two Rideau Canal lockstations (Kingston Mills and Ottawa locks), at Bethune Memorial House, and at Scotts Mills on the Trent-Severn Waterway. Most of these mitigation projects had as their impetus the CPS access initiative. Special ramps, wheelchair-accessible pathways, and wheelchair lifts have been designed and are being installed at many locations throughout Ontario Region. The initiative, funded by Treasury Board, has placed a heavy demand on the Archaeological Research Section’s ability to respond quickly to construction designs and specific projects.

Ontario Region’s contributions to CPS’s Threatened Collections Project began in 1992 with the hiring of a project manager to oversee the inventory, evaluation, assessment of condition, and repacking of the collection held in Ontario Region. Significant progress has been made, and a detailed schedule has been drawn up to deal with the 100-plus archaeological sites currently in the regional inventory. Many artifacts have been identified for stabilization or specialized treatment. More generally, the section has addressed the deterioration of our records and documents by beginning a long-range program to replace such materials with archival-quality paper, boxes, and inks. High-school students volunteering in a co-operative education program are assisting staff in converting our records to archival standards. For example, original field notes are being photocopied onto archival-quality paper.

Archaeologists and material culture specialists have participated in management-planning projects for several parks, canals, and sites and in regional strategic plan implementation efforts, and have reviewed a wide range of reports and products for their impacts on Ontario Region’s archaeological resources. Completed archaeological reports have been forwarded to the Publications Section of CPS Program Headquarters for review and printing. We continue to report research activities in “Current Research” sections of professional newsletters.

This year we also started a wide-ranging review of all our archaeological activities and examined the impacts of federal government budget reductions on our ability to deliver services to the sites, other professional disciplines in the region, and partners with whom we work. We are looking at ways of performing our work more effectively, asking others to assist us in reaching our resource-protection goals, and searching for innovative ways to inspire others to achieve similar results in resource conservation outside our own boundaries. The final report will be available in the spring of 1993.
At the region's field locations we have given guide-training sessions prior to the start of the visitor season and special workshops on archaeology, such as a joint workshop organized for the Visitor Activities and Natural Resource Conservation sections. A significant body of archaeological information on Ontario topics has been compiled in a computerized database using Papyrus software. Over 2700 entries have been made to date and are accessible by standard bibliographic reference or by using keywords. This listing is available to all sites and disciplines in the region and can be loaned or transferred to others if requested.

Georgian Bay Islands National Park
Permit 92-13H
Held by Brian D. Ross

The Young Mens' Christian Association has, for a number of years, operated a summer camp on Beausoleil Island. Historical research indicates that this camp overlies part of a mid-19th-century Ojibway village. Structural remnants of the village, consisting of cellar depressions and collapsed chimneys, are readily apparent. Archaeological examination in 1985 and 1986 produced both
precontact and postcontact artifacts. While the postcontact artifacts were indeed from the mid-1800s, the precontact material was originally thought to be from the Late Woodland Period, possibly Odawa; however, subsequent investigations have not substantiated such an occupation.

In 1989, archaeological surveys in advance of proposed septic-system installations showed that the site was much larger than previously supposed and much more complex, yielding Meadowood and what at that time was thought to be Point Peninsula material. Excavations undertaken in 1990 in the area of the new septic bed, holding tank, and feeder line (an area of 122 square m) identified six major native cultural groups (especially a large and noteworthy Saugeen component) utilizing the site from ca. 1200 B.C. to A.D. 1700. Some tantalizing evidence of an early contact (possibly Jesuit) presence was also found.

The 1992 field season was the first of a multiyear cultural resource/threatened archaeological assets program slated for the camp. Work is focussed on salvaging archaeological material and data from the camp’s volleyball court. This material is currently undergoing exposure, severe compaction, and fragmentation. The court is a simple 14 m x 16 m rectangle. An initial 84-square-m area was excavated with great success.

Again the bulk of ceramic recoveries appears to be from the Saugeen Period. This pushes the boundary of the Saugeen homeland farther north and east than previously believed. Although no structural evidence has yet been discovered, new information on the layout of a Middle Woodland community has been retrieved. Although two stratified refuse pits were found, the most numerous features at the site consist of simple hearths dug out of the sand (one carbon-14 sample, just returned, dates to 940±70 years B.P., or ca. A.D. 1010) and concentrations of highly fragmented calcined bone. As in 1990, fish bones constitute the majority of the sample, followed, in descending order, by mammal, turtle, and bird bones. One area produced an inordinate amount of burnt chenopodium seeds, suggesting a
specialized food-processing area. Neighbouring primary and secondary lithic reduction areas indicate tool mass-production. However, the single most exciting feature was two piles of cobbles that have tentatively been interpreted as the remains of a drying or skinning rack (Fig. 15).

Pukaskwa National Park

Permit 92-14H
Held by Brian D. Ross

This season’s work at Pukaskwa continued the documenting of fragile and threatened pit sites using a combination of standard surveying techniques, feature-recording procedures, and stereophotogrammetry. The project was intended to establish the necessary information base to facilitate regular site monitoring. Three pit sites were recorded.

Of particular importance was the recording of “The Fortress.” This site was being adversely affected by beaver, which were felling trees on top of the unconsolidated stone constructions. After negotiations with Ontario Region’s Natural Resource Conservation staff, a proposal to selectively cut the trees was agreed upon. Such cutting would save the site, open it up for aerial photo-documentation, and manage forest regeneration. What the selective cutting revealed was a truly unique archaeological site.

The “Fortress” earns its name from its apparently defensible setting and its architectural elements. Located almost 100 m from the present shore, the site is tucked against the base of a high granite outcrop on a plateau over 15 m above the lake. The site consists of three assemblages of structures.

The inner, main assemblage (Fig. 16) measures 41 m x 20 m and consists of the ruins of six connected rooms, each averaging 21.9 square m, enclosed within a 1.3-m-high rubble wall. A breach in this wall leads to the second assemblage of structures: a series of three walled buildings, a possible hearth, and another, shorter section of wall that overlooks a path leading from the lower beaches to the inner enclosure. This second wall merges with a series of large, fractured granite blocks and a ridge
of high-piled cobblestones to enclose the entire site. At least two other structural remains are located just inside this larger enclosure, constituting the third discrete assemblage of structures.

When first discovered in 1974, the features were thought to be the result of ice ridging, but this assessment was subsequently reversed (Dawson 1975: 75). It is quite apparent (especially with the clearing of obscuring vegetation) that this is a cultural resource without equal — an elaborate petroform — that would have required an unusual level of social control or motivation to achieve.

Reference

Dawson, Kenneth C.A.
1975

Excavations at Mulcaster Island,
St. Lawrence Islands National Park

Permit 92-4H
Held by Brian D. Ross

Mulcaster Island was first archaeologically surveyed by Dr. J.V. Wright, of the Archaeological Survey of Canada, in 1978 (Wright 1978: 27). Wright reported a site that he dated, based on limited recoveries of native material, to the late Point Peninsula or early Terminal Woodland Period. He also speculated that the site represented a very thin occupation.

Due to high visitation, the park proposes to upgrade and relocate the island’s pit privy. The new privy location was archaeologically tested in 1991, and an attempt was made to re-locate Wright’s site. Although it was not located, a new site, with evidence of Middle Woodland ceramic sherds, was discovered in the new privy locale and development was deferred until it could be thoroughly excavated.

Only 1.6 percent (29.5 square m) of the site was salvaged this field season: the entire area of the new privy and sections of the trail system that cut across the site to connect with it. A total of 854 sherds of native ceramics of Owasco cultural affiliation were recovered. This identification has been substantiated through a major comparative analysis of Owasco collections from neighbouring New York State sites housed at the Rochester Museum and Science Center. Even closer comparisons have now been made between the Mulcaster Island ceramics and those from the Miller site, near Pickering, excavated from 1958 to 1961 by the Royal Ontario Museum (Kenyon 1968). Of particular interest has been the corroboration of radiocarbon dates from these two sites. The Miller site dates to 835±70 B.P., or ca. A.D 1115 (Kenyon 1968: 50), while the Mulcaster site dates to 850±170 B.P., or ca. A.D. 1100.

Quite surprising was the paucity of lithics from these excavations (only ten specimens). While the disparity in quantities between the ceramic and lithic assemblages may be a result of a sampling idiosyncrasy, it may also represent a special-purpose function of the site — one that did not involve the manufacture, use, or repair of stone tools.

Concurrent with the excavations, a casual survey of adjacent areas revealed yet another precontact component, an extensive historic midden (likely associated with the cottage that once stood on the island), and the original native site that Wright had reported.

References

Kenyon, Walter A.
1968

Wright, J.V.
1978

Inventory of Historic and Archaeological Resources,
St. Lawrence Islands National Park

Permit 92-9H
Held by Robert Pihl,
Archaeological Services, Inc., Stratford, Ontario

As part of an on-going effort to complete the inventory of known archaeological and historical resources within St. Lawrence Islands NP, a research contract was given to Archaeological Services, Inc. The final report will be the basis for preparing a cultural resource management plan for the park and will contribute to the Federal Heritage Buildings Review Office’s assessment of the park’s built heritage. The information will be useful immediately
Ontario Region

17 Archaeological pace-and-shovel survey at Delaurier House (11H20), Point Pelee NP. Photo by B.D. Ross

in matters such as park zoning, the park management plan, interpretive programs, and regulating and monitoring maintenance activities.

Altogether, 31 locations were visited and information on 35 buildings more than 35 years old was collected according to FHBRO standards. Buildings of every size and description were photographed, mapped, and placed on overall site plans. Summaries of land title, history of use, and history of construction were also noted where such data were available. Four additional buildings were likewise inventoried even though they do not yet meet the age criterion. Unfortunately nine other buildings that did meet the criterion were not identified in time to be included in the study. Some other features such as rights of way, causeways, and cemeteries were noted but not reviewed in the FHBRO format.

CPS’s archaeological provenience system was adhered to for this work, giving us, for the first time, a comprehensive listing of all information relating to historical resources in the park, thus allowing access to data files through our national computerized records system.

Evidence of mainly precontact archaeological collections, held either privately or in other institutions, was also gathered and noted. Data were collected based on the site location, size, and nature of collection, cultural affiliation, significance, and needs for future research. Repositories in both Canada and the United States were visited, and one major local collection was documented. Photographs and, where relevant, maps and drawings were also provided.

Delaurier House, Point Pelee National Park

Permit 92-6H
Held by Brian D. Ross

The Delauriers were the first Eurocanadians to settle at Point Pelee — in 1832. A two-storey frame house
Ontario Region

and a barn are still extant, though both have been extensively restored. Evidence of farm fields, orchards, and an irrigation canal are still visible on the property. No archaeological investigations have ever been undertaken at the house site to specifically locate buried cultural resources associated with its historic occupation; however, at least five precontact sites, all of which date between A.D. 650 and 1100, have been identified throughout the farm.

Visiting Delaurier House is one of the park’s most popular interpretive experiences. In recent years the site has become a popular, though informal, picnic spot. The park intends to “formalize” this picnic area as part of its area development plan. Because of the threat to possible buried cultural resources there as a result of developmental activity, archaeological research was undertaken this past field season.

The study area measured approximately 0.3 ha and was intensively surveyed using a shovel-and-pace methodology, based on a 3-m grid (Fig. 17). We were able to locate the remains of a number of early-20th-century structures as well as an early fence line. Unexpectedly, given the extent of restoration activity at the site, adjacent to the house we were also able to retrieve material directly associated with the Delaurier occupation.

Of special interest was the discovery of new and significant precontact finds, consisting of two distinct sites representing two phases of the Western Basin Tradition. One site is apparently quite small and contains Younge Phase ceramics. The Younge Phase is believed to date between A.D. 800 and 1200 (Murphy and Ferris 1990: 200). The other site appears to be quite large, only a small portion of it having been damaged by the construction and restoration of Delaurier House. Although some Younge Phase ceramics were also found here, the important discovery was that of a discrete Springwell Phase occupation. Springwell is thought to date from the end of the 11th century A.D. to the end of the 14th century (Murphy and Ferris 1990: 228). This phase of the Western Basin Tradition had hitherto not been identified in the park, and the discovery now fills an obvious gap in our current understanding of the park’s precontact occupation.

Reference

Murphy, Carl, and Neal Ferris
1990

Kingston Mills, Rideau Canal

Permit 92-5H
Held by Caroline Phillips

Site development at Kingston Mills lockstation at the southern end of the Rideau Canal will create a “gateway” to the Rideau Canal and make the site accessible to visitors in wheelchairs. Test excavations south of the blockhouse in 1991 revealed a large deposit of cultural material believed associated with the late-19th-century occupation of the building when it served as a residence for the lock men and their families. As a result of the amount of material that turned up in the test areas, it was necessary to excavate the entire length of the proposed pathway on the blockhouse’s south and east sides.

In 1992, in co-ordination with the Visitor Activities’ staff of the Rideau Canal, Southern Area, this excavation was undertaken as a public archaeology project involving local senior public school students. Sixteen 1-m-square units were excavated following the route of the proposed path. The units south of the blockhouse all contained hundreds of domestic artifacts, probably accumulated as refuse along the rock outcropping on which the blockhouse was built. The material has not yet been analyzed, but the lack of variation in the assemblage suggests that the deposit did not accumulate over a long time. Southeast of the blockhouse a brick pavement (Fig. 18) was revealed from 3 cm to 11 cm below surface. The brickwork circled one of the large outcroppings of bedrock and was mortared in place. Former residents recall that a driveway circled the blockhouse at one time, and the fill and brick paving may be associated with that construction.

During the public archaeology program, ten classes each spent a half-day excavating at the site, supervised by CPS archaeologists. In the week prior to their excavations, Rideau Canal Interpretation staff had presented in-class programs on archaeology. Following their excavations, the students moved to the laboratory at the Cataraqui Archaeological Research Foundation in Kingston, where they washed and labelled their artifacts under the supervision of CARF archaeologists working on contract for Parks.
In an unfortunate postscript, the contractor completely destroyed the brick path when the new path was built in the fall of 1992, despite detailed instructions on the architectural drawings and a previous site meeting between the archaeologist, contractor, and project manager.

Ottawa Locks, Rideau Canal

Permit 92-17H
Held by Caroline Phillips

Restoration of Rideau Canal locks 6 to 8 at Ottawa began in the fall of 1992. While lowering the grade up an embankment on the locks’ east side for access by heavy equipment, huge limestone slabs were uncovered (Fig. 19). The project engineer requested that Archaeology investigate. The slabs were located to the east of lock 8 and had already been partially disturbed when we arrived. They had apparently served as a surface at one time, as concrete had been poured over some of the low spots to level the area. Little now remains of the road that once ran to the Royal Engineer’s building, because of the construction of a railway tunnel at the turn of the century and, more recently, the construction of a wall for the new Canadian Museum of Contemporary Photography.

While at the site the archaeological team recorded the profile of the steps up to lock 8, as the concrete casing covering the original steps had also been removed by the contractor. No diagnostic artifacts were recovered.

Scotts Mills, Trent-Severn Waterway

Permit 92-16H
Held by Caroline Phillips

In order to make the Trent-Severn Waterway lockstation and washrooms at Scotts Mills wheelchair accessible, the grade, and therefore the location, of the entrance path to the site had to be altered. The most convenient locale for the new path crossed the former lockmaster’s office (1892 to ca. 1950s). Following removal of that structure, the area had been landscaped as a fairly steep, grass-covered embankment. The construction of the new path network also involved paving the lock area near the gates, and this would affect the site of a turn-of-the-century shanty.

On arriving at the site we discovered that the engineering plans were not up to date and that the shanty area had been covered by concrete for many years.
Plans prepared in the 1930s for the lock office existed, so archaeological testing was conducted to verify the foundation location and to determine if the path construction would affect any remains.

A 0.5-m-wide cross-shaped trench measuring 3 m north/south by 8 m east/west was positioned so that three sides of the structure, as shown on historical plans, would be encountered. Below a shallow topsoil layer the soil was hard-packed clay with very few artifacts. In the east-west trench a deposit of broken window glass and wire nails and spikes was found at 25 cm below surface in a wood-ash lens, possibly a buried surface. There was no sign of in situ burning. The lens was less than 2 cm thick and ended on sterile grey clay. One of the 1 m x 0.5 m units was excavated by shovel into this clay layer to a depth of 0.43 cm below surface, with no change in composition. Modern power and sewer lines were encountered in the east-west trench.

When the limit of the path construction depth had been reached with no evidence of any structural remains, excavation ceased. Photographs suggest that the embankment has been greatly altered since the building’s removal, and thus the remains may have been either scraped away or buried beneath metres of fill during landscaping. Area residents who remembered the structure do not recall that it had a very substantial foundation.

The excavation was not widely advertised, but several local residents who watched our work remembered the lockmaster’s office, and one had photographs of the site. It would be a worthwhile project to conduct an oral history of the site. At Woodside National Historic Site a similar project, involving an archaeological excavation and the site historian, proved very successful in determining the property’s physical details through time.

**Atherley Narrows Fish Weirs National Historic Site, Trent-Severn Waterway**

Permit 92-8H
Held by Kenneth A. Cassavoy, Trent University, Peterborough

Efforts were made to document the presence and condition of fish-weir remains in specific parts of Atherley Narrows, east of Orillia (Fig. 20). Cassavoy had first worked at the site 20 years ago (Johnston and Cassavoy 1978). New, digitized maps were produced for the overall site area, and data were converted to metric measurements.

Two main objectives were set for 1992: to examine, photograph, and assess the condition of all major stake patterns and concentrations of wooden
stake underwater (which Cassavoy had previously mapped in 1973 and 74) and to survey a new area of the east channel for previously undocumented stake remains.

Immediately evident on Cassavoy's return to the site in 1992 was a thick layer of loose silt, ranging from 11 cm to 43 cm deep, that had obscured previous datum points and stake remains. Much new weed growth also made it much more difficult to orient field workers to what he had found in 1973 and 1974; probes and remeasurement from points established earlier were necessary to re-locate the areas surveyed before. Silt and weeds have made it hard to determine how many stakes have been damaged or lost in the area of the original (east) channel. The situation in the main (navigation)
channel is somewhat different, with little silting but some weed growth noted, especially where silt is beginning to accumulate.

In 1973 and 1974 three types of stakes were defined at the entrance to the east channel. Type A stakes were very long (up to 1.1 m), about 10 cm wide, and occurred in a loose pattern across the southern part of the entrance to the east channel. Sixteen were found in 1973 and 1974, but only eight could be re-located in 1992. Their great length seems to have made them more more vulnerable to breakage, but those remaining appear to be in good condition.

Type B stakes, 145 in all, were recorded in 1973 and 1974 across the more northerly section of the entrance to the east channel and north down the main channel. Ranging up to 5 cm in diameter, many were flush with the bottom or at most about 25 cm to 30 cm long. This grouping of stakes, while not extensively investigated, appear to be relatively intact.

The final grouping, of Type C stakes, was recorded close to the east bank at the northern part of the entrance to the east channel. Forty stakes, between 30 cm and 90 cm long and up to 7.5 cm in diameter, had originally been noted, and clear patterns had been discernible. Today, though, only about one-third of the stakes can be seen. It is unclear what has caused this significant loss.

Survey sections 2 and 3, easterly along the north side of the old channel, were examined in 1973 and 1974 and contained over 500 vertical stakes protruding a short 5 cm from the bottom. Four radiocarbon dates were obtained on stakes from this area and assayed dates in the 4500 years B.P. range. Silt and weeds now cover this area and appear to have given a measure of protection to the weir remains there.

Recommendations concerning short-term and long-term protection and development of the site as a heritage resource in the Orillia area have been forwarded to waterway, regional, and headquarters staff for consideration.

Permit 92-7H
Held by Peter Waddell

The research conducted under this permit is discussed in the Marine Archaeology Section report in the “Program Headquarters Archaeological Services” chapter.

Reference

Johnston, Richard B., and Kenneth A. Cassavoy
1978
“The Fishweirs at Atherley Narrows, Ontario.”

Fort St. Joseph National Historic Site

Permit 92-15H
Held by Caroline Phillips

Parks Day in July 1992 drew several hundred visitors to Fort St. Joseph NHS to view the first archaeological work at the fort since the principal excavations in the late 1970s. After those excavations, rope barriers had been placed around the ruins. These required replacement by 1992, and a request was made to excavate additional post holes. This simple archaeological project was used to the maximum, with full interpretation for the public who came to watch.

Fence post holes were requested in previously unexcavated areas around five structures: the powder magazine, the old bakehouse, the blockhouse, the guardhouse, and the new bakehouse. An additional 2-m-square unit was excavated east of the blockhouse for the site of the new flagpole.

At the powder magazine, 1-m-square units were excavated on its east and west sides. In both units the stratigraphy revealed the ruin's recent landscaping and repointing, followed by layers of sandy fill on top of the glacial till that was the original surface. The northwest bastion, where the powder magazine is located, was apparently razed and levelled prior to the magazine's construction. Two musket balls were recovered from the historic fill layers, and a Queen’s Ranger button was found at the original surface. This regiment was stationed at the fort during its construction in 1796.

At the guardhouse, three 0.5-m-square units were excavated on its east and west sides. In both units the stratigraphy revealed the ruin's recent landscaping and repointing, followed by layers of sandy fill on top of the glacial till that was the original surface. The northwest bastion, where the powder magazine is located, was apparently razed and levelled prior to the magazine's construction. Two musket balls were recovered from the historic fill layers, and a Queen’s Ranger button was found at the original surface. This regiment was stationed at the fort during its construction in 1796.

At the guardhouse, three 0.5-m-square units were excavated. They were only excavated to 0.25 cm below surface, the required depth for the post holes. The units on the north and south sides contained a few modern artifacts near the surface, followed by gravel and glacial till. One unit is beside a road bulldozed at the site in 1949 or 1950, and the gravel probably is part of that construction. On the east side, numerous historic artifacts were recovered from an organic sand and glacial till level beginning 5 cm below surface and ending 20 cm below surface.
One-metre-square units were excavated on the east and west sides of the old bakehouse. The western unit was located at the edge of the previous excavation. Few artifacts were recovered, and plastic indicated the area had been disturbed. The unit on the east side showed a similar stratigraphy of organic sand and glacial till, but with more artifacts: tin sheeting, ceramics, and window and bottle glass.

At the new bakehouse, all but one of the required post holes were repositioned to occur within previously excavated areas. The remaining 0.5-m-square unit was located at the edge of the previous excavations on the east side of the ruins. The ruins had been stabilized by staff from the Sault Canal in 1926, and the stone walls were repointed in the early 1980s. The 30-cm-deep excavation revealed this reconstruction activity with numerous limestone spalls (the limestone was transported to the site from a nearby island), mortar, and shattered brick.

A 2-m-square unit was excavated on the east side of the blockhouse at the site of a new flagpole. No historical or archaeological evidence has ever been found for the original flagpole location; the southeast corner of the fort, where it is believed the flagpole stood, was bulldozed in 1949 or 1950. Several hundred historic artifacts were recovered from the 1992 excavations. Below a shallow topsoil layer less than 5 cm deep, dark organic sand and glacial till were encountered, the size of the rocks increasing with depth. Within this rocky stratigraphy a subtle difference in rock size was noted and interpreted as an apparent ditch running from the southwest corner to the northeast corner. This possible drainage ditch, which follows the natural contour, might not have been deliberately constructed. As the slope levelled along the east side, there was less gravel, more organic sand, and many more artifacts. Fish and mammal bone, ceramic tableware and container sherds, clay pipe stems, window and bottle glass, brick fragments, nails, sheet-metal fragments, a piece of a brass shoe buckle, a pricker with chain attached, and a 49th Regiment button were located in the eastern two-thirds of the unit. The 49th Regiment was stationed at the site in the summer of 1802.

