# **RESEARCH BULLETIN**

No. 151

March 1981

York Factory National Historic Site Archaeology

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## Introduction

York Factory National Historic Site encompasses two sets of fur trade depots and their surrounding buildings. Located on the north bank of the Hayes River, they pertain to the period from 1790 to 1956, which includes the major depot period and the decline period at the York Factory locale. The buildings are situated in frozen and boggy ground on the edge of Hudson Bay. Today, it's a lonely and forbidding place in a harsh environment and only one building of historic significance remains standing.

In 1978 a small survey crew was sent to York Factory to assess its archaeology needs and potential. During this reconnaissance it was discovered that two earlier York Factory locations had been lost through river erosion and that the remaining location was seriously endangered. During the 1830s rebuilding program the entire depot was replaced and a buffer zone of about 100 m was established between the buildings and the riverbank. That buffer zone had completely disappeared and several structures were found to be partially eroded. The recommendations of the 1978 team were that an immediate program should be launched to salvage the endangered structures, complete a detailed survey of the historic resources and to re-establish, through excavation, a new buffer zone.

The summer of 1979 marked the first year of the salvage and excavation program. The primary goals of this season were to assess the archaeological resources that are in immediate danger of destruction and to excavate as many of these as possible. The project ran 11 weeks with eleven persons on the team. Gary Adams supervised an excavation crew of five people; Margaret Burnip directed two lab workers and Jennifer Hamilton assisted the other two leaders wherever it was necessary. Over the course of the field season, 202 m<sup>2</sup> were excavated and 90 percent of the artifacts were coded for computer inventory. The following text is a short