A total of 1740 artifacts was collected, indicating the extent of the rich buried heritage that still remains at Fort St. Joseph.

Mitigation of Access Projects at Fort Wellington National Historic Site

Permit 92-1H
Held by Joseph H. Last

The 1960s pathway joining the 1838 blockhouse and 1839 caponnière served the needs of a different time. Built without the disabled in mind, its undulating surface fell short of the access standards recently set (Canada. Department of the Environment. Parks Service, 1991). The pathway, composed of irregular flagstones now loosely bound with fragmented Portland cement, had experienced decades of decay and upheaval from pooling water and repeated freeze-thaw cycles.

While the exact date of the pathway is unknown, photos indicate that it was built sometime around 1961, in all likelihood as part of a larger project that included the rehabilitation of the parade-square well (Spector 1984).

The proposed upgrade of the flagstone pathway was planned for late March. The work involved removing the flagstones and approximately 0.10 m of the gravel bed and replacing them with crushed granular “A” material. The upgrade was to be done on contract without the use of machinery.

Monitoring the project was necessary, for no archaeological investigation had previously occurred in the area. The project would let us examine the impact of the flagstone pathway’s construction upon earlier, underlying deposits and assess the integrity of the historic resources remaining on the parade.

The primary aim was to record any evidence of an earlier parade surface (Fig. 21). From past investigations we know that an 1838 rock spall layer once covered most of the fort’s enceinte (Last et al. 1986). Fashioned from blockhouse construction debitage, the spall layer marks an important sealed context (Baker 1968). Recent plans to reintroduce a similar macadamized surface, as part of a historic landscape scheme, increased the need to define its nature and extent.

Monitoring occurred on 25 March. Horizontal control, for recording purposes, was established by assigning the entire pathway to one excavation unit. Its north-south dimension measured 15.31 m; its width diminished from 1.42 m at the blockhouse entrance to 1.22 m near the caponnière passageway. Three exploratory test pits were hand excavated before the pathway was removed. They extended the width of the path and were positioned equidistant along its length. Each unit was dug to 0.16 m below grade. This provided the depth required to inves-
tigate the thickness and sequence of the pathway strata.

All three units demonstrated similar stratigraphy. At grade level were the flagstones, averaging 0.07 m in thickness. Below the flagstones was a 0.09-m-thick layer of sterile sand, laid as a bed for the flagstones. Beneath the sand lay the 1838 macadamized surface, which, as in other areas of the parade, is composed of fist-sized limestone spalls embedded in a loam/clay matrix. It appears virtually intact.

Neither testing nor monitoring revealed any artifacts. However, a trapezoidal limestone block was recovered from the flagstone pathway. Dressed by chisel and bush hammer, it once served as an ornamental lintel or keystone. It may be an early building element from the site or an isolated structural remain transported from the town of Prescott.

While archaeological involvement in the access upgrade was minimal, investigations revealed that the pathway, and its subsequent alterations, had little impact upon the 1838 parade surface.

References

Baker, Steven G.
1971

1991

Last, Joseph H., et al.
1985

Spector, David
1984
Mitigation of Fraising and Revetment Projects at Fort Wellington
National Historic Site

Permit 92-10H
Held by Arnold Feast

In association with the replacement of 360 linear m of degraded fraising and 330 m of revetment, a two-phased program of excavation and monitoring was conducted at Fort Wellington.

The original revetment and fraising date to the second Fort Wellington, built in 1838 (Fig. 22). Known repairs to the revetment occurred ca. 1878, ca. 1926, and again in 1968. The fraising, last documented in 1866, was left to deteriorate to the point that no visual trace of this defensive element was evident. Sometime after 1950 the fraising was reinstalled. Successive but necessary replacement projects have been steadily consuming the original historic resource. While some archaeological recording of varying quality has been done during past repairs and replacements, no synthesis of repairs to the upper earthworks has ever been made. This project succeeded in establishing the basis for such a synthesis.

Phase 1 employed a crew of four through 11 weeks and benefited from 840 hours donated by CPS staff and outside volunteers.

Strategically placed test trenches — two each on the west and east curtains, one on the south curtain, and one on each flank of the north redan — exposed cross-sections of the revetment/parapet interface. Trenches varied from an incomplete pit measuring 1.8 m long x 1.7 m deep x 1.0 m wide to several larger pits measuring up to 2.4 m x 2.95 m x 1.0 m with a combined volume of approximately 19.4 cubic m.

This phase produced superb stratigraphic sequences of consecutive revetment installations; of banquette, revetment, and parapet configurations; and of various earthwork repair events. Although not successive in each pit, the remains of all six revetment trenches were identified, the oldest of which were found to be deeper and up to 1.0 m closer to the parapet centreline than the current revetment.

Of particular note was the identification of the 1838 banquette, complete with its former width and talus angle. A buried sod line representing the 1838 parapet was also revealed. Unfortunately, slumping has altered the original parapet elevation, making it impossible to determine its historic height archaeologically. This slumping, due primarily to the instability of a decaying revetment, is ongoing and has resulted in successive fill episodes on the interior half of the parapet throughout the 20th century and probably beginning during the final.
decades of the 19th century. Excavations into the parapet also exposed extensive vertical fissures in the upper earthworks. This phenomenon also appears to be the result of revetment degeneration.

Phase 2 employed a crew of two throughout the subsequent 12 weeks. Most of the work involved limiting and recording damage to the historic resources resulting from the continuous use of a 6350-kg backhoe and a 16 330-kg high-hoe. While monitoring work concentrated on the upper earthworks, it eventually included the parade, the north ditch, and outside the palisade gate. In general, these secondary areas suffered compaction damage and surface rupturing. A possible 19th-century midden, of unknown dimension, was found in the north ditch just east of the entrance road.

The fraising replacement itself caused little damage. However, to access the fraising, a roadway was constructed along the banquette in several areas and permanently, but not detrimentally, altered the 1992 terreplein topography. Trench excavation for the new revetment was done by backhoe and caused considerable loss to the revetment/banquette soil sequences. Despite this, monitoring identified the 1813 and 1838 rampart fill levels and uncovered evidence of a probable 1838 fraising on the west curtain and the fragile remains of the 1813 gun platform in the southwest corner.

Beyond determining the degree of disturbance to the resource, the 1992 field season succeeded in providing data on which to build a permanent record of the construction events and subsequent changes to the upper earthworks. More importantly, its results have shown the substantial value remaining in this historic resource and have added to our understanding of 19th-century military engineering techniques at Fort Wellington.

Blockhouses at Fort George
National Historic Site

Permit 92-2H
Held by David J. Christianson

Archaeological monitoring was carried out during the stabilization of the reconstructed buildings known as blockhouses 2 and 3 at Fort George, Niagara-on-the-Lake. Although the final architectural design called for little subsurface disturbance, the project was monitored because previous archaeological investigation (Wilson and Southwood 1976) had revealed that the original foundations of the 1796 buildings were only superficially buried. A portion of the original blockhouse 2 foundation had been exposed in 1974 (Wilson and Southwood 1976: 224). The area around reconstructed blockhouse 3 had been tested only minimally, and little was known about deposits associated with it.

Our primary objectives were to protect the original blockhouse foundations and to mitigate any impact on occupational deposits. The project also had the potential to increase our understanding of the site's early history: did evidence for the original blockhouse 3 foundation exist within the construction corridor; had the 1937 reconstruction efforts eradicated primary historic deposits? In that latter regard, we wanted to confirm the stratigraphic sequence Wilson and Southwood observed (1976: 49–52) for blockhouse 2 and determine whether those deposits were related to the original blockhouse 3 deposits.

Archaeological mitigation actually began at the design stage. After reviewing the initial proposal, we estimated that 43.2 cubic m of deposits would be disturbed, including the portion of the 1796 foundation for blockhouse 2 located by Wilson and Southwood. When the irony of destroying an original 1796 resource in order to provide temporary stabilization for a 1937 reconstruction was presented, efforts were made to find an alternative design. The revised plan reduced the volume of disturbance by over one half. It involved a series of stabilizing posts supported upon platforms of concrete and foamboard (Fig. 23). To accommodate the platforms, shallow 1.22 m x 2.44 m trenches were to be excavated by backhoe to the maximum depth of 0.2 m below grade.

First, 36 small shovel pits (0.2 m x 0.2 m on average) were dug to depths specified by the design. The stratigraphy and any artifacts were recorded. The excavation by backhoe was then monitored. The sequence of events associated with the original blockhouses were: event 1, a modern layer of crushed stone; events 2 and 3, two service trenches and their associated fills; event 4, a distinctive red gravel fill; event 5, a thin localized oil-stained deposit; event 6, an occupation layer associated with blockhouse 2; event 7, a generalized fill associated with blockhouse 3; and event 8, a natural sand deposit.

Stratigraphy observed generally agreed with the sequence Wilson and Southwood proposed (1976) if the distinctive red gravel layer is correlated with the gravel layer that they noted. The underlying occupation layer associated with original blockhouse 2 could be related to a 19th-century activity.

The event sequence around the original blockhouse 3 was similar to that observed in blockhouse...
23 The east face of Fort George NHS reconstructed blockhouse No. 2 showing suboperations 19H36A to 19H36G with foamboard in place. Reconstructed blockhouse No. 3 is in the far background. Photo by D. Christianson

2, although the distinctive red gravel layer was missing. Due to its absence, it was not possible to correlate the two layers (events 6 and 7). However, they could possibly represent a single early occupation.

Several fragments of limestone were also found in association with blockhouse 3. Although displaced, their general location may be related to the former blockhouse foundation. If so, the original blockhouse 3 had an orientation and “footprint” markedly different from that depicted by the current reconstruction.

Although field investigations had limited success in correlating the stratigraphic sequences between the original blockhouses 2 and 3, the project illustrates why archaeology should participate in the design process. Clearly, the most important mitigative measure taken was to substantially reduce the impact on below-grade resources through altering the initial construction design.

Reference

Wilson, John P., and Linda D. Southwood 1976

Bastions at Fort George National Historic Site

Permit 92-19H
Held by Joseph H. Last

In its initial design, Fort George was deficient as a defensive work. Constructed primarily as a depot rather than as a fortified place equal to Fort Niagara, it lacked many of the elements common to the continental design. Neither curtained ramparts nor a developed glacis graced its trace. This led Lieutenant Colonel Bruyères to denounce the work: “its situation and construction very defective, and cannot be considered capable of much defense” (Allen 1974: 72).

Acknowledging the need to increase the elevation of his artillery fire on Fort Niagara, Major
General Sheaffe converted the northeast bastion (later called Brock’s Bastion) into a cavalier battery, complete with casemate. It was with interest then, that we entertained the possibility of viewing, for the first time since the 1937 restoration, the interior make-up of this bastion.

The opportunity arose out of the need to install new sleeper supports for the deck planking of the northeast and southwest gun platforms. Although predesign discussions had led to a plan that would minimize impact on the historic resource, monitoring the project would potentially afford relevant archaeological data.

In particular, the investigation would assist in determining the depth, thickness, and uniformity of the historic deposits associated with the bastions. It would also provide the opportunity to record any postwar alterations and the effects of the 1937 reconstruction on the bastions. An additional but somewhat optimistic goal was to delineate the 1813 casemate associated with Brock’s Bastion and determine whether additional unrecorded casemates were enclosed within the earthen fill of the southwest bastion.

Investigations occurred between 22 and 24 September. Sixteen test excavations, equally divided between the two bastions, were positioned within the proposed corridors for the platform sleeper trenches.

The units were 0.5 m square and trowel excavated to depth of 0.2 m for the northeast and 0.10 m for the southwest bastions (Fig. 24). After the test excavations were completed, the digging of the sleeper trenches was monitored by the Archaeological Research Section.

Although our excavations did not locate the casemate, they were nonetheless profitable, revealing a complex series of five successive filling episodes including platform repair(s) for Brock’s Bastion. At a depth averaging 0.2 m below surface was a very fragile occupation surface. Extremely thin in areas, it consisted of a highly laminated silty grey clay. Containing wrought-iron nails, it may be the uppermost layer of the remaining historic bastion fill. Sheared and compressed by the 1937 reconstruction, it should be viewed as an important interface between the 20th and 19th centuries. Additional excavations, as opportunities permit, would further clarify and enhance this interpretation.

The sequence for the southwest bastion is similar, with the occupation/working surface only 0.1 m below grade. Fortunately, a higher elevation for the platform sleepers was negotiated during the field work, and this further reduced the impact on the bastion’s pre-1937 components and prevented yet another modification to an already overworked surface.
Ontario Region

25 Postexcavation view of operation 4H42, Fort Malden NHS, showing the proposed route for the new visitor pathway. The outline of the 1838 officers' quarters can be seen in the left foreground. Photo by J. Last

Reference

Allen, Robert S.
1974
“A History of Fort George, Upper Canada.”

Testing for the Pathway Project at Fort Malden National Historic Site

Permit 92-12H
Held by Joseph H. Last

Archaeological investigations were undertaken at Fort Malden, Amherstburg, in response to a proposal to design a new visitor pathway system. Archaeological information was required to write the terms of reference for a much larger and comprehensive monitoring program planned to be done on contract (permit 92-18H, see below) and to coincide with the pathway installation.

Our aims were to identify significant resources within the pathway corridor and to assess the impact of construction. Of concern were the later historic components at the site, the asylum (1859–70) and planing-mill (1875–1918) periods (Carter-Edwards 1980). Preliminary testing would also augment our knowledge of the stratigraphic sequence pertaining to these and earlier occupation periods.

The study area consisted of a narrow, 1.2-m-wide corridor that ran along the bottom of the north and west defensive ditches as well as encircling the parade. A new, 2.5-m-wide service road, extending across the south end of the parade, was another component of the pathway proposal. The route measured 757.0 linear m and varied from 0.05 to 0.1 m below grade. When completed, the paths will direct visitors past virtually every extant and delineated structure within the fort.

Excavation occurred between 29 June and 4 July and involved sampling at fixed intervals, the interval length varying depending on the proximity to known or suspected structures/features. Where the potential of encountering resources was high, such as along the west parade, the interval was set at 5.0 m. Along the north and south faces of the parade, where chances of encountering structural features were fewer, the interval was increased to 10.0 m (Fig. 25).

Thirty-six test pits, 0.5 m x 0.5 m square, were trowel excavated to 0.1 m below grade. Four pits were placed within the bottom of the defensive
ditch, and the remainder were distributed around the parade and behind the 1819 brick barracks.

The testing revealed that no resources within the ditch would suffer from the pathway construction. One feature, a flagstone walkway buried beneath 0.04 m of recent sod, was observed at the foot of the ramp leading from the west gate. While it may date to the asylum period, no artifacts were found to confirm this assumption. Recommendations are that the pathway circumvent this area.

Investigations along the north portion of the parade revealed a uniform layer of sod, averaging 0.6 m thick. As observed in other sectors of the parade, the sod overlies either a gravel/pebble deposit or a clay levelling-fill of undetermined depth. Past findings indicate that the underlying clay deposits extend throughout the fort interior. Although the deposits appear to be the result of a single levelling activity, this could not be conclusively demonstrated. Monitoring should provide an opportunity to correlate these disparate clay deposits.

Excavations along the southwest side of the parade revealed a 0.05-m-thick sod layer underlain by a series of levelling deposits consisting of gravel, sandy loam, and compacted clay fills. Collectively they extend 0.1 m below surface. If the proposed roadbed is kept to the specified depth of 0.10 m, little, if any, of the historic resource will be endangered. The same can be said for the south parade, where a buried roadbed was discovered.

Testing about the 1819 brick barracks uncovered a rock spall deposit immediately beneath the sod. The angular spall was embedded within a clay matrix containing brick chips, charcoal, and ash. It appears to be a walking surface that dates to the asylum period.

Our results establish that most of the proposed pathway will have little adverse impact on the historic resources at Fort Maiden. Excluding the possible asylum flagstone pathway and the rock spall surface, which must be further investigated, no further preconstruction testing will be necessary. The pathway project should require only minimal monitoring during construction.

Reference

Carter-Edwards, Dennis
1980

Monitoring the Pathway Project at Fort Malden National Historic Site

Permit 92-18H
Held by Peter Sattelberger,
Cataraqui Archaeological Research Foundation,
Kingston

Monitoring of the Fort Malden pathway project (see above) occurred between 28 September and 23 October. Its aims were to monitor and mitigate any disturbance to the historic resources during pathway and service road construction and exterior exhibit installation. Although the initial pathway proposals incorporated a path along the north and west ditches, this portion was deferred. The resulting study area was therefore reduced to include only the route that defined the perimeter of the parade and the new service road running parallel to the parade’s south side.

Although preliminary investigations by J. Last (permit 92-12H) revealed that disturbance to pre-asylum (pre-1859) deposits would be negligible, there was no guarantee that the planned excavation limits would not be exceeded by the heavy machines. Much of this concern was mitigated by the use of a mechanized sod remover instead of larger machinery. However, disturbances did occur from heavy vehicular traffic and localized backhoe use. These circumstances required close monitoring and detailed recording.

An excavation unit 4.0 m x 1.9 m was dug between the 1819 brick barracks and the 1820s cookhouse. It revealed a very high concentration of fragmented ceramics, brick bats, and degenerated mortar that is believed to be a secondary deposit associated with the cookhouse’s use, demolition, and removal. Another unit, situated behind the barracks and close to the previous excavation unit, defined a pathway and another demolition layer at approximately 0.22 m below grade. Underlying this layer was a compacted clay fill that, at the depth of 1.0 m, had not been fully excavated. It may also be associated with the cookhouse demolition. Further interpretation awaits artifact analysis.

Evidence of planing-mill activities was observed along the west portion of the parade immediately southeast of Hough House, the present administration building. Here, just below the sod line, was a dense deposit of industrial ash and clinkers and substantial quantities of cut nails. Preliminary analysis dates the deposit to the last quarter of the 19th century.

Investigations of the south and southwest portions of the parade confirmed the presence of a roadbed and driveway running diagonally from the
southwest bastion to Malden Lane. A series of road surfaces and reworked fills indicate that several road upgrades had occurred prior to the demolition and eventual burying of the latest surface. Demolition fill was also observed running parallel to the presumed location of framed barracks No. 2. In all likelihood, it is the remains of a 20th-century bungalow that CPS purchased and subsequently bulldozed and levelled during the late 1970s.

Monitoring of the pathway construction was successful in that it augmented existing data derived from limited test excavations and enhanced our knowledge of the stratigraphy associated with the asylum and planing-mill periods at Fort Malden. It also let us mitigate disturbances to several historic features that were previously unknown. Importantly, it demonstrated that using mechanized sod removers reduces damage to historic resources.

Battle of the Windmill National Historic Site

Permit 92-11H
Held by Steve Mills

During June and July a four-week salvage excavation was conducted at the site of the Battle of the Windmill, near Prescott, Ontario. The site was the scene of a three-day battle in November 1838 between American “Patriot Hunters” bent on bringing republicanism to Upper and Lower Canada and the British army and navy assisted by local militia units.

Stabilization work, scheduled for the fall of 1992, required the repointing of the entire circular structure and the upgrading of the electrical system inside the tower. The archaeological project had two objectives: test a 1-m-wide corridor around the building foundation for buried cultural remains and test the proposed route for the electrical service line. A subsidiary goal was the recovery of artifacts from the period between the battle and 1873, when the windmill became a lighthouse. Little documentary evidence exists from that period, so it was hoped that the investigation could fill in some gaps in the site’s history.

The foundation was tested along three sides (the north side having been previously tested in 1988), with particular attention given to the towers’ south side, facing the St. Lawrence River, and which contained a doorway during the building’s early use (Fig. 26). Initial excavations uncovered several construction/repair strata and several thousand artifacts. The large number of artifacts from the four test pits, in particular from the two on the tower’s south side, necessitated extending the excavations to encompass nearly all of the southeast side of the foundation. Forty-four percent of the windmill foundation was excavated, nearly all of it down to bedrock. The remainder was exposed mechanically during stabilization and under the watchful eyes of two archaeologists. A number of artifacts were also recovered, and the extent of the disturbance around the structure was delineated. Also recorded were the construction and repair of the building and the formation of soil deposits around the tower base.

Preliminary analysis indicates that the site was a popular spot for recreational endeavours for much of the past century and throughout modern times, as an abundance of 20th-century alcohol-related bottle glass and personal artifacts indicate. A small selection of early-19th-century artifacts were recovered from the deepest deposit around the tower and were probably discarded either by those who constructed the windmill or its earliest occupants. Several lead shot of varying calibres and a couple of percussion caps may attest to the military presence at the site during the battle and for the year following. A lack of diagnostic artifacts from the second half of the 19th century corroborates the suggestion that the building was not used then (Lee 1976, Burns 1979). Structural artifacts recovered from test pits along the service corridor indicate that a building foundation may exist near the windmill; however, a change in the stabilization design eliminated the requirement for an electrical upgrade, thus protecting the area from any disturbance.

References

Burns, Robert J.
1979

Lee, David
1976
26 The excavation units adjacent to the windmill, Battle of the Windmill NHS. Drawing by M. Fidler from original by S. Mills

Navy Island National Historic Site

Permit 92-20H
Held by Jon K. Jouppien, J.K. Jouppien Heritage Resource Consultant, St. Catharines, Ontario

Additional monitoring of shoreline erosion was conducted on behalf of CPS at Navy Island in the Niagara River in the late fall. The island, commemorated earlier in the century for its role as an 18th-century British naval shipyard and a refuge for Mackenzie's rebels in 1837-38, also contains significant precontact resources dating back at least to the Archaic Period (ca. 2500 years B.P.).

Renewed interest in the site beginning in 1989 led CPS to sponsor an inventory to assess the island's cultural resources. Each year since then, the extent of new erosion has been documented and archaeological consultants have collected any exposed archaeological material. Logistical challenges include negotiating the swift-flowing
Ontario Region

27 The north wall of the unidentified pit, showing its wooden lining, Bethune Memorial House.
Photo by C. Phillips

Niagara River as it rushes to the falls less than three kilometres away, dodging duck hunters, and crashing through dense undergrowth. In this season, archaeological material related to both 19th-century domestic occupations and precontact sites was found. It is not yet known which native occupations are represented in the material collected in 1992; the contractor’s final report has not yet been received.

Engineering studies were undertaken in 1992, and will continue in 1993, to determine possible causes of erosion, to confirm the most severely threatened shoreline areas, and to propose solutions, and long-range plans for the site’s protection will be made. We hope that a multiyear research program can be set up with an Ontario university to mitigate effects of any erosion control or to carry out CRM projects at the site. In the coming year we hope to pursue opportunities for partnerships with the local heritage community, with sister agencies such as the Niagara Parks Commission, and with American researchers.

Bethune Memorial House
Permit 92-3H
Held by Caroline Phillips

Landscape restoration at Bethune Memorial House in Gravenhurst was started in the late 1980s by a team of historians, landscape architects, archaeologists, and Bethune House staff. Archaeological research attempted to locate outbuildings, garden areas, driveways, and even clothesline poles. Testing was based on historical research, a few historic photographs, resistivity surveys, and even water divining. Despite all these techniques, no trace was ever found of a well.

In 1990, during reconstruction of the period fences, the contractor encountered rotten wood in one of his post holes, and in 1991 we investigated the source of this wood. A segment of a circular pit was located in the northeast corner of a 1.3 m x 1.0 m excavation unit, the remainder of the pit apparently lying in an unexcavated northern unit and below the new fence. The unit was excavated to a depth of 1.0 m, at which time it became evident that a much larger excavation would be needed in order to get below that depth in the loose sand. As time did not permit this, the excavation was covered with plastic and filled in.

In 1992 the pit was reopened, and two new, 1-m-square units were dug on the north and west sides. The new fence prevented excavation of the east side. The pit contained layers of fill, wood ash, and some mid-20th-century artifacts. At 2.18 m below surface, hard grey sand was encountered, believed to mark the pit limit. The three sides of the pit that were uncovered were lined with a wooden frame (Fig. 27), now badly rotted. The wooden wall on the west side was partially collapsed, only a few traces of rotten wood remaining at the corners. The north-south width of this feature is 1.1 m.

No water was encountered in the excavation; however, a local Bethune House staff member remarked that lining wells with wood was a technique used in the area (Helen Waters 1991: pers. com.). Water lines were installed in Gravenhurst around 1906, although no records have yet been found dating when town water was piped into Bethune House. Further research will have to be undertaken by the landscape restoration team to determine if this feature is the missing well, and if not, what a 2.18-m-deep wood-lined pit would have been used for. The feature had served as an ash pit for a short period after it was abandoned, as ash was found around the top of the pit, down its sides, and again at its bottom. It was then filled in with layers.
of fill ranging from sand to topsoil. Very few artifacts were found in these layers. Between 0.62 m and 1.18 m below surface, lenses of burned books or magazines, bottles, aerosol cans, an RCAF button, plates, glasses, and a War Amps key tag were mixed with the sand fill. This in turn was covered by more layers of fill. Such modern refuse may have been buried during the house’s restoration in the 1970s, when the hole was completely filled in and the lawn area landscaped.

While the well excavation was under way, a parallel program of public archaeology was taking place in the garden area behind the house. This project was run with the assistance of Bethune House staff, who made in-class presentations prior to the students’ taking part in the “dig.” Each senior public school class spent a half-day excavating and then prepared reports, drawings, and poems, later displayed in the visitor centre, on their experiences. The garden area had proved to be rich in artifacts in previous seasons; however, their provenience has been disturbed by the septic tile bed installation. No new features were uncovered during the students’ excavations.

In preparation for a temporary wheelchair lift to be built at the front door of Bethune House, a 3.0 m x 1.8 m unit was excavated south of the front steps. Since only a concrete pad was to be installed, the area was only excavated to a depth of 20 cm. The area had been a garden prior to the landscaping done in 1990, and the excavations revealed this disturbance. Very few artifacts were recovered, and therefore the site for the permanent lift, to be located farther south, was cleared for construction without archaeological monitoring.

### Material Culture Research and Collection Management

#### Threatened Archaeological Collections Project

The conservation, protection, and presentation of cultural resources is of utmost importance, and concern for the state of CPS collections prompted the Threatened Archaeological Collections Project. Ontario Region’s participation in this project began in April 1992 with these objectives:

1. To produce accurate computerized inventories of site assemblages for collection management, research, and applied interpretation. Currently our collection consists of 1800 standard-size storage boxes containing an unknown number of artifacts.

   Computerized inventories exist for some of the recently excavated assemblages, and for assemblages excavated prior to computerization, some handwritten or form inventories were completed; however, a large portion of the collection has never been inventoried. Correcting this deplorable state is the first step in opening the collection for use as a cultural resource.

2. To evaluate the significance of the site assemblages. This key objective recognizes that not all archaeological material is of equal value. Significance will be evaluated in terms of the assemblages’ archaeological and historical contexts and potential to promote research, to illustrate site themes, to present a more complete view of the past, and to educate the public about the value of our cultural heritage.

3. To conserve selected items and to monitor previously conserved artifacts for signs of deterioration. Mending of glass and ceramic artifacts is anticipated although the current impetus is to preserve rapidly deteriorating metal and organic artifacts.

4. To identify items that might be sacred to native peoples in preparation for their possible return to descendant groups.

5. To identify and safely remove any explosives, primarily unstable black-powder armaments, from the collection.

6. To repack the collection into proper storage containers using archival-quality materials and to upgrade environmental conditions.

7. To reorganize the storage facilities in order to make the most efficient use of space and to improve access to site assemblages for research, education, interpretation, etc.

To date the project has concentrated on 263 boxes of material from Fort Wellington NHS. The material is primarily from the 1984–92 latrine excavations, a superbly stratified context dating from 1839 to the 20th century. As of November, 225 boxes, or 235 826 artifacts, have been inventoried, and approximately 392 artifacts have been conserved. The inventoried artifacts have been packed in archival storage containers. The assemblage dating from the Royal Canadian Rifle Regiment occupation between 1843 and 1854 (the period of animation at the site) has been sent to CPS PHQ for further research. Artifacts from this context will form a resource collection to be used for furnishing-plan information as well as for displays illustrating such themes as domestic life, diet, health, hygiene, and so on.
Correlation of the Fort Wellington archaeological and historical contexts is under way, but awaits the inventory's completion. A final report will evaluate the significance of the Fort Wellington collection, suggesting other potential applications and themes, and after the Fort Wellington report is completed in 1993/94, we will concentrate on inventories for sites where aboriginal issues are anticipated, for sites with current research requirements, or for assemblages with potential to illustrate current themes and objectives at specific sites.

**Fort Wellington Latrine Material Culture Research Project**

This important project is discussed in the Material Culture Research Section report in the “Program Headquarters Archaeological Services” chapter.

**Outreach Projects and Professional Outside Contacts**

With the Marine Archaeology Section of CPS PHQ and the provincial marine archaeologist, we sponsored a marine heritage information seminar at Fort George. Increased co-operation with local divers and the heritage community and enforcement agencies resulted. CPS Ontario Region has joined the “Passport to the Past” program of the Ontario Archaeological Society, giving volunteers the chance to receive further credit for their participation in our research projects. Other outreach activities took place throughout the year, with public talks, school programs, career fairs, library displays, and tours of our laboratory being arranged.

Staff continue to pursue other co-operative interests, such as with the Archaeological Resource Centre of the Metro Toronto Board of Education, and serve on committees of professional associations, such as the Canadian Archaeological Association, and other organizations. Partly funded by CPS and partly out of personal interest, staff gave papers at several conferences.

Brian Ross prepared a talk, “Historic Ojibway Cemeteries on Beausoleil Island, Georgian Bay Islands National Park: Broadening Our Perspective,” for the Canadian Archaeological Association meetings in London in May; Sheryl Smith presented it at the conference. In August he gave a “campfire presentation” on archaeology on Beausoleil Island to campers at the park.

Brian and Cesare D’Annibale attended (14 and 15 November) the Rochester, New York, “People to People Conference,” sponsored by the Rochester Museum and Science Center, on intertribal and interethnic relationships in the Northeast during the early contact period.

Joe Last assisted at the College of William and Mary Field School in Historical Archaeology in Bermuda in July. At the field school he presented “Fort Wellington: Two Decades of Archaeology.” In October at the Council for Northeast Historical Archaeology meeting at Glen Falls, New York, he gave a paper, “A Mass of Earth Badly Put Together: An Archaeological Perspective of Fort Wellington at Prescott, Ontario.” In the spring he was interviewed on CBC television’s “Midday” and by Peter Gzowski on CBC radio’s “Morningside.” Both interviews were on the Fort Wellington latrine project.

Suzanne Plousos instructed students in field techniques at the William and Mary Field School in Historical Archaeology in Bermuda for two weeks in July. At the field school she also gave a presentation on archaeological collections, covering processing procedures, records management, and collection considerations. At the CNEHA meetings in October she gave a presentation entitled “Interpreting Ethnic Diversity and Inter-Group Conflict among Rideau Canal Construction Workers.”

Cesare D’Annibale spent October doing lithic analysis for the Western Cyprus Project, Brock University, at the Chalcolithic site of Prastio-Ayios Savvas, Cyprus. (Helen Dunlop assisted Cesare on this project.) He also co-authored a paper, “Prehistoric Settlement Patterns from the Metaponto Survey, Basilicata, Italy,” presented at the American Institute of Archaeology annual meeting in December in New Orleans.

**Outside Publication**

Smith, Sheryl A.

1992


Compiled by Sheryl Smith
Quebec Region
History and Archaeology
Archaeology Section

Translated from the original French by the Department of the Secretary of State

Overview

Managing our archaeological resources, meeting other service needs, responding to public demand, and disseminating research results: these are the focal points of our archaeological activities in Quebec Region.

Virtually all our region’s programmed and emergency field archaeology activities in 1992 were carried out within the framework of the Guidelines for the Management of Archaeological Resources in the Canadian Parks Service. Some initiatives, particularly studies of potential and inventory and assessment of resources, were taken in order to create efficient management tools, while others were taken in response to pressing needs for action to protect in situ resources. This is the context in which our salvage excavation and monitoring activities and surveys of remains were done. As a result of these activities, many recommendations have been made for mitigating action to minimize the impact of archaeological and construction work on fragile resources.

Whether large-scale or small, every one of our archaeological activities in the field not only attained its resource protection objectives, but also provided an opportunity to harvest invaluable information on the former occupation of the site in question. While some of the data were too fragmentary for detailed analysis, they nevertheless contributed to improving our knowledge of the site. Other activities in themselves provided the material for a broader-ranging analysis of the local area and its themes of archaeological interest. This was especially true of the work conducted in the Saint-Jean Bastion of the Fortifications of Québec National Historic Site, at Fort Lennox NHS, and at Forges du Saint-Maurice NHS.

Other Quebec Regional Office achievements in the area of archaeological resource management include our participation in planning and monitoring the archaeological aspects of cost-sharing agreements (Morrin College/Québec jail, Sir Étienne-Paschal Taché House, Davie Shipyard) and our supervision of archaeological projects sponsored by other federal agencies (Canadian Wildlife Service, Société du Vieux-Port de Montréal).

This chapter contains many illustrations of activities conducted by CPS archaeologists, material culture researchers, and archaeological collection managers. We have the Program as a whole to thank for our success in attaining our research, resource protection, and information dissemination objectives.

Saint-Jean Bastion,
Fortifications of Québec National Historic Site

Permit 92Q-001
Held by Robert Gauvin

The Saint-Jean Bastion underwent stabilization work between the fall of 1989 and the fall of 1992. Parallel with this reinforcement work, planned archaeological activities were carried out to identify, record, and protect archaeological resources that might be disturbed.

In 1989, mechanical explorations as well as manual digging were carried out in several areas of the site where the presence of remains was suspected. Subsequently, archaeological monitoring was maintained throughout the stabilization work. The data collected between 1989 and 1992 contributed to our knowledge of the rampart’s components, such as the escarp and buttresses, as well as the parapet level.

As a result of the activities carried out in 1992, we have been able to complete our surveys of the previously untouched areas. In addition, the analytical inventory of the remains was drafted this year. This inventory, scheduled for publication in...
Archaeological activities in Quebec Region.
Drawing by L. Lavoie
1993, discusses survey results and analyzes the structural and functional history of the works studied.

A specific study will also be conducted concerning the discovery of a walled passage dating from the French period: information from contemporary period sources will be compared with data from the archaeological work done at the Saint-Jean and Ursulines bastions.

Reference

Gauvin, Robert
n.d.

The 1855 Wash House, Grosse Île National Historic Site

Permit 92Q-009
Held by Jacques Guimont

As its name indicates, building No. 16 was intended as a wash house for healthy immigrants when it was erected in 1855. Toward the end of the 19th century it was equipped with men's and women's toilets. After the quarantine station was closed in 1937, sheet-metal, carpentry, and plumbing facilities and a forge were installed in the building. The approximately 200-foot-long frame structure is on the west side of the island, on the riverfront below the first-class hotel, near an old landing.

Preventive Work

The wash house has no basement; it is supported by masonry pillars. Since it sits on a slope, deposits of earth from the cliff and road to its north had built up over the years, gradually burying sections of the floor joists and supporting timbers. Since these rotted beams imperilled the building's stability, excavation was undertaken to lower the road level and replace the beams.

Archaeological Potential of the Site

As a result of the study, the archaeological potential of Grosse Île was graded “average” because the site had been used for a variety of different purposes since the wash house was built, in 1855. This, however, was a theoretical assessment that had to be verified so that the work's impact on the site resources could be estimated and appropriate mitigating action could be recommended.

Exploratory work was conducted in June 1992 under Jacques Guimont's direction to confirm traces of activities related to the building's occupation — a fence put up at the end of the 19th century when the men's and women's toilets were installed, traffic...
patterns — and remains of occupation prior to the building’s construction.

Four test pits were dug on the north side of the building, and surface material was collected from underneath the wash house and around the old landing.

Levels of occupation prior to the wash house’s construction (i.e., before 1855) were identified around the eastern portion of the building. They were related to the use of the landing, the second one built (in 1839) during the period of the quarantine station. Some remains might perhaps be traced back to an earlier occupation. We found many remains related to the building’s construction and subsequent repairs, from the time the wash house was first built to the closing of the quarantine station (1855–1937). A layer that might correspond to a traffic area was observed in the west half of the building. No artifacts indicating how the wash house was used during the quarantine period were unearthed, perhaps because of the nature of such activities. Finally, a few traffic areas, dating from the mid- to late 20th century, were found.

As a result of these activities, the archaeologist recommended restricting the excavation associated with the preventive work in the area opposite the building’s west side and, on the east side, the layers predating the construction of the wash house. These layers must be protected, and excavation must be conducted under archaeological supervision.

Mitigating Action

Architectural and Engineering Services were contacted in order to ensure that the preventive work would be executed in accordance with the archaeologists’ recommendations. The road to the north of the building was levelled, and the bases of the north and east walls were cleared under Guy Plourde’s supervision in October 1992. During this work, the archaeologist took stratigraphic samples where supporting beams for the floor, roof beams, or joists were to be put in and where there was a risk of disturbing layers that predate the wash house.

Results

As at the time of the June explorations, excavation of the portions of the layers of occupation predating the wash house yielded an assemblage of artifacts that pointed to its possible use as a family residence during the first half of the 19th century. French material, possibly from the 18th century, was also recovered. In fact, several pre-1855 layers of occupation were discovered, and at least one of these precedes the landing.

Test pits excavated under the building have made it possible to identify activities related to its construction and renovation as washrooms during the quarantine period. Few archaeological traces of the use of the wash house were discovered, but brick rubble from the demolition of the washing and refuse-disposal facilities, probably related to the forge, were uncovered.

References

Guimont, Jacques
1992
“Grosse-Île: reconnaissance archéologique dans le cadre des travaux préventifs au lavoir de 1855, 8 au 19 juin 1992.” Manuscript on file, History and Archaeology, Quebec Regional Office, Canadian Parks Service, Québec.

Plourde, Guy
1992
“Grosse-Île: surveillance archéologique lors des travaux préventifs au lavoir de 1855, 13 au 28 octobre 1992.” Manuscript on file, History and Archaeology, Quebec Regional Office, Canadian Parks Service, Québec.

Maison de la Petite-Ferme, Cap Tourmente Wildlife Reserve

Salvage archaeology and monitoring of reinforcement work at the Maison de la Petite-Ferme on the wildlife reserve have unearthed many architectural remains and material culture objects that attest to the site’s occupation from the time of the first farm, established by Champlain in 1626, to the present. This reinforcement work, however, was done only in the area immediately around the house, so many remains are probably still buried.

These archaeological activities, under CPS stewardship, were directed successively by Jacques Guimont, Pierre Drouin, Anne Desgagné, and Gisèle Piédalue and were completed with the assistance of the Canadian Wildlife Service, which funded the research, and Public Works Canada, which did the reinforcement work.
The First Farm (1626–28)

Numerous architectural remains that likely came from the first farm were brought to light. On the south side of the present-day house, at least one building that may date from that period was identified. It may have been a blockhouse (certainly with a living area, and perhaps also with a storage area or stable). Earth and posts were used as building materials, and the roof was likely thatched. Such construction corresponds to Champlain’s description of the Cap-Tourmente farm’s first residences, built in 1626 and destroyed by the Kirke brothers in 1629. At least one of the rooms in the building had plank flooring, and another probably had a tiled floor. The other rooms probably had dirt floors. Few artifacts were linked with this building; however, a coarse earthenware jar was found, filled with beans that had calcified (probably as a result of
the Kirkes’ fire of 1629) as well as a few grains of corn.

Remains of outbuildings were also discovered: on the east side of the house, the remains of a root cellar or icehouse were found. This building had been dug out the local natural clay, and its floor was wooden. Three blown-glass bottles or flacons, probably French, were found there.

The Second Farm (1632 or 1633 to 1667)

Masonry remains found in the basement of the present-day house and two masonry walls located on the east side of the house (on top of the fill from the cellar mentioned above) may come from the second period of occupation, about which little is known. We do not know yet what the building was used for. The masonry foundations under the west wall could also date from the second farm. In addition, a masonry well on the north side could have been built during that period. A large number of coarse earthenware potsherds were found in the earthworks. These sherds (mostly pans and dishes) are of French and local origin. There was also a handle from an unidentified tool and a handcrafted leather shoe. At first sight the material found in the well seems to date from the second half of the 17th century, which is probably when the site was abandoned. A small wooden drain was found near the well, and it could date from that period or from the first period of occupation.

The Seminary Farm (1664–1969)

The present-day house would have been built sometime between 1692 and 1732, but the central portion may be older yet: it may actually be the house that stood on the site when Monseigneur de Laval acquired it in 1667. This house may have originally had a basement entrance on the south side (southwest corner). Three masonry walls constituting the remains have been found. Additions were built on the east and west sides at the end of the 17th century and in the early 18th century. At the same time, a new chapel was put up on the east side (the foundations of the chapel have been partly uncovered). Numerous objects for keeping and serving food and several tools were found as evidence of the house’s occupation. These objects include several coarse earthenware containers of French and local make (many casserole dishes), a tin plate, and a few knife blades. The tools include at least two axes, an adze, a chisel, a file, a sickle, and an ice saw. A few pieces of architectural hardware such as iron butt and strap hinges, hooks, and flaps were found. A sizable collection of mammal and fowl bones indicate the inhabitants’ dietary habits.

Traces of a fire reveal that the house was partially demolished during the 1759 bombardment. Remains of more recent occupation were also found, including several toe walls from a veranda, running the length of the south face of the building, that may have been built in the mid-19th century.

The extension to the north of the building was found to have been built in two stages: the first part, between the main body of the house and the present-day addition to the extension, may have been a milk house built in the early 19th century. The extension was apparently added in 1866.

Remains from the Petite-Ferme site bear witness to 350 years of occupation. The earthworks and posts from the first farm buildings are probably the oldest such remains brought to light in the St. Lawrence Valley.

As the description of the results of the 1992 archaeological activities on this site reveals, a wealth of information has been found here. The data will be analyzed in 1993, and the results of that study should greatly enhance our understanding of this site and the ways in which it has been used.

References

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1992
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Guimont, Jacques
1993
Piédalue, Gisèle
1992
“Réserve nationale de faune du Cap-Tourmente, travaux de stabilisation de la maison de la Petite-Ferme, recommandations pour l’enregistrement et la protection des vestiges archéologiques.” Manuscript on file, History and Archaeology, Quebec Regional Office, Canadian Parks Service, Québec.

Morrin College/Old Québec Jail

Morrin College/the old Québec jail is on rue Saint-Stanislas in the historic old quarter of Québec City. Built between 1808 and 1812 on the site of the Royale redoubt, the building, originally a jail, has an important place in Canadian political and architectural history. Its architect, François Baillairgé, combined the French and Palladian styles that characterized Quebec architecture at the beginning of the 19th century. The interior was redesigned by the architect Joseph Ferdinand Peachy in 1868, when the jail was closed, in order to renovate the building to accommodate an educational institution affiliated with McGill University. The Quebec Literary and Historical Society has made its home there since 1900.

The historical and architectural significance of Morrin College was acknowledged in 1981 by the Government of Quebec and the Historic Sites and Monuments Board of Canada. In 1989 Québec City acquired the building. Acting on the Board’s recommendation, the Minister of the federal Department of the Environment declared the structure eligible for the National Cost-Sharing Program. In 1991 the city submitted a conservation report to CPS and an agreement was signed in 1992.

Monique Élie has supervised the archaeological aspects of the conservation report in the regional working group on cost-sharing agreements. This year she participated in the group’s work in preparing the region’s recommendation on finalizing the agreement and determining the conditions for carrying the project through.

In view of the site’s potential, archaeological excavation behind the building was carried out by the city as part of the preparatory and complementary studies planned for in the management report. As a result of the excavation, substantial remains of the jail latrines and drainage system were cleared in addition to traces of the former occupation of the yard. The excavations were monitored through the first stage of the conservation work. In co-ordinating meetings with the city and the project consultant, the Department’s archaeologist and the other members of the working group kept abreast of progress on studies and construction work and ensured that all archaeological remains uncovered were appropriately protected.

In 1992, at Québec City’s request, the Archaeology team finally started a planned archaeological survey and a study of the cell block floors. The careful recording of the floors and graffiti was completed.

Reference

Les architectes Bouchard, Frigon, Lafond and Associés
1991
“Rapport de conservation, Ancienne prison de Québec/Morrin College.” Manuscript on file, Service d’urbanisme, Ville de Québec, Québec.

Davie Shipyard, Lévis

The Davie Shipyard, on the south shore of the St. Lawrence, steps from the Lévis ferry, is the oldest shipyard in Canada that still has the parts needed for the yard to be used for its original purpose. Indeed, much of the original establishment has been preserved, including one of the floating caissons and the haulage facilities, erected in 1832 using a technique patented in 1819 by the Scottish firm Morton. Their survival is evidence that 19th-century techniques were employed for over 150 years for naval construction and, especially, repair.

The shipyard owner’s residence, also built in 1832, still stands on the site, as do a few workshops. The way in which they are arranged is typical of an organizational structure in which the owner lived near his industrial premises. The offices were in the basement. The Davie family, one of whose members founded the firm now known as MIL Davie, lived in the house for over a century.

The Davie shipyard was declared to be historically and architecturally significant by the HSMBC in February 1990. In March 1991 the Board recommended that the Program examine the feasibility of helping to preserve the landmark through a cost-sharing agreement. In light of this recommendation, the City of Lévis, which would be the prime contractor, developed a feasibility study including a conservation report and a development concept.

Representatives of CPS and of the Quebec Ministère des Affaires culturelles are on hand to
advise the city when their help is needed. Monique Élie has participated in the work of the project monitoring committee by visiting the site, assessing bids for the feasibility study contract, attending progress meetings, reviewing preliminary drafts of the conservation report, and communicating comments to the consultants. An archaeological-potential study, taking the site’s industrial and domestic components into account, has been conducted as documentation for the conservation report. In all likelihood, the site contains many remains associated with the Canadian shipbuilding and repair industry and deserving of further study, protection, and conservation. The final version of the conservation report will be released in 1993.

Reference

Urbanex, Cinémanima et Groupe de recherche en histoire
n.d.

Sir Étienne-Paschal Taché House, Montmagny

The Taché house, in the heart of the old town of Montmagny, was acknowledged to have national historical and architectural significance and was declared eligible for the National Cost-Sharing Program in February 1990. Now the property of the town of Montmagny, the house was for over 30 years the principal residence of an important Canadian historical figure: the physician and statesman Sir Étienne-Paschal Taché. Built by Taché between 1822 and 1826, “the house is an excellent example of popular adaptation of a Quebec residential building to neoclassical and Regency influences of the first quarter of the 19th century and the Picturesque current in the 1850s–1880s.” When Taché bought the property, a house and farm buildings already stood on it.

Interested in obtaining CPS participation in restoring the building, the town of Montmagny contracted with a firm of consultants for a conservation report. This was supervised by the project monitoring committee, made up of CPS’s working group, of which Monique Élie is a member, and representatives of the town of Montmagny and the Ministère des Affaires culturelles (for the development phase). Along with the other members of the working group, the archaeologist examined and commented on the preliminary draft of the consultant’s conservation report.

Since the Cultural Resource Management Policy applies to cost-sharing agreements, any significant archaeological resources found on the properties concerned must be protected.

Reference

Denis St-Louis et Associés
n.d.
“Programme des ententes à frais partagés, Maison Sir Étienne-Paschal Taché, Rapport de conservation.” Manuscript in preparation, Ville de Montmagny, Montmagny.

Fort Lennox National Historic Site

Permit 92Q-010
Held by Gisèle Piédalue

The Casemates

The Fort Lennox casemates are long, earth-covered stone structures attached to the rampart at the north and west curtains. Six casemates, four of which were used for storage (1821–23) and two for officers’ kitchens (1826–27), are on each side of the north gate of the fort, while seven other casemates used for storage (1822) and four that served as kitchens (1825) were built in a row behind the barracks on the west front. One of these casemates was used for a bakery.

The Stabilization Work

The first phase in stabilizing the Fort Lennox casemates took place from August to November 1992. The backs of the arches were excavated and dampproofed, the front walls were rebuilt, liquid cement was pumped under pressure into the masonry remains, and a drainage system was hooked up to the main collector. Since the areas marked for excavation contained important archaeological resources, strict archaeological monitoring was essential in order to protect and collect all these resources. In addition, in support of the restoration project and to assure its quality, related research was conducted (on door and window hardware, for
example) in co-operation with the architect and historian assigned to the project.

Results

Some of the many items collected during the 1992 season illustrate the physical appearance and functional design of the casemates particularly clearly. This is especially true of two different types of arch backs at the north curtain, which may have been erected at different periods. The differences were confirmed by the discovery of the foundations of the first south staircase, at the end of the storage casemates. Another detail found on none of the historical drawings but which was discovered in 1992 is the extension of the foundations of the walls inside the main gate.

Interesting items were also found inside the casemates. When the masonry joints in some of the storage casemates were cleaned out, holes from floor joists were found. The floors in these casemates were not level with those in the kitchen casemates because of the special needs in the latter. The walls were cleaned by spraying and sand blasting. This revealed traces of the location of the vegetable gardens in the kitchen casemates. There was no roughcast plaster where the old braziers had stood by the interior walls, next to the chimneys.

Drainage work provided most of the data on occupation levels contemporary with or earlier than the casemates. For example, some of the remains of a wooden structure were unearthed on the present-day parade grounds, and a deposit of artifacts was uncovered at the south end of the west casemates. Both of these finds probably go back to the last quarter of the 18th century, when British troops first occupied the site.

Archaeological activities in connection with the casemate stabilization will be resumed in the spring of 1993. We hope at that time to complete observations on the development of the structure and the occupation of the site and to conduct supplementary studies on the material culture characteristic of the occupation of the Fort Lennox casemates.

A number of important objectives have been attained in the course of this lengthy yet indispensable field work: archaeological monitoring of the excavations has been completed, a detailed study of architectural and stratigraphic remains has been conducted, and measures have been taken to protect significant evidence of the physical changes in the site and of the ways in which the casemates were used during and after the military occupation period.
Quebec Region

Reference

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n.d.
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The Old Port of Montréal:
Pointe-à-Callière, Lachine Canal,
and Bonsecours Area

Since 1988 CPS, at the invitation of the Société du
Vieux-Port de Montréal, has been contributing to the
archaeological research being carried out by the
latter in the process of developing and interpreting
its properties. Under the terms of agreements signed
by the two organizations over the last five years,
CPS provides professional and technical direction of
the research programs and, occasionally, advice,
expertise, and special equipment (short-term loans).
In 1992 the agreement provided mainly for the
preparation of a publication on significant
archaeological excavation work done at Pointe-à-
Callière in 1990–91 to record, protect, and
understand the remains uncovered at the exit of the
Lachine Canal and in the Bonsecours area. Monique
Élie of CPS and Pauline Desjardins, chief
archaeologist, Société du Vieux-Port de Montréal,
co-operated on this project.

References

Desjardins, Pauline, and Geneviève Duguay
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1992
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en 1990–91: les écluses de Montréal." Manuscript
on file, Société du Vieux-Port de Montréal,
Montréal. 2 vols.

Bergeron, Mario
1992
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Bonsecours en 1990–91: dossier technique." Manuscript
on file, Société du Vieux-Port de Montréal, Montréal.

Fort Témiscamingue
National Historic Site

Permit 92Q-012
Held by Pierre Drouin

Archaeological research was carried out at Fort
Témiscamingue NHS in August and September
1992, resuming the excavation work done in 1971 by
the archaeologist Richard Cox. The 1992 research
was done in compliance with the 1990 master plan,
which called for an outdoor interpretation walk to
explain the remains, the reconstruction of the trace
of the old palisade, and the construction of a
reception, interpretation, and service centre. The
archaeological objectives were to discover the
boundaries of a portion of the known remains, find
the ground-plan of the fort, and carry out preventive
work before construction began on a new building.

The area earmarked for the future reception,
interpretation, and service centre had never seen any
archaeological research, so the site had to be
examined to ensure no archaeological remains were
there or, if necessary, to take adequate conservation
action.

Site History

The first trading post on Lake Témiscamingue was
built on an island at the mouth of the Montréal River
in the last quarter of the 17th century. The post was
destroyed in a 1688 Iroquois attack, and a new post
was not built until around 1720, probably at the
point later named The Narrows.

Historical records suggest that this post was
used until the end of the French period. Abandoned
by French traders at the time of the conquest, the
post was taken up again by the English in 1761. It
was a regular stop for Hudson’s Bay Company
factors, among others, in 1774 and 1794. That year,
the company factor, George Gladman, wrote a
description of the post, thereby providing formal
confirmation that the establishment was located right
where Fort Témiscamingue NHS now stands.
Historical sources are silent on the fort’s location
before that date. It may be assumed that the post was
located in the same spot as it had been at the end of
the French period.

In 1795, following an agreement with an
independent trader, Richard Dobie, the Northwest
Company took over the territory, intensifying
competition between the Northwest Company and
the HBC. The latter won the prize, however, when
the two companies were merged, in 1822. The post
at Témiscamingue was kept on until 1902, when the HBC finally abandoned it.

In 1888 a site plan was drawn up by a company inspector. For most of the period (1795–1902), the Témiscamingue trading post was the centre of activity for subsidiary posts in the region and traders based in Montréal. It was where goods intended for the different trading posts were brought for redistribution and where furs obtained by barter with the Indians were collected before being sent on to Montréal.

During the HBC’s administration of the post, missionaries came to Témiscamingue (1836). The Oblates established a mission on the site of the fort (around 1840), and the Saint-Claude mission was established on the far shore (1863).

After the HBC abandoned the post, the site continued to be inhabited. The last buildings from the trading post were torn down around 1960.

What was Known before Excavation

The first archaeological excavations were held in summer 1971 on the site of Fort Témiscamingue NHS. The archaeologist’s objectives at the time were to recover remains of buildings shown on the 1888 HBC map. The remains of 12 buildings were located: stores, the post chief’s and clerk’s residences, the icehouse and the base of the flagpole between these two houses, two residences for the staff, a garage and a canoe-making shop, a smithy, and a carpentry shop. A lime kiln from the same period and another building, probably more recent, were also brought to light.

Results of 1992 Activities

A number of the buildings revealed during the 1971 excavations were found, and some of the data needed for completing the revised development plan were supplied. Complementary research will be
Quebec Region

necessary in order to find the palisade line and a few buildings that have not yet been located.

Trading-Post Area

In the course of the archaeological work, ample new information was collected concerning several aspects of the site’s occupation. First, remains of many of the buildings are now more accurately documented. The 1971 excavations had only cleared away the top layer of the foundations; the 1992 excavations — although far from complete since the trenches dug were only 2 m long by 80 cm wide — allowed us to recognize the characteristic features of the foundations and other structural elements and to identify older, undiscovered layers. There were also indications that a post predating the HBC one had stood on the site. Only a portion of the palisades had been discovered before this time.

Numerous artifacts, mainly from the 19th century but also some from the English occupation during the 18th century, were found in the excavations. Trading objects, everyday goods of European origin used by the people who lived on the site, construction hardware, and similar objects are represented in the collection. These discoveries have encouraged us to review the site’s research potential, especially as regards the trading theme.

Conclusive evidence of a precontact Amerindian presence on the site has also been documented. Fragments of Woodland pottery and lithic objects have been discovered in different spots on the site. These objects include projectile tips, knives, scrapers and retouched flakes. Identification of at least one Laurentian Archaic projectile tip indicates that Amerindians have been in the area for 4000 years. This discovery is significant, as it marks the first time any trace of Amerindian presence has been identified there. It is also an important discovery in terms of improving our understanding of the occupation of the region because it confirms that the Ottawa River was the route to the north used during the Archaic Period. Previously, traces of northward penetration had been identified farther to the south (around Pembroke) and in Abitibi.

Reference

Drouin, Pierre
1987

Superintendent’s House, Carillon Canal

Permit 92Q-018
Held by Pierre Drouin

Reconstruction work on the Carillon Canal superintendent’s residence involved removal of the front veranda. Since this work altered the old supporting structures of the veranda and since remains of other construction might be buried underneath, archaeological monitoring was recommended and implemented. The work was done on 14 and 16 December 1992.

History of the House

The superintendent’s house is one of the few links with the military canal at Carillon, from the 1829–33 period. The residence is on the outskirts of the village of Carillon, near the entrance to the first canal.

The house was built in 1842 or 1843, at the time when the military canal authority decided to move the Grenville control centre to Carillon. The building served first as a residence for the lockmaster and offices for the Royal Engineers; then, in 1857, with the transfer of ownership to the government of the United Province of Canada, it was converted into a residence for the superintendent of the Carillon and Grenville canals, which is how it was used until 1967, when the last of the superintendents moved out. Subsequently the house and Carillon Canal were transferred from the Department of Transport to Parks Canada.

The superintendent’s house is a rectangular two-storey building with a gable roof. There is a stone chimney at the west end and a frame addition, at a slightly lower grade than the main building, at the northwest gable wall. A veranda extends the full front of the house.
Archaeological Observations

The archaeological findings revealed how the veranda was supported and remains associated with openings along the building façade.

Supporting Structure

The roof of the veranda that runs along the front of the house is supported by seven pillars. The pillar footings are set in the ground by a rudimentary method: two or three stones one on top of the other, on which the front wall-plate rests. The stones are different sizes and embedded about 40 cm into the ground. No mortar secures them, and they do not rest on bedrock. Although our excavations have not gone down to bedrock, we found a thick layer of earth under the stones that supported the veranda. However, there was little room between the surface of the ground and the base of the veranda wall-plate.

Architectural Remains

When the veranda was removed for the reconstruction work, it was possible to discern the building’s architectural characteristics. A stone from the front stoop was found under the veranda in front of the present entrance. Its thickness could not be measured. It is in one piece, lower than the threshold of the door, and when it was found it was covered with sandy earth, suggesting that the frame veranda was not part of the original house.

The remains of two basement window openings were identified in the front of the building. Although they are different sizes, local limestone was used for edging both of them. No mortar was observed, but they are still solid.

Conclusion

Thanks to the archaeological activities undertaken so that the veranda could be repaired, the method by which the veranda was originally supported prior to renovation was discovered, and heretofore unknown
architectural remains were found, facilitating their preservation.

Reference

Lafrenière, Normand, and Yvan Fortier
1989
“La maison du surintendant — canal de Carillon.”
89-007, manuscript on file, History and Archaeology,
Quebec Regional Office, Canadian Parks Service,
Québec.

The Wheelwright Shop Area,
Forges du Saint-Maurice
National Historic Site

Permit 92Q-003
Held by Pierre Drouin

The southern part of the Lavoir Creek area was a site of human activity from the time of the French regime, in the middle of the 18th century, until the mid-1980s, when a fire destroyed the Manoir des Forges. The manor dated back to the beginning of the 1900s and was originally the third house owned by the Marchand family. We know from documentary and iconographic sources that during the 19th century this part of the site was occupied by some dwellings and a wheelwright shop. There is further, albeit not very accurate, evidence from maps of the presence of buildings in this area from the beginnings of the industrial activity.

The research undertaken on this site in 1991 had identified four construction phases. The first one was marked by the presence during the French regime of a main building containing two living quarters; the second, by the construction of a wheelwright shop shortly after the main building was destroyed; the third, by the addition after 1897 of a dwelling adjoining the shop; and the fourth, by the demolition of the main building around 1863 and the conversion of the shop into a house with two living quarters. In light of these discoveries, recommendations were made to provide archaeological monitoring of the waterway diversion project and to continue excavating the study area.

Complementary excavation work in 1992 around the wheelwright shop has enriched our knowledge of the site and enhanced our understanding of some of the activities carried on there. The buildings’ north and west boundaries were identified through the discovery of well-preserved remains, and excavation of part of the cellar under the eastern part of the first
building erected on the site allowed us to recover a sizable collection of artifacts that bear witness to the different phases in the site's history.

The monitoring activity in the eastern portion of the construction area also proved fruitful, since the remains of a barn we had been looking for in 1991 were found. With that evidence it was possible to conclude that the barn had been at the southern boundary of the area affected by the construction. These remains consist of pillar bases 11 cm long. The structure's dimensions would have been about 19 m EW by 10 m NS.

Reference

Drouin, Pierre
n.d.

Study of Archaeological Potential, Pointe-au-Père Lighthouse National Historic Site

A study of the site’s archaeological potential was carried out during development planning for Pointe-au-Père Lighthouse NHS. The research was performed by archaeologist Richard Fiset for Cinémàmanima, under contract to the QRO Planning Section. Since the development project affects the entire navigation-aid station, the study extends beyond the boundaries of the national historic site.

Based on an examination of literature, maps, and a limited selection of old photos, Fiset retraced the evolution of the station, identified areas of occupation and major disturbances, and inventoried the site’s main resources. By means of visual field reconnaissance and by superimposing maps, these resources and some of the disturbances were located, and indications of their presence were found.

After briefly reviewing the site’s history, Fisnet discussed the archaeological potential of the period before the lighthouse station and concluded that it is mediocre, but the potential of the lighthouse station’s history is high, with the exception of the areas that have seen recent disruption (by the construction of pumping stations and an electric power plant, among other things). He concluded with general recommendations to protect the resources and suggested archaeological activities. The report is illustrated with reproductions of the photos and maps he used and includes a map of resources and archaeological potential as well as records of areas and resources.

While this is a cursory study, it is a good starting point for inventorying the site’s archaeological resources in compliance with the CPS CRM Policy.

Reference

Cinémàmanima
1992
“Concept de mise en valeur, lieu historique national du Phare-de-Pointe-au-Père.” Manuscript on file, Planning Section, Quebec Regional Office, Canadian Parks Service, Québec. Annex II.

The Musée de la Mer, Pointe-au-Père Lighthouse National Historic Site

Permit 92Q-016
Held by Richard Fiset,
Musée de la Mer, Pointe-au-Père

In October and November 1992, surveys and archaeological monitoring were done at Pointe-au-Père Lighthouse NHS in conjunction with the renovation of the lighthouse keeper’s and assistant’s houses. Today these buildings are used for interpretation by the Musée de la Mer under a mandate awarded by CPS. The archaeologist Richard Fiset is responsible for the museum’s operations.

The Site

This national historic site is located at Pointe-au-Père, near Rimouski. Occupied by a lighthouse station since 1859, the point may conceal remains of an earlier time, since river pilots had been using the lighthouse area since 1800. The national historic site does not cover the entirety of the navigation-aid station, merely the northern portion, where the concrete lighthouse (1909), the keeper’s house (1956), the assistant’s house (1909), the foghorn building (1903), and a garage (1956) are still standing.

The Objectives

Archaeological research was conducted in order to collect, protect, and understand the significant
archaeological data endangered by the excavation and demolition work necessitated by the renovations to the museum, and to make this information accessible to the public.

This obviously involved locating and identifying the archaeological resources, recording the relevant data, and ensuring that these resources were protected by means of recommendation and appropriate monitoring activities throughout the course of the renovations.

The Work

The renovations included the demolition and reconstruction of the annexes at the backs of the keeper’s and assistant’s houses, entailing deep excavation in order to renew the buildings’ foundations. Further excavation to sink posts for a “terrace” to link the two houses was expected to disturb the soil, which is archaeologically important because it may contain evidence of everyday 20th-century life at the station. The study of archaeological potential had also revealed that excavation to bury electrical cables might be necessary in the area where the gas generator shed had been located (around 1902). There was also the risk that other resources, undiscovered so far or omitted from the inventory, might lie in the path of a bulldozer moving through an area close to several buildings and structures used for navigation aids.

The archaeologist started by hand-digging test pits to find some of the potential cultural areas identified in the study of potential, chiefly where the generator had been and around the assistant keeper’s house. He then monitored the mechanical excavation that had been planned.

Results of Archaeological Activities

The surveys around the assistant keeper’s house revealed layers that were poor in artifacts. However, three other surveys south of the concrete lighthouse, where the generator shed was assumed to have stood, revealed remains of the foundations and metal pipes from the building, and a number of artifacts were collected there. On the archaeologist’s recommendation, the location of the trench planned for the electrical cables was moved to protect the remains.

A final survey was done around the proposed new trench, where a bump that could be seen on the surface was located, and large pieces of wood from some structure were brought to light.

Through archaeological monitoring, two wooden privies and one cement privy were found. A small refuse deposit, a portion of the wooden structure mentioned earlier, a small pile of bricks, fragments of slate pipe, and a small outbuilding next to the foghorn shed were also recorded.

In the light of these discoveries, 13 events were identified, and these may be divided into five phases. The data speak to: events that occurred before the buildings known from the 20th century were erected (phase 1), mainly the stabilization of the banks, of which the pieces of wood are evidence; the construction, probably in 1902, of the generator shed, where acetylene was first tested in St. Lawrence lighthouses (phase 2A); and the construction of the assistant keeper’s house in 1909 (phase 2B). In the following period, earth accumulated around the buildings while they were in use (phase 3), and this was the period when sanitary facilities and the little refuse pit were in use. Another phase is related to events surrounding the demolition of the generator shed, probably in the 1950s (phase 4), and the last phase is marked by events related to land use in the last couple of decades (phase 5).

Conclusion

The discoveries made during this salvage archaeology confirmed the site’s archaeological potential. A more detailed analysis of the findings and their correlation with data collected in the course of future research involving field visits, iconographic sources, and oral history will contribute significantly to our knowledge of the site.

Reference

Fiset, Richard 1992
“Intervention archéologique au lieu historique national du Phare-de-Pointe-au-Père (1992).” Manuscript on file, History and Archaeology, Quebec Regional Office, Canadian Parks Service, Québec.

Emergency and Small-Scale Archaeology

In connection with CPS’s CRM mandate, QRO archaeologists have been called upon on many occasions to assess the impact of various construction projects on archaeological resources in our
parks. Most of the time, these assessments — frequently carried out on emergency bases — have resulted in mitigating action ranging from monitoring excavations to conducting our own preliminary excavations in the most critical areas. The activities described below illustrate the kind of situations that may occur at any time of the year.

**Governors' Garden, Fortifications of Québec National Historic Site**

Permit 92Q-004  
Held by Robert Gauvin

Archaeological impact assessment of planting trees in one of the oldest gardens in Canada. Mitigating action: archaeological excavation of the planting site and the usual surveys.

Permit 92Q-006  
Held by Robert Gauvin

Archaeological impact assessment of the temporary installation of a concrete base for a commemorative plaque. Mitigating action: archaeological monitoring of excavation work, topographic and stratigraphic surveys.

**Saint-Louis Bastion, Fortifications of Québec National Historic Site**

Permit 92Q-005  
Held by Robert Gauvin

Archaeological impact assessment of the installation of a commemorative plaque and of a project to create a walkway. Mitigating action: archaeological monitoring of the excavation work and the usual surveys.

**Kent Gate, Fortifications of Québec National Historic Site**

Robert Gauvin

Assessment of impact on archaeological resources of the project to install an underground utility area. No field activities.

**Fort No. 1 at Pointe de Lévy National Historic Site**

Robert Gauvin

Archaeological impact assessment of the project to rebuild the plank floor in the powder magazine at the left caponier and excavation to find an old drainage system. Mitigating action: monitoring of excavation work, topographic surveys.

**Carpenter's Shop, Chambly Canal, Chambly**

Permit 92Q-017  
Held by Gisèle Piédalue

Archaeological impact assessment of reconstruction in the carpentry shop, built in 1883. Mitigating action: monitoring of excavation work, topographic surveys. Several items related to former uses of the building as well as other structural remains of undetermined origin have been discovered.

**Fort Chambly National Historic Site**

Permit 92Q-007  
Held by Gisèle Piédalue

Archaeological impact assessment of the installation of a commemorative plaque and of a project to create a walkway. Mitigating action: archaeological monitoring of the excavation work and the usual surveys.

**Fort Lennox National Historic Site**

Permit 92Q-010  
Held by Gisèle Piédalue

Archaeological impact assessment of construction to provide universal access from the wharf to the fort. Mitigating action: monitoring of excavation work, topographic survey.
Mitigating action: monitoring and surveys relating to the removal of four old gasoline tanks. Behind the officers’ quarters, parts of old drainage works and of an old brick-floored walkway were found, and in the counterscarp, pieces of wood from its supporting structure were uncovered.

Coteau-du-Lac National Historic Site

Gisèle Piédaluse

Archaeological impact assessment of construction to provide universal access and of moving several interpretation units. Mitigating action: archaeological monitoring of excavation work, topographic and stratigraphic surveys. Collection of significant data concerning stratification of areas still untouched by systematic excavation work.

Forges du Saint-Maurice National Historic Site

Permit 92Q-013

Held by Pierre Drouin

Assessment of the impact of torrential rain on an area of Lavoir Creek between the blast furnace and the mill. Monitoring of clean-up operations. The usual surveys.

The Fur Trade at Lachine National Historic Site

Permit 92Q-008

Held by Robert Gauvin

Archaeological impact assessment of the burial of electrical cables. Mitigating action: monitoring of excavation work, topographic and stratigraphic surveys.

Other Archaeological and Planning Activities

Study of Archaeological Potential, Fort Lennox National Historic Site

Gisèle Piédaluse completed the study of the archaeological potential of the site, a study started in 1991 as part of the preparation of the management plan for this national historic site in the Richelieu Valley:

Piédaluse, Gisèle
1992
“Île aux Noix: le potentiel archéologique, Lieu historique national du Fort-Lennox.” Manuscript on file, History and Archaeology, Quebec Regional Office, Canadian Parks Service, Québec.

Also, in April, she presented a paper on the archaeological potential of the fort to QRO staff.

Forges du Saint-Maurice National Historic Site Brochure Project

A brochure on the Forges du Saint-Maurice furnaces was begun, under Louise Bernard’s direction, in order to acquaint the public with the information available on one of the production sectors for which this industry used to be famous. This project was part of the Marketing Service’s publication plan at the request of CPS’s La Mauricie District.

Guide Training

QRO archaeologists took an active part in the annual guide training: they gave papers in several national historic sites to meet Visitor Services staff’s specific needs:

- Fort Chambly NHS (Gisèle Piédaluse): archaeological remains at Fort Chambly.
- Fort Lennox NHS (Gisèle Piédaluse): basic archaeology at Île aux Noix (a participatory exercise).
- Fortifications of Québec NHS (Monique Élie): archaeological research at Dufferin Terrace, Montmorency Park, and Governors’ Garden.
- Forges du Saint-Maurice NHS (Pierre Drouin): archaeological research at the Forges du Saint-Maurice.
- Louis S. St. Laurent NHS: A group of guides from Louis S. St. Laurent NHS visited Diane LeBrun, Collection Management Section, in her laboratory. They were shown the areas where artifacts are stored and processed, and they participated in a workshop on archaeological objects from acquisition through archiving.
Commemoration of Amerindian Presence in Quebec

At the request of the Planning Section, Pierre Drouin prepared a working paper on evaluating national historic sites and parks as potential sites for commemorating the Amerindian presence in Quebec in precontact times.

Fort Chambly National Historic Site

At the request of Visitor Services, archaeologist Gisèle Piédalue helped to revise explanatory panels intended for display in various areas of the site.

Grosse Île National Historic Site

In May Jacques Guimont presented a paper on the archaeological potential of Grosse Île to QRO staff.

Quebec Citadel

At the request of CPS’s Quebec District, Monique Élie examined a proposal from the Department of National Defence for a new access route to the Québec Citadel and made recommendations for limiting its impact. Construction has not yet begun.

Meeting of CPS Archaeological and Material Culture Researchers

QRO staff participated in the different workshops held during the biannual meeting in Cornwall in February. Papers were given on several topics, including technical tools used in cultural resource management (Gisèle Piédalue), “public” archaeology (Monique Élie), and research at military sites (Pierre Drouin and Gisèle Piédalue).

Fort Lennox National Historic Site

Taking a multidisciplinary approach, Gisèle Piédalue and Louise Bernard participated in drafting the development options and concept, and in establishing an appropriate research program.

Saguenay Marine Park

Monique Élie examined a proposal for History and Archaeology to participate in the study of the underwater archaeology potential being conducted by the Program Headquarters Marine Archaeology Section. She also participated in some progress meetings.

Pointe-au-Père Lighthouse National Historic Site

Monique Élie participated in the working group on development planning.

Archaeological Collection Management

The QRO archaeological collection contains over twenty million objects and/or fragments. In January 1992, management responsibility for this collection was transferred from the History and Archaeology Section to the Collection Management Section of the QRO Heritage Resources Protection Branch. This was done in order to benefit from an integrated approach to collections management and to allow more flexible use of available storage facilities.

Management of the Archaeological Collection

Highlights of the collection management activities include:

- writing a directory of archaeological resources in national parks and historic sites in Quebec Region: completed.
- preparing a record of QRO’s archaeological collection: ongoing.
- updating management files on objects in the reference collection: ongoing.
- inventorying the contents of 877 boxes of objects from the Dufferin Terrace (Fortifications of Québec NHS) collection: completed.
- inventorying contents of 436 boxes of various material objects from the Artillery Park NHS collection 18G1 to 18G33: ongoing.
- fitting up new controlled-atmosphere storage room for organic material objects and transferring these objects: ongoing.
- welcomed the installation of thermostats and humidity-monitoring equipment for the reference collection and for metal and miscellaneous materials.
• in co-operation with the QRO Historic Resource Conservation Section, examining each object in the reference collection and establishing restoration priorities; covering display drawers with an absorbent, inert material; separating unrestored objects and shipping 187 identified objects for restoration: ongoing.

**Assistance for Archaeologists, Researchers, and Conservators**

- cataloguing, locating, and negotiating analytical or restoration work:
  - analysis: 162 requests sent
    175 analyses returned
  - restoration: 182 sent
    132 returned
- surveying and recording data in the field for archaeological research projects conducted at Grosse Île NHS and the Garrison Club.
- inventorying the precontact collection from La Mauricie National Park on loan to the Trois-Rivières museum of archaeology.
- preparing shoes and buckles from the archaeological collection for study by Stephen Davis, material culture researcher, PHQ Archaeological Services.
- preparing objects and participation in setting up an exhibit at the QRO main office on CPS publications.
- preparing archaeological objects and helping set up an exhibit on the crafts of long ago at Grande Maison, Forges du Saint-Maurice NHS.
- preparing archaeological objects for reference or comparison with historical objects.
- documenting archaeological objects for conservators.
- preparing and monitoring objects for the interpretation centre at the Esplanade powder magazine, Fortifications of Québec NHS.

**Outreach Projects and Professional Outside Contacts**

**The Green Plan in Saint-Romuald: At the Crossroads of Nature and History**

This project exploited a cultural theme centring on archaeology and history and also a natural theme focussing on the clean-up of the banks of the St. Lawrence. An Environment Week effort, this project brought together several government departments and community partners. The project was a resounding success.

The cultural theme included an exhibit, “De la survie à la sauvetage,” in the Saint-Romuald town library. Precontact archaeological objects found in excavations in Saint-Romuald were on view. The emphasis was on popular appeal; this was evident both in the messages on the display panels and in the way in which objects were exhibited. An archaeologist was on hand to tell visitors about the nature of the objects and the way they were discovered. There was also a workshop on recycling through the centuries: participants were shown how to recycle everyday things by using techniques employed for three centuries in Quebec.

A guided display of archaeological objects was very popular. Using examples from the archaeological collection, Diane LeBrun explained the many and varied things we can learn about bygone days from what our forefathers threw away.

A campaign to clean up the banks of the St. Lawrence rounded out this busy week of activities on the theme of the environment yesterday, today, and tomorrow. The site of this huge, open-air workshop was the riverbank in Saint-Romuald. Everybody got involved — the town, the Ministère des Affaires culturelles, the Canadian Coast Guard (Transport Canada), Forestry Canada, the Quebec ministries of forestry and the environment, the South Shore Saturn-Saab-Isuzu dealership, the Caisse populaire, and large companies with stakes in environmental issues, such as COPIM Saint-Laurent, Esso, Petro-Canada, Shell, Ultramar Canada Inc., and Sani-Jet Inc. Thanks to excellent organization, a large quantity of objects, rubbish, and refuse was picked up, depolluting a shore that used to be famous for its beautiful sand beaches and all the while educating the local population about protecting their resources. Promoted and organized by Louise Bernard, assistant chief, Material Culture Section, this event was one of the region’s high points for 1992.
Québec City: Projet Archibus

At the city’s request, CPS contributed, through information exchange and loans of artifacts and iconographic documents, to the creation of an archaeological tour and exhibit on the theme of urban archaeology in Québec (“Québec, cité d’archéologie”) at the Centre d’interprétation de la vie urbaine de Québec.

Loans of Archaeological Objects for Exhibits

Archaeological objects from the CPS collection were displayed in three exhibits put on by cultural organizations:

- “L’hiver et les jeux d’autrefois,” Bibliothèque de Québec, Saint-Jean-Baptiste branch.

Archaeological Collection: Opinions and Consultation

Many researchers in archaeology and material culture, both freelancers and employees of public or private institutions, asked us for our assistance concerning objects from the collection and related documents.

Canadian Environment Week

As part of Environment Week, Diane LeBrun, Collection Management Section, participated in several projects aimed at educating the public about their cultural and natural heritage:

- developed a precontact collection and set up an exhibit on that subject; participated in theme development and wrote material with popular appeal;
- facilitated an educational workshop for the public on environmental protection issues including the protection of the natural and archaeological environment and protection of archaeological objects;
- demonstrated archaeological objects in harmony with nature (reuse and recycle).

Edu-kit

Diane LeBrun, in co-operation with Lorraine Lepage of the QRO Historic Resource Protection Section, prepared a teaching kit, a portable mini-museum, for park visitors.

International Council of Museums

Archaeologists, material culture researchers, and collection managers represented CPS in this important world convention, held in Québec City in September. A group of council members visited an excavation and were treated to a workshop on the management, processing, utilization, and promotion of CPS archaeological collections.

Archaeological Collection: Open to the Public

Under Diane LeBrun’s direction, the Collection Management staff carried out the following activities:
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- received a group of Université de Montréal graduate students in architecture, took them on a tour, and led a workshop for them on the role of archaeological objects in restoring old buildings. They examined collections of architectural hardware and building materials; participated in a discussion of the archaeologist’s role in restoring old buildings, the importance of scientific analysis on certain materials, the interest of archaeological objects, and the preservation of remains and structural elements.

- received a group of Université du Québec à Trois-Rivières undergraduates attend an introductory course on the postcontact archaeology of Quebec; took them on a tour of our facilities and led a workshop on archaeological objects, from acquisition to management.

- received a group of nuns from the Congrégation du Bon-Pasteur interested in history and ancient objects; took them on a tour of our facilities and led a workshop on archaeological objects and what they tell us about life in the past.

- received two groups of École primaire Montagnac schoolchildren (from Grades 2 and 3) as part of their human sciences studies on the past and the present; led a workshop in which archaeological objects were compared with objects from the present; told the children about environmental protection by comparing the quantity of things used in the past and now, the materials used yesterday and today, and the reuse and recycling of products today and yesterday; raised the children’s awareness of our natural and cultural heritage.

- CPS archaeologists met with many university and college students who were researching post-contact archaeology projects: communicated information about the archaeological research done on our sites, explained our work methods, and provided opinions on material culture objects.

- Monique Élie prepared comments on a new course in history of material culture at the Université du Québec à Trois-Rivières.

Papers Given

Beaudet, Pierre, and Monique Élie

“Is Archaeology Destructive or are Archaeologists Self-destructive?” Given at the annual meeting of the Council for Northeast Historical Archaeology, Glens Falls, N.Y., October 1992.

Piédalue, Gisèle


“Définir la ‘période de contact’.” Given at the Centre d’études sur la langue, les arts et les traditions populaires, Université Laval, seminar “Identités, transferts culturels et métissages,” Québec City, February 1992.


Other Activities

In her capacity as a member of the CNEHA board of directors, Monique Élie acted as membership secretary for Quebec and as correspondent for the council’s Newsletter.

Pierre Drouin participated in the Comité des avis de la Commission des biens culturels du Québec and participated in work on the exhibit “Découvrir l’archéologie: la rivière Beauport,” shown at the Bélanger-Girardin house in Beauport. As president of the Société d’art et d’histoire de la Ville de Beauport, Pierre headed an archaeological research project at Montmorency manor in co-operation with the society and provincial outdoor recreational organizations.

Pierre Beaudet was re-elected Chair of CNEHA, and until October 1992 he co-ordinated the agreement for the promotion of Québec City cultural assets. His duties were:

- to co-ordinate the implementation of programs and projects under the agreement between the city and the Ministère des Affaires culturelles;

- to co-ordinate steering and management committees struck under the terms of the agreement; and

- to assist in drafting and negotiating new agreements involving the city, the Ministère des Affaires culturelles, or other institutions (e.g., Université Laval re restoration architecture, ethnology, and archaeology; CPS re cost-sharing agreements; Museum of Civilization re research and development concerning Place Royale).
Outside Publications

Beaudet, Pierre
1992

Drouin, Pierre
1992

Drouin, Pierre, and Lyne Bernier-Morel
1992
"Fort-Témiscamingue: quand les vestiges et la nature nous parlent d’histoire." Continuité, No. 54 (Summer), pp. 7–9. Québec.

LeBrun, Diane
1992

Miville-Deschênes, François
1992
"L’objet occulté." Mémoires vives, No. 3 (Fall), pp. 19–25. Montréal.

Piédalue, Gisèle, and Jerome Cybulski
1992
"Les sépultures des fortifications de Québec — Une histoire à suivre." Mémoires vives, No. 3 (Fall), pp. 4–12. Montréal.

Other

We communicated condensed versions of archaeological research findings through reports in information bulletins published by the Council for Northeast Historical Archaeology and the Association des archéologues du Québec.

Compiled by
Pierre Beaudet

Reports and publications produced through the Publications Section, Archaeological Services Branch, Program Headquarters, Ottawa, are listed in the “Reports and Publications” chapter.
35 Sites of activities in Atlantic Region.
Drawing by J. Gasperac
Atlantic Region Archaeology Section

Overview

Eight permits were issued for field work in Atlantic Region in 1992. At Port au Choix the final season of work revealed exciting new information about Dorset house-building techniques. At Louisbourg several sites, including a peculiar waterlogged, stone-walled enclosure, along the rapidly eroding north shore of the harbour were investigated. On Georges Island, in Halifax Harbour, work continued on structures associated with the submarine mining complex. On Grassy Island, near Canso, a coffin being washed out of a steep, eroding bank was excavated. At Fort Anne, further work on the 17th-century history of the site continued to reveal more ambiguous traces of this early period. In Kejimkujik National Park a small native-history campsite was investigated and the petroglyph-moulding project continued. Finally, in Terra Nova NP, salvage excavation of the threatened Bank Site produced, among other things, an unusual collection of Recent Indian tools of Ramah chert.

Preparation continued on several reports on the excavation of Atlantic Region sites. These reports included L’Anse aux Meadows (Birgitta Wallace and Charles Lindsay); North Shore, Louisbourg (Rob Ferguson); Signal Hill Survey (Rob Ferguson); and Halifax Defence Complex Survey (Earl Luffman). Interim reports on the 1991 and 1992 excavations at Port au Choix (Priscilla Renouf) were received, as was a contract report on the 1991 test excavation project at the St. George’s Hospital/barracks site on Signal Hill (Bill Gilbert). Also, a manual concentrating on the Norse buildings was prepared for the guides at L’Anse aux Meadows. The manual depicts the floor plans of the buildings and explains the functions of the various rooms and the associated artifacts.

In the area of collection management, work continued on the conservation backlog project at Louisbourg, while a major project to upgrade the storage conditions of the Atlantic Region archaeology collection was begun.

The Archaeology Section was also involved in a broad range of outreach and co-operative projects. Staff have been involved in developing edu-kits, presenting public lectures, acting as consultants for exhibits mounted by other agencies, and serving on the boards and committees of various professional and avocational bodies. All these activities, many of them undertaken by staff outside the formal scope of their duties and on their own time, were aimed at building public understanding and support for the environmental heritage protection mandate of the Canadian Parks Service.

Port au Choix National Historic Site

Permit 92-A01
Held by Priscilla Renouf,
Memorial University of Newfoundland, St. John’s

1992 was the last field season of the 1990–92 program of research at Port au Choix NHS. This was the second three-year program at the site, the first running from 1984 to 1986. This year, work was considerably scaled down, with excavations at only one Groswater Paleo-Eskimo site (Phillips Garden West) and one Dorset Paleo-Eskimo site (Phillips Garden). Work continued at a Recent Indian site (Spence) outside the national historic site; this work was funded by the Historic Resources Division, Newfoundland and Labrador Department of Provincial and Municipal Affairs, and by the Social Sciences and Humanities Research Council of Canada.

At Phillips Garden West the lowermost part of the hillside midden was excavated, producing large amounts of sea-mammal bone along with hundreds of pieces of cut bone and lesser amounts of lithics. Also excavated was a small activity area at the base of the hill, which appeared to be a lookout station for observing the movements of sea mammals; it was no doubt associated with the main area of occupation on top of the terrace. Identification of the faunal material will test the working assumption that the site was a short-term summer encampment.

The most exciting find of the summer came from Phillips Garden, where excavation of a well-defined house structure produced the first ever Dorset post holes. The dwelling feature was unlike the other houses excavated at Phillips Garden and was much more like Paleo-Eskimo house features found...
Atlantic Region

36 Baleen whale rib in post hole of Dorset house at Phillips Garden, Port au Choix NHS. All stones from "wall" areas have been removed; main dwelling depression is clearly visible.
Photo by P. Renouf

elsewhere in the Canadian arctic and subarctic. Whereas each of the previously excavated Phillips Garden houses appeared to have an interior rear sitting platform and a north-south line of pits bisecting the interior space, this house had a 1-m-wide axial pavement through its centre, thus conforming more to the Paleo-Eskimo "type house," which is characterized by a central axial pavement of this sort. The Phillips Garden house was 6 m in diameter and was dug down approximately 25 cm into the limestone rock and sand beach. The axial pavement consisted of limestone slabs and was approximately 75–100 cm wide and cut east-west through the house. This would have been where cooking and other activities took place and would have been the focus of activities. The house was outlined by a 1-m-wide built-up area of limestone rocks.

Although under normal circumstances excavation would usually end at this point, with the house exposed to sterile level and then backfilled, the excavators began to dismantle it with the idea of future exhibition in mind. Each of the more than 500 rocks was numbered, keyed into a map, and then set aside for storage. Unexpectedly, once the rocks were removed a series of 12 large and deep post holes was exposed. In order to set the posts, large pits had been dug into the sand below the limestone rock beach, the posts had been placed in the holes and shored up with rocks, and then sand had been used to complete the filling of the holes. When the posts were eventually removed following abandonment of the house, the post holes filled up with sand, holding the shoring rocks in place.

The posts lay outside the area of built-up limestone slabs that circled the house and which, under normal circumstances, would have been interpreted as marking the location of the wall. These stones must now be seen as an internal part of the house, and presumably served as sleeping or sitting platforms.

One initially puzzling aspect of the post holes was the slant of many of them, which was such that a straight post would point away from, rather than towards, the house centre. However, when ribs from a large baleen whale were set into these holes, they made perfect sense. These curved pieces slanted away from the house at their bases, but curved back over the house nearer their mid-points. This indicates that the superstructure of this Dorset house, and perhaps others at the site, was domed. The height of the framework provided just enough room to stand up, but not so much that it would have been hard to heat. Since whale ribs last a long time and would have been scarce, it is likely that they
would have been removed, to be reused elsewhere, when the house was abandoned.

**Fortress of Louisbourg National Historic Site**

Permits 92-A02, 92-A06
Held by Charles Burke and David Christianson

**The North Shore Threatened Sites Project**

The North Shore Threatened Sites Project is a three-year program designed to salvage 18th-century remains being exposed by erosion on the North Shore of Louisbourg Harbour (site 59L). Some of the work reported here was carried out in 1991, but most of it took place in 1992.

59L7
Several features were assessed at this site. No evidence of 18th-century fish flakes was recovered, and the linear earth ridges on the surface were interpreted as the remains of 19th- and 20th-century plowing. There were undisturbed 18th-century resources in a narrow strip along the eroding embankment, and several new features were identified. These include a linear stone ridge (59L7C), a semicircular fieldstone feature (59L7D), and a semicircular depression (59L7B). Further testing is required to establish the nature of these features.

**Garden Island**

Archaeological tests on Garden Island (59L9) were undertaken to establish the nature and extent of an 18th-century deposit in the erosion face. The deposit is probably associated with an eroded domestic structure that appears on several 18th-century plans. The test identified 18th-century grave (beach) surfaces for drying cod, as well as a roadbed. In situ 18th-century grave surfaces at the eastern and western extremities of the island are eroding, and landward sections have been disturbed by 20th-century land use. The eastern section of the roadbed has already been destroyed, and the remaining portions may be lost to erosion within the next decade.

**The Enclosure Site**

A testing program was conducted within and around a large stone enclosure (encompassing operations 59L66, 59L88, and 59L89). This enclosure, covering approximately 900 square m, surrounds a water-saturated fen-land peat area. Substantial quantities of 18th-century artifacts recovered from a buried organic layer running beneath the enclosure walls and from a thin overlying 18th-century peat layer date construction of the feature to this period.

Based on field observations, it appears that the site was equally wet in the 18th century, when drainage efforts provided short-term and probably unsatisfactory results. Three separate and widespread occupation surfaces were identified, including a major fill/occupation layer that replaced the original peat surface that the site occupants had largely removed.

The major research problem this site poses is the issue of marginal land use and modification. It appears from historical documents that the site had a low monetary value, compared to nearby drier areas, yet extensive efforts were made to prepare the site for use. These efforts included the construction of several drains and a large stone feature that may have served a drainage function as well.

**Royal Battery Cove**

Limited small unit testing was conducted at another eroding site (59L86), in a cove east of the Royal Battery. Eighteenth-century cultural materials were concentrated in the area to the east of a small stream that bisects the site. Evidence of the original 18th-century occupation surface was widespread. In excavation units east of the stream a coarse sand/gravel layer had been placed over this original organic surface, perhaps in order to prepare a clean and level surface. Above this layer a second 18th-century organic surface was present. This stratum was followed by another coarse sand and gravel fill, also with 18th-century artifacts. Finally a post-occupation sod capped the earlier deposits. Some historical maps illustrate the cove as an unloading point for materials used at the Royal Battery lime kiln. The gravel surfaces noted during excavation may reflect surfaces prepared for this role.

**Demesi Site**

The Demesi site (59L87) is named after its first occupant, Jacques Ange Lenormant Demesi, who served as Louisbourg's first commissaire ordonnateur in 1719. There were three subsequent owners during the French period (to 1758). The property
was subdivided into smaller lots by the British following their capture of Louisbourg that year. Recent avocational interest in the site has focussed on speculation about possible pre-18th-century use.

The erosional face at this site was found to be heavily disturbed, reflecting deposition by silting from the nearby stream and redeposition of eroded materials. The small knoll behind the erosional face appears to have been formed naturally. Excavation on the knoll revealed intact 18th-century deposits including an exterior hearth. There has been some slumpage of soils and redeposition of materials further downslope. There was no evidence of pre-18th-century use of the site.

Environmental Assessment and Review Process Screenings
Archaeology staff at Louisbourg were involved in 52 EARP screenings in 1992. Seventeen of these required field monitoring, surveillance, or actual excavation. Working under David Christianson’s direction, Kris Tanner monitored trench excavations for the replacement of nine period fences in town blocks 2, 16, and 17. Although artifacts were recovered in most units, the trenches were located in previously excavated or disturbed areas. The activity had little impact on in situ resources.

Reports
Charles Burke completed the Archaeological Resource Description and Analysis document for Louisbourg. The four-volume report includes 1000 pages of archaeological resource description. In addition to the remains and features located in the Louisbourg townsite, the ARDA identifies over 850 archaeological sites throughout the park and a number of submerged cultural resources. It is expected that a more comprehensive archaeological survey report will be presented in another format.

Don Harris, former senior archaeologist at Louisbourg, began a major revision of his 1980 report that summarized almost 20 years of excavation of the Louisbourg townsite. In its original form the report included many cross-tabulated tables correlating provenience units (“lots”) with behavioural units (“events”). Unfortunately, these tables proved very cumbersome to use. One of the primary goals of the current revision, therefore, was to reformat the information on these tables into an electronic database that could be included on diskette with the hard copy of the report.

Georges Island, Halifax Defence Complex National Historic Site
Permit 92-A03
Held by Earl Luffman

Excavations on Georges Island in 1992 focussed on structures and features associated with the submarine mining complex that the British military established on the island in the 1870s to manufacture and deploy underwater mines to protect Halifax’s inner harbour. Specifically, excavations were conducted on the sites of the married-quarters barrack, the officers’ privy, the married officer’s privy, and a structure used for housing cable for underwater mines.

The last of these structures, now roofless, consisted of two concrete tank structures that originally contained bulk cable. The cable was cut to specific lengths based on the depth of water in which a particular mine was to be laid. The excavation focussed on assessing the extent and condition of drainage systems around the structure, so that appropriate stabilization measures could be effected. Excavation revealed that the structure had no footing drainage, which accounts for the frost heaving of the foundations. There were, however, two valve-controlled pipes that drained the interiors of the concrete cable tanks. The cable tanks may have been filled with water to reduce the heat cable spools generated as they were unwound.

The married-quarters barrack was built in the 1870s to house personnel engaged in the submarine mining operation. The wooden two-storey structure had accommodations for 30 men (housed in two common rooms) and two sergeants and their families (each in a private room). An ablutions room was located on each floor.

The excavations verified the barrack’s dimensions (15.4 m x 9.1 m) and corner footings, uncovered the drain associated with the ablutions room, defined the area of the sergeants’ quarters, and exposed the base of the four-flue chimney. Additionally, evidence was found that suggests that electrical power was added to the building after its initial construction. The investigations also raised questions about the workmanship of the structure’s footing, but left unanswered the question of when the building was demolished.

The barrack footing was constructed of concrete and finished to grade with brick. The concrete finish ranges from poor (aggregate poorly mixed, with air pockets) to good (aggregate well mixed, no air pockets). The depth of the footing below grade ranges from 0.60 m to over 1.0 m. The latter depth
would have still been too shallow to prevent frost damage to the foundation.

The discovery of a crochet needle in an area designated as sergeants’ quarters may indicate that one of the sergeants was married. In fact, a photograph shows a woman sitting on the barrack veranda with a uniformed sergeant standing off to one side, a small dog nestled at his feet. This crochet needle is the first archaeological indication of women’s presence at any of the British forts in the Halifax area.

The privy excavations were less productive. The married officer’s privy was not located. The area excavated contained instead a privy that was probably constructed and used during stabilization work on the island in the 1950s.

Whether the officers’ privy vaults were found is also uncertain. The excavation units, which were placed according to documentary evidence that indicated a privy structure about 2–3 m from the officers’ quarters, uncovered a privy vault that had two walls completely demolished. Time constraints prevented us from fully excavating this privy vault, but we attempted to locate the adjacent second privy vault. This attempt was thwarted by the discovery of a structural footing that we believe was built over the second privy vault. No documentary evidence has yet been found concerning these additions or deletions to either the officers’ quarters or the officers’ privy.

**Grassy Island National Historic Site**

Permit 92-A04
Held by Robert Ferguson

In May 1992, information was received that a coffin had been exposed by erosion on the south side of Grassy Island. Canso informants had often told of similar discoveries being made before CPS acquired the island in 1978. Whole or broken coffins, some containing only lengths of hair or pieces of tooth enamel, had been found. The first archaeological work there, by Elizabeth Snow in 1975, had actually been in response to such a story. Her investigation failed to find any burials, neither did an extensive auger survey in 1979. It seemed probable, therefore, that the entire cemetery had already been lost to the extensive erosion that afflicts the steep bluff that borders the island’s south side.

The most recent report was investigated on 2 June 1992. The unmarked cemetery is located at the southeast end of the island, at the opposite end from the settlement that had prospered on the island between 1720 and 1744. Informant Harry Dollard had recovered part of the base plank from the beach below. The remaining coffin fragments could be seen projecting from the unconsolidated glacial till that here formed a loose, steep, 20-m-high face.

The burial was fairly shallow, about 1 m below surface at its base. The top and sides of the coffin had collapsed onto the base and were badly fragmented. Three iron nails were found in one corner. The base plank was 2.4 cm (1 in.) thick. When combined with Mr. Dollard’s piece, the two pieces produced a coffin 157 cm (5 ft. 2 in.) long, with a traditional hexagonal shape. At the shoulder the board was 39 cm (1 ft. 3 in.) wide. The only contents were two plain brass buttons, one on either side of the coffin, at about the waist, and a handful of wood shavings preserved by the copper salts of the buttons. Both the shavings and the box itself were of Eastern white pine (*Pinus strobus*). The shavings are probably evidence of a coffinmaker’s superstition that debris from coffin construction...
could cause death. Consequently all wood scraps would be placed in the finished coffins.

The two brass buttons may indicate a male burial, buttons being more common on men’s clothing of the period. The short stature, below male norms for the period, suggests an adolescent. The young man would thus appear to have been buried in clothing, with his hands at his side. The burial lay east/west, with his head at the west end.

Lenses of charcoal containing tiny fragments of burnt bone were recovered from the fill over the coffin. Anne Rick of the Zooarchaeological Analysis Programme, Canadian Museum of Nature, examined the minute remains and was able to identify several as fish teeth. These and two white glass seed beads found among the bones hint at a romantic lunch (a barbecue?) among the graves, a popular pastime in the 18th century. The small picnic hearth would have been subsequently scattered and lost in the fill over the burial.

The coffin’s discovery has confirmed the location of the cemetery, which is only alluded to in historical documents. The contrast between loose fill and compact glacial clay suggests that a conductivity survey could be successful in locating other graves. Salvage requirements could then be more dependably evaluated. This will be attempted in the course of excavations planned for 1993.

Fort Anne National Historic Site

 Permit 92-A05
 Held by Birgitta Wallace

1992 was the fourth and last field season focussing on the earliest history of the Fort Anne site. The excavations, which took place through July and August, were directed by Rion Microys, with a crew of 11–13 supplied on contract by the Historic Restoration Society of Annapolis County. Birgitta Wallace is project director.

The excavations revealed further evidence of the many fortifications that have been erected since 1629 at the southwest periphery of the current fort on an escarpment overlooking the confluence of the Allain and Annapolis rivers. The many construction/destruction phases closely spaced in time have made the archaeological evidence confusing. New palisade lines were discovered in 1992, but they cannot yet be dated. A slate wall and a burnt floor are probably from the trading post established by Charles de Menou, sieur d’Aulnay. According to the historical documentation the post was destroyed in 1658.

Predating this level is a palisade line that may be from Sir William Alexander’s fort of 1629–32.

Firm conclusions must await detailed analyses, which have only just begun. During the coming year Birgitta Wallace will be working on the final report on the site.

In addition to the regular excavation program and under the same permit and contract, minor test excavations were carried out along the edge of a footpath encircling Fort Anne. This path is to be widened to make it accessible for visitors in wheelchairs. No archaeological resources were encountered. Field director for these excavations was Rebecca Dunham, assisted by Sara Beanlands.

The installation of a new oil tank for the officers’ quarters and a sewer line for the administration building prompted archaeological monitoring, which was carried out by contract crewmember Nicholas Lindsay. The oil tank was placed close to the first gate of the British fort and the 1797 officers’ quarters. This area was presumed thoroughly disturbed during the restoration of the building in 1934–35. The monitoring confirmed that this was the case and that no in situ archaeological resources remain. The sewer line extends from the administration building to the street. Test excavations in 1990 and 1991 had indicated considerable modern disturbance in this area, and this was further corroborated by the monitoring.

Shoreline erosion has been a problem at Fort Anne since the late 17th century. In 1990, at the request of Archaeology staff, a base line for monitoring its progression was set up by volunteers from the College of Geographic Sciences at Lawrencetown, N.S., under the direction of Philip Hore, senior instructor at the college. By spring 1992 it was clear that the erosion was escalating at an alarming speed, undermining the area of the first occupation. The CPS area superintendent, Lillian Stewart, has initiated a program to identify the precise source of the erosion and to prepare appropriate countermeasures.

Fort Anne Archaeology Exhibit

Atlantic Region archaeology and material culture research staff prepared a small exhibit for display on the history of the Fort Anne site and the purpose and methodology of the archaeological dig. The exhibit was placed in the officers’ quarters.
Port Royal National Historic Site

Permit 92-A05
Held by Birgitta Wallace

Archaeological testing was carried out at the reconstructed 1605 trading post of Jean de Biencourt, sieur de Poutrincourt, at Port Royal, made famous through the writings of Samuel Champlain and Marc Lescarbot. Located eight kilometres downriver from Fort Anne, this post was the precursor of the later French post at Fort Anne. The reconstruction, completed in 1939 as a co-operative project by the Annapolis Royal Historical Association and the Government of Canada, was based on historical documentation rather than on physical evidence. An excavation undertaken in 1938 yielded data that, at the time, were believed to authenticate the location of the proposed reconstruction. A re-examination of the material has shown it to be of 19th-century date. However, the original post was probably in this general vicinity, so all park activities involving ground disturbance must be closely monitored. Plans for wheelchair access ramps along a path adjacent to the reconstruction and to a nearby picnic area prompted archaeological testing of these areas. A 19th-century barn foundation was uncovered in the picnic area. Close to the reconstruction was further evidence of 19th-century material. Some of the 1938 archaeological trenches were encountered in areas not corresponding to their location on the map prepared at that time. No signs of the original trading post were found. This excavation was directed by Rebecca Dunham, assisted by Sara Beanlands.

Kejimkujik National Park

Permit 92-A07
Held by Robert Ferguson

Two projects were undertaken in September 1992 in this park. The first involved clearance of a small area within a postcontact Mi’kmag cemetery. The other was an investigation of a previously recorded site that is experiencing erosion.

Merrymakedge Cemetery

A small cemetery was used by Mi’kmag families living on farm reserves around Kejimkujik Lake in the mid-19th century. The cemetery originally contained perhaps two dozen headstones. All but one have been removed. The remaining slate stone is inscribed “1847 Maltai,” with a small cross-hatched cross below, and resembles petroglyphs on nearby
slate outcrops. The inscription may identify a young victim of an epidemic that killed a number of children around the lake that year.

At the request of Chief Frank Meuse, Bear River Reserve, a small area in the cemetery was opened to determine that it contained no burials. A 1-square-m unit was excavated. The soil showed considerable surface disturbance from tree-throws, and the upper edge of a grave shaft that lay outside the excavated area may have been intersected at one edge of the pit; however, the pit itself did not contain any burials.

Frozen Ocean Lake I

A potentially interesting native-history site has been identified at the end of a portage at the mouth of Still Brook, where it empties into Frozen Ocean Lake. A wilderness tent site is located here, and canoeists cross the site to return to the water.

The site was first identified in 1973 by a crew under H. Brad Myers. Testing was limited, and no diagnostic material was recovered. Subsequently, three projectile points and a trade axe have been found by visitors and park staff on the shore where the bank is most heavily trampled. The points suggest a Late Archaic component.

In 1992 a base line was established on the site and three 1-square-m test pits were opened to determine its inland extent and to test the portage area and the front of the site near the shore. The shore area produced only a few quartz finishing flakes. Both other pits revealed hearth features filled with heat-altered stone. An uncorrected carbon-14 date of 1650±70 B.P. (Beta 57747) was obtained from one hearth. Artifacts recovered from these pits, including agate flakes and a scraper, were consistent with the Woodland Period date.

Deposits appear largely undisturbed by recent park use. Nevertheless, the campsite will be relocated away from the archaeological site. The shoreline erosion, though slow, will require monitoring. Neither Late Archaic nor postcontact deposits were identified in the excavations, but testing was limited. The site has probably been used extensively throughout all occupation periods by small hunting parties from major settlements on Kejimkujik Lake.

Other Sites

Three other archaeological sites were added to the park's inventory during September. Two of these are located at either end of a portage on the Mersey River and are directly associated with major settlements beside eel weirs. The third is close to a settlement site on Kejimkujik Lake. All three were identified by surface examination and collection.

Petroglyph Moulding

Also during September, assistance was given to a team of conservators (Michael Harrington, Paul Heinrichs, and Stephen Duffield) from Program Headquarters in their second year of moulding petroglyphs. Over 200 images were copied. These are being reproduced as copper plates to provide a durable record. Scanned computer images, courtesy of the National Research Council, indicate that less than 4 microns (4/1000 mm) of definition are lost between rock surface and finished copper plates.

Bank Site, Terra Nova National Park

Permit 92-A08
Held by Fred Schwarz,
Memorial University of Newfoundland, St. John’s

The Bank Site is situated in Terra Nova NP, Bonavista Bay. The site occupies a strategic location near the junction of Clode Sound, Chandler Reach, and Goose Bay. When initially discovered in 1979, the site appeared to be of little interest: testing yielded typical Dorset Eskimo artifacts and indicated that most of the site had been eroded away, leaving a narrow band of intact deposits along the top of the eroding bank from which the site gets its name. However, in 1990 a routine monitoring visit to the site led to the discovery of an unusual, stemmed projectile point, comparable to Early Archaic (ca. 7200 B.P.) pieces in southern Labrador and seemingly 2000 years older than the earliest dated Archaic occupation of insular Newfoundland. This suggested the need for a radical reassessment of the site's significance. Under Fred Schwarz's direction, archaeological excavations were undertaken by Memorial University in August–October 1992 with the goal of excavating all the area threatened by erosion. In addition, loose scree fronting the bank was sifted in case an Early Archaic component that may have been present had been entirely deflated.
Excavation revealed multiple components at the site, with occupations representing all four major periods of Newfoundland precontact history. The site was stratified both horizontally and vertically, but the deposits were shallow and the components poorly separated from each other. The findings might be summarized as follows.

A tiny Maritime Archaic component was represented by a ground slate celt and a side-notched projectile point. Both are typical of Newfoundland Late Archaic (50 000–3200 B.P.). No evidence for an Early Archaic component was recovered; as for the specimen recovered in 1990, it now appears that it may be a damaged and reworked Late Archaic side-notched point.

An Early Paleo-Eskimo (Groswater) component (2800–2100 B.P.) is represented by high-side-notched end-blades, side-blades, sickle-shaped gravers, and a burin-like tool. Many of these tools were manufactured from fine, colourful cherts thought to be from Newfoundland’s west coast. The Groswater tools are widely distributed across the site, but are concentrated in the lowest occupation levels.

An extensive Dorset occupation (1900–1400 B.P.) constitutes the principal component at the site. The assemblage from this component is typical of the Bonavista Bay regional Dorset style, dominated by long, slender end-blades of local rhyolite. Interestingly, small numbers of west-coast-style end-blades and raw materials are present, but nothing representative of the southeast regional style. It is possible that analysis of raw materials and minority end-blade styles here and in other Dorset assemblages may reveal more about the nature of, and relationships between, Newfoundland Dorset regional groups.

Finally, a Recent Indian component (ca. 1400–400 B.P.) is represented by diagnostic projectile points and triangular bifaces from a restricted deposit of fire-cracked rock with bone and calcined bone overlying the Dorset occupation layer at the eastern end of the site. The assemblage is stylistically typical, but distinctive in the number and frequency of points manufactured from Ramah chert from far northern Labrador. Finished artifacts of this material are otherwise almost unknown in Newfoundland Recent Indian sites. The size and uniformity of this dump of fire-cracked rock, and the uniformity of its artifact contents, suggest that it represents a brief depositional episode: perhaps a single event. It is tempting to speculate that the events represented by this deposit were of unusual ritual and social significance.

Material Culture Research

Louisbourg Hardware Study

Douglas Ross tabled a series of hardware reports on 44 properties within the Fortress of Louisbourg for use in the building recapitalization project. These reports, a result of a major study of approximately 7000 building hardware artifacts from both the townsite and fortifications at the Fortress of Louisbourg, deal primarily with the application of finishing hardware for shutters, windows, and doors. In addition, several aspects of structural hardware have been studied.

Application of this research to the operational requirement of the recapitalization program was dealt with by examining all the types and numbers of shutters, windows, and doors on the reconstructed buildings and comparing these to the types and distribution of building hardware artifacts recovered from excavations throughout the site.

Ceramics

Denise Hansen inventoried the ceramics from the 1992 field season at Fort Anne. Minimum vessel counts for the entire 17th-century ceramic collection (excavated during the last three field seasons) were determined.

Ceramics from the 1992 excavations on Georges Island were also examined.

Collections Management

Upgrading of Atlantic Region Archaeology Collection Environment

In 1992 a project was begun to upgrade the Atlantic Region archaeology collection storage and workspace. The first phase, in May 1992, saw the installation of a compressed-storage system. Prior to the system’s installation, the approximately 3000 square feet of storage and workspace were filled to capacity. To say that there was actual workspace would be an exaggeration. There was barely room to set up a folding table. However, with the compressed system, what took 3000 square feet to house now takes only about 1000 square feet, leaving plenty of workspace and room for additional storage.

Phase 2 of the upgrade is scheduled to take place early in 1993. This will include the construc-
tion of a climate-controlled room around the compressed-storage area; the installation of proper heating, air conditioning, and ventilation for the remainder of the workspace area; the painting of the cinder block walls and concrete floors and ceiling; and the installation of a sprinkler system. This project will take from eight to ten weeks to complete and will be a vast and long-awaited improvement over the present conditions. When the work is completed, the Atlantic Region archaeology collection storage area will meet the environmental standards established by PHQ’s Historic Resource Conservation for the long-term maintenance of archaeological collections.

Louisbourg Backlog Conservation Project

Heidi Moses became the new artifact collections assistant in 1992, with responsibilities that included supporting the backlog conservation project, now in its fifth year. In 1992, 1866 iron and other metal small finds were selected on the basis of condition and significance, catalogued, and shipped to conservation labs in Ottawa, Louisbourg, and Halifax. In addition, 1685 conserved artifacts were returned from conservation laboratories and reprocessed back into the Louisbourg collection.

In 1992 the Archaeology Unit at Louisbourg also completely reorganized the wooden artifacts. The storage area was cleaned and painted, and new shelving units were installed. Each of the 478 wooden artifacts (mostly architectural) were inventoried, relabelled, and stored in a dust-free environment.

Storage media in the main collection were also upgraded. Staff removed over 4000 metal-rim tags from metal artifacts and affixed new archival-quality labels. In addition, 7280 small finds from 55 properties were packed in ethafoam-lined boxes.

Outreach Projects and Professional Outside Contacts

Edu-kits

Denise Hansen continued work on the production of the Grassy Island “Discovering Our Past” edu-kit. Two full copies of the kit were completed in January. The kit was formally presented at the Nova Scotia Social Studies Teachers Conference in October. The Nova Scotia Department of Education agreed to formally test six “mini-kits” with fewer artifacts and a slide substituting for a mounted aerial map. Wider provincial distribution of the manual and two videos is a distinct possibility. Production of the mini-kits is scheduled for completion in mid-February 1993.

Preliminary work has begun on a second Grassy Island edu-kit, “Fishing — Then and Now.” The project is expected to be completed in the upcoming year with the participation of the Atlantic Region Archaeology, History, and Communications sections. A particularly interesting part of this edu-kit is its inclusion of the history of the fishery right up to the present day, drawing appropriate environmental lessons in the process. Advice and expertise in this aspect of the edu-kit is being provided by staff of the Department of Fisheries and Oceans, Scotia-Fundy Region.

Co-op High School Program

A Grade 12 student from Prince Andrew High School, Dartmouth, N.S., worked in the Archaeology Section one day a week during the spring semester, assisting with the full spectrum of tasks performed in the section. The student was taking part in a career-counselling program for high school students who wished to find out just what it was like to work in a particular field. Although the student worked hard, she didn’t say much, so we don’t know what she thought about us or about archaeology. Her school, however, seemed quite pleased with the results.

Public Lectures

Birgitta Wallace presented public and professional lectures in Vikings and L’Anse aux Meadows at the University of Windsor; the Mariners Museum, Newport Beach, Virginia; the Learned Societies Conference; Bates College, Maine; The Alternative Archaeology Symposium, presented in Halifax by the Nova Scotia Archaeology Society, St. Mary’s University, and CPS; the Halifax Public Library Children’s Program; and the Jamestown-Yorktown Foundation. She also lectured on Fort Anne to the Annapolis Royal Historical Association.

Denise Hansen and Earl Luffman made presentations about archaeology to classes at Halifax and area schools. Robert Ferguson spoke on the Kejimkujik petroglyphs to the Caledonia Historical Society and on Grassy Island to the Elder Learner Association and at the Maritime Museum of the Atlantic.
Exhibits

Birgitta Wallace provided extensive input in her role as a consultant to the following exhibits:

- **Les Vikings ... Les Scandinaves et l'Europe, 800-1200** at Le Grand Palais in Paris 2 April to 15 July. The same exhibit, but with German texts, was shown at Altes Museum in Berlin 2 September to 15 November and, with Danish texts, at the National Museum in Copenhagen 26 December 1992 to 14 March 1993.


- **La saga Viking**, 3 February to 1 August 1993 at La Musée de la civilisation in Québec City.

Films and Books

Denise Hansen was involved in preparing a children’s activity book, “Discovering Archaeology,” being developed by the Nova Scotia Archaeology Society for distribution to schools throughout the province.

Birgitta Wallace served as consultant for a film project concerning the Norse by Pamela Burger of Boston University and for a film directed by Ted Timrick on the Viking westward expansion. This latter film will be shown on PBS’s “Nova” series. She also refereed scientific papers dealing with Norse research in North America and provided advice and information to Joan Clark for her forthcoming novel.

Officeholders

In 1992 several staff held offices in organizations related to archaeology.

Charles Lindsay was a director of the Nova Scotia Archaeology Society and was appointed to the Nova Scotia Advisory Committee for the Protection of Special Places. He was also instrumental in organizing a well-attended symposium on alternative archaeology in Halifax in May. Ten invited speakers from the U.S. and Canada discussed the phenomenon of alternative (or “cult”) theories — and why these theories attract so much public attention while scholarly studies do not.

Birgitta Wallace was the Canadian representative on the steering committee for research on Norse activities in North America and was a founding member of the North Atlantic Biocultural Organization, an international organization of archaeologists and natural scientists from North America and Europe.

Robert Ferguson was vice-president of the Nova Scotia Archaeology Society and served as chair of two of its committees: the Urban Archaeology Committee, which presented to Halifax city council a proposal for developing a municipal policy for archaeology, and the Heritage Showcase Committee, which prepared an exhibit on the relevance of archaeology to Nova Scotia’s Mi’kmaq community. He was also Atlantic Region current research editor for the Society for Historical Archaeology and the Council for Northeast Historical Archaeology newsletters.

Denise Hansen was the Nova Scotia representative on the Society for American Archaeology Public Education Committee and was a member of the Children’s Activity Book Committee of the Nova Scotia Archaeology Society.

Rion Microys was a director of the Nova Scotia Archaeology Society.

Outside Publications

Wallace, Birgitta


Compiled by Charles Lindsay
Program Headquarters
Archaeological Services

Overview
The Program Headquarters activities, not surprisingly, differ considerably from those of the regional offices: there is less emphasis on sitespecific research and correspondingly more on specialist support to the regions through thematic studies on material culture and on the development of standards, guidelines, and training intended to ensure consistent application across the system.

The important exception is the Marine Archaeology Section. Because of the expense, both in terms of equipment and of building a qualified team, this specialized research activity is a centrally located function, and the crews go out to coastal and inland areas as required. Although it is natural to think of underwater archaeology as specific to the Atlantic and Pacific coasts, and secondarily to the Great Lakes, the team has been active in most major parks in virtually all provinces and territories, since submerged sites from recent times to long before the arrival of Europeans may be found in any body of water. However, the site that has earned the team its national and international reputation is the Basque whaling station in Red Bay, Labrador; although field work has long since been completed, analysis and report preparation are the preoccupation of marine archaeologists, material culture researchers, and other specialists.

In other areas, PHQ developed guidelines for the implementation of the revised Canadian Parks Service policy, which contains a new, separate section on cultural resource management and is therefore of prime interest to archaeologists and staff in the parks. To examine new computer technology for site surveys and recording, as well as to grapple with the problem of preserving the deteriorating records and images of some 30 years' work, data-management staff obtained Green Plan funding to establish a computer image enhancement lab, which in 1992 began testing of computer-rectified video images of underwater sites.

Last but not least, PHQ is responsible for the bulk of research publishing, not just for the archaeological services, but for all cultural-heritage-related research; information is released in bulletin form or as full-length monographs dealing with specific sites or themes. To ensure that there is a central corporate "memory" of all CPS research work, published or not, all reports are reproduced on microfiche, copies being sent to the public archives, the provincial archives, and other designated repositories.

Archaeological Resource Management Program
The Archaeological Resource Management Program provides advice on a national program of archaeological resource management issues to identify, manage, and use archaeological resources within CPS (i.e., national parks, national marine parks, national historic sites, and historic canals). The section also assists PHQ and regional and field offices with related priority issues, such as aboriginal peoples' history, and Historic Sites and Monuments Board of Canada issues.

The section's responsibilities also include preparing agenda papers concerning archaeology for the HSMBC. In 1992 Lyle Henderson wrote a paper about HMS Terror and Erebus, the two ships Sir John Franklin used during his final, tragic search for a Northwest passage. Lyle also co-authored a paper with Ellen Lee, of PHQ's Native Heritage Program, on the Hatzic Rock site, a Sto:lo transformer site, in B.C. The ships and site were declared to be nationally significant.

The section also assisted Ellen by compiling an annotated bibliography of archaeological research that has already been done in the areas proposed as the Mealy Mountains and Torngat Mountains national parks in Labrador, and reviewed a number of land claim documents.

Other activities included training. Doug Bryce (special projects officer on secondment from the Material Culture Research Section) was a facilitator for the Department's Service Excellence course that was offered to all Department employees. Doug also acted as the Assistant Deputy Minister's executive assistant when the regular assistant was absent.
**Planning**

Robert M. Harrold, ARM chief, represented the Branch on the National Historic Sites Systems Plan Task Force, a PHQ/regional group responsible for reviewing the NHS Systems Plan (a general guide to the systematic establishment of new national historic sites by CPS). The systems plan is intended to help the HSMBC and CPS identify potential sites and research priorities. A number of under-represented themes in the family of national historic sites have been identified and are proposed for commemoration between now and the year 2000. Research, workshops, and consultations with federal, provincial, territorial, and non-government organizations will allow the task force to recommend potential sites to the Board. If commemorated, they would address some of the under-represented themes in Canadian history.

We also represented the Branch in discussions of management-planning issues for 19 CPS-administered properties. This primarily involved identifying planned objectives to meet archaeological requirements and to ensure compliance with policies concerning identifying, protecting, and managing *in situ* archaeological resources (including submerged resources), collections, and original documentation. Our management-planning responsibilities also included addressing archaeological concerns in the PHQ NHS Management Planning Directive 3.2.1 (a guide to the stages of management planning), and the Project Initiation and Planning System process.

Robert was also a member of a PHQ/region working group to develop a CRM Policy Orientation Training course. The course is to evolve into a national training course for regional and field offices. He also reviewed the overall CRM training initiative on behalf of the Branch.

Doug represented the Branch on the CPS Science Committee and compiled a compendium of science-related projects for NHS Directorate, prepared an issue paper on science and research and development for the Directorate, and reviewed the Science Committee position paper for the Branch.

Doug was the only member from PHQ’s NHS Directorate to participate in the Western Regional Office Ecosystem Task Force that addressed the protection of natural resources while remaining aware of potential impacts on cultural resources. The final draft report was approved by the WRO management committee.

Pierre Nadon was named Archaeology’s member of the PHQ working group to revise the CPS Environmental Assessment and Review Process directive to comply with the new environment bill.

**Guidelines, Directive, and Manual**

Robert completed the *Guidelines for the Management of Archaeological Resources in the Canadian Parks Service* after extensively and intensively consulting PHQ and regional offices. This document broadly articulates CPS’s approach to ARM and relates this approach to the principles and practices of the CRM Policy. The guidelines identify ARM tools that are being, or will be, developed to provide further assistance to CPS managers.

Doug started revising the *Archaeology Collections Management Directive*, written in 1986, to reflect changing CPS priorities and realities — such as the need for a disposal policy and the responsibility to repatriate aboriginal material — and to generally comply with CRM Policy principles and practices. Collection management issues were discussed with regional archaeology staff during a workshop in March. A first draft was prepared and circulated to Archaeology, Interpretation, and Historic Resource Conservation staff at PHQ and regional offices. A second draft has been prepared based upon these consultations.

Pierre began to revise CPS’s 1977 *Archaeology Manual: Excavation Records System* to bring it up to 1990s standards and to ensure that it follows the CRM Policy’s principles and practices. Its contents were discussed with regional staff, and a first draft was prepared and circulated within the Branch for preliminary review.

**Native Heritage Program**

In 1992 Ellen Lee, the chief (and sole employee) of the Native Heritage Program, continued to work on issues of aboriginal heritage as they relate to the CPS mandate. Native heritage programs involve 1) representing the interests of the NHS Directorate during negotiation of comprehensive and specific land claims when CPS interests are involved, 2) consulting with local communities and carrying out the archaeological and oral history research necessary for the establishment of new national parks where there are aboriginal interests, and 3) supporting the commemoration of aboriginal sites of national historic significance. At this time the section’s other focus involves co-ordinating the Threatened Sites and Threatened Collections
projects with regional staff. The protection programs are supported by Green Plan funding.

Archaeological Protection

The Threatened Sites Project maintains a list of important sites that are threatened with substantial damage or destruction within the next ten years. This list is updated regularly in consultation with regional staff. In most cases the threats are from natural processes such as riverbank erosion, animal trampling, or unstable slopes. In others, the threats are from vandalism or the cumulative effect of innocent visitors. These threats can be countered by, for example, attempts to stabilize the sites in their present states, engineering solutions, or redesigning trails and facilities to avoid particular areas, but these are expensive solutions. More practically, the threats are mitigated by salvaging information from the sites through proper recording and excavation before they are irrevocably lost. This project is designed to support urgent salvage measures at threatened sites when insufficient regional funding is available.

The Threatened Collections Project addresses concerns about potential loss of information in CPS research and artifact collections that are maintained in the regional offices and at headquarters. These losses can be through the physical decay of artifacts or photographs, from poorly organized storage of records or items in inadequate space, or from the inevitable separation of field information and artifacts that occurs when a large collection has not been properly recorded and analyzed. The project started with a systematic survey of collections in order to determine their contents and state of preservation. It is identifying major backlogs, where large portions of a collection have not been suitably recorded, analyzed, or treated to ensure preservation. Once identified, these problems can be addressed.

Threatened In Situ Assets (Sites)
Regional offices conducted salvage work on five of the 58 sites currently registered in this category. These included the Bank Site in Newfoundland, Frenchman Butte and a site in Fort Walsh Townsite in Saskatchewan, and work at the Fortress of Louisbourg, Nova Scotia.

Threatened Collections
Work has been done on collections from Ontario and Prairie and Northern Regional Offices — approxi-
New National Park Establishment

Ellen worked with staff from the PHQ National Parks Systems Branch to address archaeological concerns in the establishment of new national parks on Banks Island and at Wager Bay in the Northwest Territories, at Vuntut/Old Crow in the Yukon, and in the Torngats and Mealy mountains in Labrador.

She consulted with Systems Branch, PNRO, and legal staff to suggest wording for the “Traditional Knowledge and Archaeological Specimens” article in the agreement for the establishment of Aulavik NP on Banks Island. This article provides for consultation with the Inuvialuit Regional Corporation, other Inuvialuit community groups, and the Prince of Wales Northern Heritage Centre on such issues as archaeological research permits, recording traditional knowledge, and ownership and disposition of artifacts.

Archaeological surveys were carried out in the areas proposed as new national parks at Wager Bay and Vuntut/Old Crow. The archaeological work was co-ordinated with preliminary oral history information concerning aboriginal land use in these areas. These studies were co-ordinated by Ellen, staff from the National Parks Systems Branch, and Bill Fox, the PNRO chief of Archaeology.

Lyle Henderson of the ARM Program prepared an annotated bibliography of archaeological research that has already been done in the areas proposed as the Torngats and Mealy Mountains national parks. This involved discussions with Newfoundland provincial archaeologists and representatives of the Naskapi, Montagnais, and Innu nations.

Commemoration of Aboriginal Heritage

The NHS Directorate brings sites to the attention of the HSMBC so that the Board can determine whether or not they are of national significance. Ellen has co-ordinated consultations with aboriginal communities in the Yukon, the Mackenzie Valley, and the Keewatin. These consultations are designed to help communities determine which sites are of great significance to their culture and heritage, and which sites they would like to nominate for Board consideration.

Ellen met with CYI representatives to plan how best to conduct a co-operative theme study on Yukon Indian heritage. She is managing a contract held by Christopher Hanks for a site-specific proposal for commemoration of Dene heritage. This contract approaches commemoration of aboriginal heritage in a new way. Bear Rock, in the Mackenzie Valley, is associated with particular events in a fundamental myth cycle and is thus appropriate for commemorating the shared cultural heritage of the Dene as a whole. The myth cycle gives an order to much of the landscape for the Dene by naming key geographic features and relating them to actions of the hero Yamoria. The second part of the contract addresses commemoration of the Mountain Dene (Shu’tagot’ine); a foot trail and the variety of sites along it would be used to present the Mountain Dene and their relationship to the land. Both Dene projects involve consultation with communities in the Mackenzie Valley and will continue into next year. When community-supported proposals are completed, they will be submitted to the HSMBC for consideration of the national historic significance of the sites involved.

Ellen worked with David Webster of PHQ Operations Branch to develop submissions for research projects requested by the communities of Baker Lake and Arviat in support of commemorating Inuit heritage. A caribou crossing at Piqqiq and a concentration of stone tent rings and other stone features at Sentry Island have been chosen by these communities for commemoration. Research projects, to be conducted in 1993/94, will combine archaeological recording of features at these sites with an oral history, as community members accompany the archaeologists and describe each feature’s significance. This research will be the basis of community-supported agenda papers for review by the HSMBC.

HSMBC agenda papers were prepared in response to requests concerning national significance and cost-sharing for two aboriginal sites: Hatzic Rock, B.C., and Cluny/Blackfoot Crossing, Alberta. (The Hatzic Rock paper was co-authored by Lyle Henderson.) Agenda papers provide the historic and archaeological background necessary for the HSMBC to evaluate the national significance of a place or event. Hatzic Rock is the first site that has been reviewed by the HSMBC specifically as a spiritual site; it is a transformer site of importance to the Sto:lo people of the Lower Fraser Valley and is an archaeological site that has been occupied for some 5000 years. Cluny Fortified Village is part of a complex of archaeological and historic sites at Blackfoot Crossing, which the Siksika Nation has recently brought to the HSMBC’s attention. Both sites were ruled to be of national historic significance.
Marine Archaeology Section

The Marine Archaeology Section undertook many different activities in 1992. The development of management plans for submerged cultural resources was one of the important goals identified for that year. Conservation monitoring and submerged cultural resource inventories, consultations, and impact assessments throughout the CPS network of parks, sites, and canals were part of the work in which the section was involved. Plans to put heavy emphasis on the Red Bay project, on analysis and report writing, had to be altered when various other projects required immediate attention.

A major staff drain over the year was the participation of several Marine Archaeology staff in planning the construction of a model of a "generic" French ship from ca. 1530 for Cartier-Brébeuf NHS in Québec City. This project is now nearing completion.

Atherley Narrows National Historic Site, Ontario Region

Permit ORO 92-7H
Held by Peter Waddell

Peter Waddell directed a five-week survey in the area of the Highway 12 bridge at Atherley Narrows NHS. The survey evaluated the expected impact of a proposed new bridge. Fish-weir stakes from the site have been carbon-14 dated from 4500 years B.P. through to the modern day. Some 60 000 square m of the narrows bottom were surveyed and mapped, and several specific areas test excavated. Rapid resource deterioration was noted on the major stake concentration below the west end of the existing bridge. This stake concentration, possibly from the Champlain era, is experiencing both natural and human pressures, and its excavation has been recommended. Other stake remains exist in the general bridge area, and plans were made to monitor these resources over the coming years.
Fathom Five National Marine Park, Ontario Region

The CRM plan for Fathom Five NMP, prepared by ORO staff for the land-based cultural resources, is being updated by Willis Stevens to cover all known submerged cultural resources. An important addition to the plan was the design of a submerged-resource monitoring program, a joint project with Lorne Murdock of PHQ's Historic Resource Conservation Branch. Monitoring will measure resource deterioration and will enable park staff to better control the preservation of submerged sites. This is a first in the field of marine archaeology and has aroused much interest from our international colleagues.

Banff National Park, Yoho National Park, and Jasper National Park, Western Region

These projects were directed by Marc-André Bernier. Lake Minnewanka in Banff NP is the site of a submerged townsite and two dam structures, the earliest of which dates to the late 19th century. Intense visitor pressure, primarily from divers (200 divers on a good weekend) but also from other park users such as fishermen and tour operators, has necessitated a closer look at these resources' management. Although the survey is still being assessed, a number of preliminary recommendations, to be initiated in the up-coming season, were proposed. The most pressing need is to regulate diving activities within parks boundaries. The success of the Banff survey was due in large part to the participation and co-operation of local divers Mark Gibeau, Wally Romanchuk, Robin Battley, and Lorie Hedemark. In addition, regional support from Gwyn Langemann, Ian Clark, and Marty Magne was greatly appreciated.

Other field inventories of submerged cultural resources took place. In Yoho NP several Canadian Pacific hotel dump sites were surveyed, and at Jasper NP an assessment of the World War II experimental ice barge (Project Habbakuk) continued in Patricia Lake.

The inventory and assessment of submerged cultural resources will continue in Western Region. SCRM plans for all parks will be completed as the various databases are evaluated and more clearly understood.

Saguenay Marine Park, Quebec Region

The inventory of submerged cultural resources within this park (conducted under provincial permit 92LARD-01) was directed by Daniel Laroche and began with a series of towed searches. Nine areas were surveyed, including three known shipwreck sites. Preliminary site recording was carried out using still photography and video. Continuation of the inventory is planned for 1993.

Red Bay National Historic Site, Atlantic Region

Peter directed a four-week survey to monitor the reburied remains of the 16th-century Basque whaling vessel (24M). Results were encouraging, with low levels of dissolved oxygen being recorded and little iceberg damage. The discovery of yet another shipwreck in Red Bay Harbour prompted a brief test excavation to determine the extent of the remains and, if possible, the period of use. Preliminary results indicate that the wreck is not likely a 16th-century vessel, but rather originates from a later period, possibly the 19th century. More excavation is required for a more accurate assessment.

Submerged Cultural Resource Management Training

In 1992 the section gave SCRM training to ORO and Quebec Regional Office staff (Atlantic and WRO staff received training in previous years.) The training has been extremely successful in raising the level of awareness of submerged cultural resources and the need for better management of these fragile resources. (Yes, folks, pot hunting and looting are still serious problems.) PNRO staff have not yet received this training; however, we hope to offer it to them in the near future.

Material Culture Research Section

Site-Specific Projects

Fort Wellington, Prescott, Ontario

This project involved collaboration with ORO archaeologists; Fort Wellington curatorial staff; a historical researcher on contract, Katherine McKenna, a part-time lecturer in the Queen's
University History Department; and a zoological researcher on contract, Ann Rick, of the Zooarchaeological Analysis Programme, Canadian Museum of Nature. The goal and product of the project was information about garrison life at Fort Wellington from 1843 through 1854. The Material Culture Research Section’s contribution was the analysis and interpretation of the archaeological material with the exception of the faunal and floral remains.

Material culture researchers Charles Bradley, Stephen Davis, Phil Dunning, Gérard Gusset, Catherine Sullivan, and Lynne Sussman completed the analysis of all artifacts except pipes, which will be studied next year. Lynne co-ordinated the project.

Many surprising aspects of the enlisted soldiers’ life at the fort were revealed. The picture that emerged was one of variety and domesticity, rather than the military uniformity that was expected. Barracks life, incorporating the lives of women and children, was conducted amidst many personal possessions including a wide variety of teaware, serving dishes, toys, and decorative knick-knacks.

Because timeliness of information was necessary for the furnishings plan, MCR staff worked closely with the curator (Robert Henderson) responsible for revising and implementing the plan. As interpretations were made, he and others were informed; feedback in the form of historical or faunal evidence confirmed or contradicted the artifact evidence. Artifacts were selected for reproduction and ordered in the numbers reflecting their archaeological proportions.

Next year the illustrated reports, based on the now-completed database, will be available at PHQ and ORO.

Gerald’s Pottery, Prescott, Ontario
Gerald’s Pottery (ca. 1840–45) was a typical small Ontario pottery making utilitarian coarse earthenware articles. Gérard’s analysis of the contents of an excavated waster dump shows the range of material: food-related vessels, flowerpots, chimney collars, and kiln furniture. One reason why this site is of particular interest is its close proximity to Fort Wellington and the presence of the same kinds of vessels at the pottery and the fort. One of the questions concerning garrison life is the relationship between the garrison and the town.

The 24M Wreck
This wreck was a 16th-century Basque whaling ship that was found off the coast of Red Bay, Labrador. A large report, with contributions by a number of researchers, is being prepared. In 1992 the following chapters were completed:

- “The Basque Iron Industry and its Relation to Shipbuilding,” by John Light;
- “Principal Timbers (Keel, Stern, Stem),” by Brad Loewen;
- “Hull Framing and Planking,” by Brad Loewen;
- “Interior Structures (Decks),” by Brad Loewen; and
- “Superstructures (Castles),” by Brad Loewen.

As well, John and Phil completed a descriptive report, “Woodworking Tools Used in Construction of the Red Bay Vessel.” It is part of a collection of reports on material culture found in association with the vessel. These reports are on file at PHQ.

Charles and Brad, in collaboration with Suzanne Beauvais, a contract historian familiar with 16th-century Spanish, and staff artist Carol Piper, reconstructed the rigging of the San Xristobal, a vessel contemporary to the Basque whaling ship wrecked off Red Bay, Labrador. The information was found in a rich collection of documents describing law suits. The particular value of the San Xristobal documents is the detail and rarity of the information they provide; to our knowledge, they give the most complete description of a 16th-century ship’s rigging.

In 1993 this information will be combined with information from other historical documents and from the archaeological evidence to produce a generic reconstruction of 16th-century rigging.

The Saphire
Virginia Myles completed an illustrated descriptive report, “Artifacts from the 17th-Century Wreck of the Saphire, Bay Bulls, Newfoundland.” The Saphire was an English frigate that was scuttled in battle in 1696.

Cross-Site Projects

“Manual of French and Mediterranean Coarse Earthenware”
Gérard is preparing an introduction to studying French and Mediterranean coarse earthenwares. The completed manual will discuss identifying, dating, and classifying these coarse earthenwares and will cover the major varieties found on Canadian sites as well as the main reference sources available.
**National Reference Collection**

Stephen, in collaboration with international scholar and independent consultant June Swann, former keeper of the shoe collection of Northampton Museum, England, reviewed the National Reference Collection of footwear. They confirmed, corrected, and refined the identifications. They also identified examples suitable for display.

**Special Project**

Ron Whate, head of MCR, was seconded to work on a prime-time television special, tentatively titled “Canadian Odyssey.” Olive Jones was acting head throughout this period.

**In-House Training**

MCR staff participated in the curatorial workshops organized by PHQ Interpretation Branch’s Interpretive Curatorial Division. Phil conducted workshops on writing and on flatware (forks, knives, and spoons). He and Lynne made a presentation, “Using Archaeological Information for Site Interpretation: Fort Wellington — A Successful Example.” Lynne conducted a workshop on common mid-19th-century tablewares; Catherine conducted a workshop on 19th-century glass; and Charles and Stephen conducted informal workshops based on questions concerning military accoutrements, clothing, and footwear.

“The Archaeological Survey of Wager Bay, NWT,” an illustrated lecture by Karlis Karklins, was given to PNRO Archaeology staff in Winnipeg, and “Glass Bead Making in Venice and Austria,” another illustrated lecture by Karlis, was given to archaeology, curatorial, and history staff at PNRO.

Mid-19th-century footwear was the subject of Stephen’s training session for curatorial and collections management staff at QRO, Québec.

**Collection Management Section**

The Collection Management Section has been very busy during the past year. Not only have we carried out our traditional activities, but we have also implemented a lot of new ideas.

Collection Management’s role has been modified and broadened beyond the simple task of monitoring the material itself. The costs involved in restoring artifacts and storing them in a proper climatic environment are high, and therefore good management must make optimum use of the collection.

The avenues to achieve such a goal are diverse; for example, encouraging and supporting in-house and outside analyses, offering tours of our collection, facilitating work relationships with other offices, and providing field placements for students interested in collection management.

The section is also the home of a Green Plan project under the lab revitalization initiative. We are establishing a laboratory to test and implement digital image technology. These new tools will permit us to prepare maps from video images, build databases of maps and photos, and construct digital and analog image archives.

**Collection Monitoring**

**Regarding the Archaeological Artifacts**

We took a close look at our archaeological collection, identifying problem areas and recommending actions to improve the collection’s condition and facilities. A copy of our report was sent to all regional offices, and we are now working through our recommendations to improve the entire collection’s status.

We went through all 33 boxes of rusted nails from Fort Beauséjour, discarding old rust, inventorying and rebagging all remaining nails, and reboxing the material in the correct provenience order. This simple exercise reduced the number of boxes to 26, a space saving of 21.2 percent. We intend to continue this project in 1993 with the Coteau-du-Lac collection.

We undertook a major clean-up in our storage bay. We produced a thorough inventory of all the boxes kept there (sending updated copies to all regional offices) and ensured that every box is clearly labelled.

We completed the location inventory for specimens on 466 trays in the organics room, and took this opportunity to standardize their entries on the Dossier computer program. We also completed an inventory of all the ships timbers in our collection.

We reorganized the storage of all casts and moulds, along with all plastic and rubber artifacts. Also, we turned all of the live ammunition over to our local police force as stipulated in CPS directives.

We set up new shelving for supplies, and in order to facilitate the general inventory of the collections, clearly labelled the shelving and
cabinets in all storage rooms, the research labs, and the storage bay.

In addition to routine handling of the artifacts, we packed and returned three large collections after MCR studies were completed here: the Fort Walsh material (to PNRO), the Fort Wellington glass (to ORO), and the Red Bay land-site glass and ceramics (to Memorial University, Newfoundland).

Monitoring the collection's condition has included looking after the Fort Wellington untreated leather shoes, sent here to be drawn by staff illustrators. This entailed spraying the shoes three to four times a day to keep them moist and transferring them to cold-storage facilities in the Historic Resource Conservation Branch for every weekend. As well, we dealt with humidity problems in our metals room, cleaned up dusty glass bottles and sherds, and battled a couple of water leakages.

Since our strategy is to encourage Parks researchers and other institutions to use our collection, we implemented a new, structured loan system allowing us to closely monitor any movement of material and ensuring the return of borrowed specimens.

Regarding the Archaeological Records
During this past year we conquered a backlog of photographic records. All uncatalogued photos (approx. 2000) were numbered, registered, and stored, and the relevant information computerized.

With the installation of our new compressed-storage unit, we reorganized our entire storage of field notes and documents, and placed them in archival-quality boxes.

Archaeological Computer Image Enhancement Laboratory
We had a narrow window of opportunity between when funds were released in August and when spending was frozen in December. In that time we acquired a DOS/Windows-based computer system supported by various scanning, printing, and plotting devices. The first of several software systems was installed.

A Nucor programmer was engaged to make various modifications to the Nucor Map Database for Windows software. These modifications included automating the correction of optical distortion in images and enabling us to register images and build photomosaics, and to deal with very large files so that we can work with high-resolution images on low-resolution monitors.

The first results, based on an underwater video of the Sweepstakes shot in Fathom Five National Marine Park two years ago, are very promising. Mosaics are coming together usefully even before the application of geo- and optical correction. Some images shot at low light and contrast levels have been enhanced for clarity. The technological hurdles, while significant, were not as high as anticipated.

Outreach Projects and Professional Outside Contacts
As president of the International Committee of Archaeological Heritage Management within the International Committee of Monuments and Sites, Pierre Nadon, ARM Program, has been busy participating in the management committee's February meeting in Paris to examine the ICOMOS archaeology charter; chairing the ICOMOS Canada French-speaking committee on archaeology and urban development; participating in the ICOMOS executive committee meeting held in Colombo, Sri Lanka, to prepare for the the archaeological heritage management workshop planned for the ICOMOS general assembly in 1993; and participating in the November ICAHM and advisory committee meetings in Sydney, Australia. Pierre operates the Secretariat and formed four subcommittees from the ICAHM members he recruited from across Canada through symposiums and meetings. These four subcommittees are dealing with a directory of heritage institutions, the 1994 symposium, legal affairs, and the ICOMOS charter.

Robert Harrold attended a number of federal/provincial meetings to discuss the Department of Communications' proposed archaeology legislation; DOC's proposed shipwreck legislation; and DOC's Inventory of Wreck Framework, its database prototypes, and its implications for submerged cultural resource management in Canada.

We also attended a number of workshops and conferences, including the CPS Reconstruction Workshop (Robert), the Society for American Archaeology conference (Robert), the Archaeological Association of Quebec conference (Pierre), and the Canadian Archaeological Association conference (Robert, Doug Bryce, and Pierre).

Ellen Lee, Native Heritage Program, presented a paper at the 1992 Chacmool Conference, at the University of Calgary, in a session dedicated to the commemoration of aboriginal history. The paper, titled "Commemorating First People's Heritage..."
through the National Historic Sites Program,” will be published in the conference proceedings.

The Marine Archaeology Section’s chief, Robert Grenier, was extremely busy on shipwreck protection issues nationally and internationally. Of particular concern to a number of countries is the growing threat to submerged cultural resources brought on by advances in undersea technology and easy access to that technology, and many countries are now co-operating in an attempt to develop international standards for managing submerged cultural resources.

Robert also attended, by invitation, a conference in Nantes, France, on cultural resource management. His paper, “Le concept de musée sous la mer de Louisbourg,” is to be published in the conference proceedings. In addition, at the Society for Historical Archaeology/Advisory Council on Underwater Archaeology meetings in Jamaica he delivered the keynote address for marine archaeology during the quincentennial celebration of Columbus’s voyage to America. His paper, to be published in the 1992 proceedings, was very well received within the professional community, and he was subsequently invited to deliver another keynote address — to the Maine Maritime Museum’s annual meeting in Bath, Maine.

Of considerable importance to the world of marine archaeology was Robert’s nomination to the newly formed International Committee of Underwater Archaeology, which operates under ICOMOS auspices. He will be involved in developing guidelines for nominating shipwrecks to the World Heritage List and for protecting historic deepwater wrecks in international waters. The ICOMOS meetings also afforded him the opportunity to participate in two public forums sponsored by Australia’s Maritime Museum.

Other Marine Archaeology staff activities included Marc-André Bernier’s two weeks of training in France, focussing on the excavation of a submerged medieval fish weir in the Saône, near Beaune. Staff attended an international seminar on Great Lakes shipwrecks management; made presentations at a variety of museums, schools, avocational and professional societies, and marine heritage committee meetings; participated in co-operative student shadow programs; attended the CAA and SHA/ACUA meetings; engaged in co-operative research with colleagues from the Institute of Nautical Archaeology (at Texas A and M University), Bermuda Maritime Museum, Amsterdam Maritime Museum, and Mary Rose Trust (Portsmouth, England); and, with ORO staff and the provincial marine archaeologist, presented a marine heritage education seminar at Fort George NHS, Niagara-on-the-Lake, to local ORO staff and the local diving community.

Phil Dunning of the MCR Section gave an illustrated lecture, “Taverns and Drinking Habits,” to the Canadian Ceramic Circle and a presentation on the use of reproductions at historic sites to the Ontario Museums Association. He conducted a workshop, “Deportment in the 18th Century,” at Van Cortlandt Manor for Historic Hudson Valley Restorations. He acted as guest interpreter at Richmondtown Restoration, Staten Island, and took part (in the role of a sutler) in Loyalist Days at Fort Wellington. He was also a judge of tinsmithing and domestic arts for the Upper Canada Village exhibition.

Catherine Sullivan was responsible for the co-op high school student program for the school years 1991/92 and 1992/93. She designed a course of readings and activities that covered the basic principles of archaeological and material culture research, monitored our two students’ attendance and work, and graded their performance.

Olive Jones gave an illustrated lecture, “Setting the Table at the Fortress of Louisbourg,” at the annual SHA conference in Kingston, Jamaica. She also gave a one-day workshop on historic glass at the annual CAA meeting in London, Ontario. Lynne Sussman and John Light refereed manuscripts for Historical Archaeology, the journal for the Society for Historical Archaeology; IA, the journal for the Society for Industrial Archaeology; and Material History Bulletin, Museum of Science and Technology, Ottawa.

MCR staff responded to requests for professional assistance or information from 53 institutions in Canada, the United States, and Europe. Here are a few examples of the kinds of requests that were typical and a few that make life interesting.

- Request from Canadian Museum of Civilization, Ottawa, for assistance in selecting historical objects from their collections for display in History Hall exhibits.
- Request from Canadian Circumpolar Institute, University of Alberta, Edmonton, to identify and comment on a tile fragment from the Tungatsivvik site, a 16th-century Arctic site relating to the Frobisher expedition.
- Request from Ontario Ministry of Culture and Recreation to advise on the excavation method and research design for the study of the smithy at the George Beley House, Brockville.
• Request from Perlen-Museum, Berlin, for names and addresses of individuals and institutions in North America that have knowledge of and/or collections of beads.

• Request from University of Calgary to identify, date, and comment on the European artifacts excavated from three Ashanti sites in Ghana.

• Query from Rochester Museum and Science Center about the effect of baby oil on glass beads.

A complete list of the institutions that requested information or assistance appears below. It is an interesting demonstration of the broad and international character of historical archaeology.

Canada
Bata Shoe Museum, Toronto
Billins Estate Museum, Ottawa
Bytown Museum and Research Centre, Ottawa
Canadian Bottle and Stoneware Collector, Toronto
Canadian Circumpolar Institute, University of Alberta, Edmonton
Canadian Conservation Institute, Ottawa
Canadian Forces Sub-Aqua Club, Ottawa
Canadian Museum of Civilization, Hull
Canadian Museum of Science and Technology, Ottawa
Canadian War Museum, Ottawa
Centre de Conservation, Québec
Fort York Historic Site, Toronto
Glenbow Museum, Calgary
Inkwell Learning Material, Ottawa
King’s Landing Historical Settlement, Fredericton
Laval University, Département d’histoire, Québec
McCord Museum, Montréal
McGill University, Montréal
Memorial University, Dept. of Anthropology, St. John’s
Montgomery’s Inn, Toronto
Musée d’archéologie et d’histoire de Montréal
Ontario Ministry of Culture and Recreation, George
Beley House, Brockville
Prince of Wales Heritage Centre, Yellowknife
Queen’s University, School of Conservation, Kingston
University of Calgary, Dept. of Archaeology
Upper Canada Village, Morrisburg
Vieille maison des Jésuites, Québec

USA
The Bead Museum, Prescott, Arizona
The Carnegie Museum of Natural History, Pittsburgh, Pennsylvania
Center for Bead Research, Lake Placid, New York
Center for the Study of Beadwork, Portland, Oregon

The Clairborne Project, Baltimore, Maryland
Columbia River Maritime Museum, Astoria, Oregon
Costume Society of America, Des Moines, Iowa
East Carolina University, Dept. of Nautical Archeology, Greenville, North Carolina
Fort Stanwix National Park, Rome, New York
Fort Vancouver National Park, Washington
Haverford College, Pennsylvania
Illinois State Museum, Springfield
Richmond County Restorations, Staten Island, New York
Rochester Museum and Science Center, Rochester, New York
Smithsonian Institution, Washington, D.C.
Texas A & M University, Dept. of Nautical Archaeology, College Station
University of Nevada, Reno
Weber State University, Dept. of Sociology and Anthropology, Ogden, Utah

Europe and Other
Historical-Archaeological Experimental Centre, Lejre, Denmark
Mary Rose Trust, Portsmouth, England
Ministère français de la culture
Musée de la Marine, Paris
Museo Naval, San Sebastian, Spain
Perlen-Museum, Berlin
Rijksmuseum, Amsterdam
Scottish Pottery Society, Glasgow

To promote our collection, and to dispel myths about archaeology itself, the Collection Management Section prepared a small slide presentation, “What is Archaeology?” It has been tested in 12 classes in three Quebec schools: Ste-Marie, Quyon; Notre-Dame-de-la-Joie, Luskville; and Vieux Verger, Aylmer. Both students and teachers were highly responsive.

We provided field placement for two Algonquin College students and several high school students. They all had the opportunity to work with “real” archaeological material and learn about collection management.

We helped to organize the Archaeological Services Branch Parks Day display at the Ottawa locks of the Rideau Canal, and organized and set up archaeology displays for the inauguration of CPS PHQ main offices’ new accommodations in the Jules Léger Building in Hull in December.
Outside Publications

Jones, Olive
1992

Light, John D.
1992

Compiled by Robert Harrold, Lyle Henderson, Ellen Lee, Gwyn Langemann, Willis Stevens, Lynne Sussman, and Louise Renaud

Reports and publications produced through the Publications Section, Archaeological Services Branch, Program Headquarters, Ottawa, are listed in the “Reports and Publications” chapter.
The following regional and Program Headquarters reports and publications were produced through the PHQ Publications Section in 1992.

**Microfiche Reports**

In 1982 the conventionally printed Manuscript Report Series was replaced by the Microfiche Report Series/Rapports sur microfiches.

These reports appear in the language of the author; they are not translated and are identified as “Microfiche Report” or “Rapport sur microfiches” depending on the language in which they were written.

A report’s reproduction in the series does not preclude its later editing, translation, and publication; however, not all the research material that Parks publishes necessarily appears first in the Microfiche Report Series.

Microfiche reports are not for sale. Copies are deposited in the federal and provincial archives and in the Natural Resources Library of the U.S. Department of the Interior. Those who require specific material for research purposes should be able to obtain copies of the reports, either on fiche or printed from fiche, at nominal prices from these depositories. Microfiche Reports are also available, while supplies last, to interested researchers by mail from Publications, Parks Canada, Department of Canadian Heritage, 1600 Liverpool Court, Ottawa, Ontario, Canada K1A 0M5. Alternatively, copies may be borrowed on interlibrary loan from Parks libraries in Ottawa and in the regional offices.

In the following list of Microfiche Reports, the date cited in parentheses is the date the report was written, not the date it was produced in the series.

440
**Jerome S. Cybulski**
“Additional Human Remains from Courtine Saint-Louis (Site 39G6), Quebec City” (1991)

441
**François Miville-Deschênes**

442
**Pablo Someyinsky**
“Le site préhistorique 72G: un atelier de taille sur l’archipel de Mingan” (1990)

443
**Anita Campbell**
“Green Gables House, Barn and Farmyard Furnishing Plan” (1990)

444
**Anita Campbell**
“Green Gables House — Pantry, Dairy Porch, Front Hall Furnishing Plan” (1990)

445
**Paul Fortier**
“Brick Barracks Room No. 2 — Fort Malden National Historic Park Furnishings Plan” (1985)

446
**José Benmouyal**
“L’archéologie préhistorique de Penouille” (1990)

447
**E. Gwyn Langemann**

448
**E. Gwyn Langemann**
“Archaeological Sensitivity Classification of the Jasper Park Lodge Leasehold, Jasper National Park, Alberta” (1990)

449
**Eugene M. Gryba**
Eugene M. Gryba

Robert Gauvin
"Le jardin des Gouverneurs à Québec, du XVIIe au XXe siècle" (1991)

Gisèle Piédalue
"Répertoire des vestiges structuraux associés aux magasins du fort Lennox" (1991)

Simon Courcy
"Les objets archéologiques exposés au haut fourneau des Forges du Saint-Maurice: mur des artefacts" (1991)

Simon Courcy

Simon Courcy

Dr. Peter V. Krats

Simon Courcy
"Les objets archéologiques exposés au rez-de-chaussée de la Grande Maison des Forges du Saint-Maurice" (1991)

Arnold Roos
Reports and Publications

358T, Kootenay National Park, British Columbia, Permit WRA 92-1" (1992)

470
Michael Payne
“Labour at Lower Fort Garry in the Mid-19th Century” (1990) “The Role of Women at Lower Fort Garry, 1840 to 1860” (1990)

471
Alain Bernard
“Pour une interprétation des composantes culturelles au parc marin du Saguenay; mise à jour bibliographique, bilan des connaissances, thématique culturelle et orientations de recherche” (1992)

472
Willis Stevens, ed.

Research Bulletins/Bulletins de recherches

Research Bulletins are short papers describing current PHQ and regional research projects. They are not for sale. Issues are available, while supplies last, to interested researchers by mail from Publications, Parks Canada, Department of Canadian Heritage, 1600 Liverpool Court, Ottawa, Ontario, Canada K1A 0M5.

Research Bulletins Nos. 1–81 were printed in the language of the author; subsequent issues were printed in separate English and French versions.

297
Peter Filopoulos and Gary F. Adams
“From Farmyard to Schoolyard: Mitigation at the Staff Facility, York Factory” October 1992

“De la ferme à l’école: Mesures d’atténuation à l’emplacement du logement du personnel à York Factory” October 1992

298
Gisèle Piédalue
“Prisoners in Quebec City: The Ongoing Saga” October 1992

“Prisonniers à Québec: l’histoire continue” October 1992

Gisèle Piédalue
“Archaeological Excavation at Fort Lennox National Historic Site” October 1992

“Fouilles archéologiques au lieu historique national du Fort-Lennox” October 1992

Studies in Archaeology, Architecture and History

J.F. Bosher
Men and Ships in the Canada Trade, 1660–1760: A Biographical Dictionary. 251 pp., 2 black & white illus., 8 genealogical tables. $29.95, U.S. $38.95 outside Canada.

Négociants et navires du commerce avec le Canada de 1660 à 1760: dictionnaire biographique. 263 pp., 2 black & white illus., 8 genealogical tables. $29.95, U.S. $38.95 outside Canada.

When Canada was a French colony, between 1608 and 1760, it depended on shipping from France. Traces of the ships and the merchants behind them are scattered in specialized studies and remote archives. Professor Bosher has gathered facts about more than a thousand of the vessels that crossed the Atlantic during the colony’s last century and about five hundred of the people who owned, managed, or used them, or who otherwise invested in them. This biographical dictionary, in the form of two alphabetical lists, one of ships and the other of men (and some women) in transatlantic trade, is the first book of its kind, and serious students of New France may find it indispensable.

Canadian Parks Service
The Wreck of the Auguste
70 pp., 49 black & white and 13 colour illus. $9.95, U.S. $12.95 outside Canada.

Le naufrage de l’Auguste
70 pp., 49 black & white and 13 colour illus. $9.95, U.S. $12.95 outside Canada.

St-Luc de la Corne trekked on foot from Cape Breton to Québec City in the dead of winter in 1761 after surviving a shipwreck in which most of his family and friends drowned. On board had been many of Montréal’s illustrious fur-trading and military families.

After years of searching, local divers found traces of the wreck in the sands off Cape Breton. These traces — a few bits of metal and wood — and
La Corne's account of the wreck and his journey have allowed Parks researchers to give us a glimpse of that time and its artifacts.

Karlis Karklins

*Trade Ornament Usage among the Native Peoples of Canada: A Source Book.* 244 pp., 135 black & white and 20 colour illust., 7 tables. $15.25, U.S. $19.80 outside Canada.


The Indians and Inuit of Canada were supplied with a wide range of ornaments by white explorers, missionaries, entrepreneurs, and government officials. These items were not only “conventional” adornments such as finger rings, glass beads, and wampum, but also utilitarian articles (thimbles, coins, and spoons) and natural objects (dentalia and cowrie shells, and feathers). The aboriginal peoples also modified imported goods into ornaments. The study describes, in chronological order, how the various “trade ornaments” were used from initial contact to *circa* 1900 by representative tribes of Canada’s seven major native groups.

A.B. McCullough

*The Primary Textile Industry in Canada: History and Heritage.* 314 pp., 120 illus., 19 tables. $16.50, U.S. $21.45 outside Canada.

*L’industrie textile primaire au Canada: Histoire et patrimoine.* 326 pp., 120 illus., 19 tables. $16.50, U.S. $21.45 outside Canada.

Since the mid-19th century the textile industry has played an important role in the labour, business, economic, and architectural history of central and eastern Canada. The woollen and cotton industries were among the first Canadian businesses to employ large numbers of women and youths in a factory setting. The industry was a training ground for many Canadian businessmen who learned both the opportunities and the hazards of investing in manufacturing. It also provided many often-contradictory object lessons for businessmen, economists, politicians, and labour leaders who opposed or supported government’s fostering of industrial development through tariff protection, subsidies, and legislation. And in many places the mills helped to define the community in the same way that churches and public buildings did.

*The Primary Textile Industry in Canada: History and Heritage* examines the major themes in the industry’s history and discusses some of the major surviving mills.

Appendix A
The Parks Canada Archaeological Proveniencing System

The archaeological proveniencing system that is used by Parks Canada is a hierarchical system that integrates site numbers and excavation units into a single alphanumeric code. Although the order and format of the elements of a provenience number are fixed, the meaning given to them is determined by the archaeologist who uses them. This flexibility gives the archaeologist latitude and discretion to use provenience designations best suited to the size and nature of the site.

The elements of a provenience number, using as an example 4A27D6-5, are:

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Operation</th>
<th>Sub-operation</th>
<th>Lot</th>
<th>Artifact/SPECIMEN Catalogue No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A</td>
<td>27</td>
<td>D</td>
<td>6</td>
<td>-5</td>
</tr>
</tbody>
</table>

**Site Number.** A site number consists of two parts—a letter and a numeric. In most cases the letter refers to the province or territory in which the site is located, though there are some exceptions. Letter codes currently in use are:

A Newfoundland  
B Nova Scotia (except Louisbourg)  
E New Brunswick  
F Prince Edward Island  
G Quebec  
H Ontario  
K Manitoba  
N Saskatchewan  
R Alberta  
T British Columbia  
X Northwest Territories  
Y Yukon Territory  
L Fortress of Louisbourg  
M Underwater sites  
U Donated specimens  
V Ontario provincial sites

In all cases but one, the numeric in the site element is simply a sequential number applied as sites are entered into the system. Thus site 4A is the fourth site Parks Canada recorded in province A (Newfoundland).

The one exception applies to donated specimens. Here the number refers to the Parks Canada administrative region from which the specimens originated.

1U National Capital  
2U Atlantic  
3U Quebec  
4U Ontario  
5U Prairie & Northern  
6U Western

**Operation.** The operation is the largest subdivision of a site and can be either an arbitrarily defined portion of a site or a major analytical unit within a site. How it is used largely depends on how the site number has been defined. Where a national park or national historic site has been given a single site number (e.g., to represent a survey), each island or valley or each significant archaeological locus within the park or site could be given an operation number.

Where a national park or national historic site contains many sites that have been given individual site numbers, the operation number usually refers to such things as a single building within a site, or a portion of an arbitrarily defined sampling area of a site, or perhaps a group of related features on a site.
Appendix A

Suboperation. The suboperation is usually an arbitrarily defined excavation unit (e.g., trench, square, test pit, etc.) within an operation, though it may also be defined as an analytical unit, such as a well or tent ring, within a larger complex of archaeological features.

Lot. The lot is the smallest physical unit identified in the proveniencing system. It can be an arbitrary layer, a meaningful layer, part of a layer or a group of layers, a shovel test, a feature (such as a post hole or a hearth), or even the space occupied by a group of artifacts within a layer. The important thing to remember is that the lot means whatever the archaeologist wants it to mean in defining the smallest spatial unit within an excavation.

Artifact/Specimen Catalogue Number. The catalogue number, strictly speaking, is not part of the proveniencing system since it does not refer to a unit of space. It is simply a sequential number applied, following a hyphen, to the provenience number of an individual artifact or specimen so that that object can be identified separately from all other artifacts and specimens from the same lot.

Borden Numbers. Borden numbers may be assigned to archaeological sites in national parks and national historic sites so that they can be registered in provincial and national archaeological site databases. Parks Canada, however, never uses Borden numbers as substitutes for its own provenience numbers. It assigns Borden numbers only as a parallel proveniencing system.
## Appendix B
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACUA</td>
<td>Advisory Council on Underwater Archaeology</td>
<td>GTPR</td>
<td>Grand Trunk and Pacific Railroad</td>
</tr>
<tr>
<td>A&amp;ES</td>
<td>Architectural and Engineering Services for Environment Canada, Public Works Canada</td>
<td>HBC</td>
<td>Hudson’s Bay Company</td>
</tr>
<tr>
<td>ARDA</td>
<td>Archaeological Resource Description and Analysis</td>
<td>HSMBC</td>
<td>Historic Sites and Monuments Board of Canada</td>
</tr>
<tr>
<td>ARM</td>
<td>Archaeological resource management</td>
<td>ICAHM</td>
<td>International Committee of Archaeological Heritage Management</td>
</tr>
<tr>
<td>ARO</td>
<td>Atlantic Regional Office</td>
<td>ICOMOS</td>
<td>International Council of Monuments and Sites</td>
</tr>
<tr>
<td>CAA</td>
<td>Canadian Archaeological Association</td>
<td>MCR</td>
<td>Material culture research</td>
</tr>
<tr>
<td>CARF</td>
<td>Cataraqui Archaeological Research Foundation</td>
<td>NHS</td>
<td>National Historic Site</td>
</tr>
<tr>
<td>CNEHA</td>
<td>Council for Northeast Historical Archaeology</td>
<td>NMP</td>
<td>National Marine Park</td>
</tr>
<tr>
<td>COSEP</td>
<td>Co-op Student Exchange Program</td>
<td>NP</td>
<td>National Park</td>
</tr>
<tr>
<td>CPR</td>
<td>Canadian Pacific Railway</td>
<td>NPR</td>
<td>National Park Reserve</td>
</tr>
<tr>
<td>CPS</td>
<td>Canadian Parks Service</td>
<td>NWMP</td>
<td>North West Mounted Police</td>
</tr>
<tr>
<td>CRM</td>
<td>Cultural resource management</td>
<td>ORO</td>
<td>Ontario Regional Office</td>
</tr>
<tr>
<td>CYI</td>
<td>Council for Yukon Indians</td>
<td>PHQ</td>
<td>Program Headquarters, Ottawa</td>
</tr>
<tr>
<td>DOC</td>
<td>Department of Communications</td>
<td>PNRO</td>
<td>Prairie and Northern Regional Office</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of the Environment</td>
<td>QRO</td>
<td>Quebec Regional Office</td>
</tr>
<tr>
<td>EARP</td>
<td>Environmental Assessment Review Process</td>
<td>SHA</td>
<td>Society for Historical Archaeology</td>
</tr>
<tr>
<td>FHBRO</td>
<td>Federal Heritage Buildings Review Office</td>
<td>SCRM</td>
<td>Submerged cultural resource management</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical information system</td>
<td>WRO</td>
<td>Western Regional Office</td>
</tr>
<tr>
<td>GPS</td>
<td>Global positioning system</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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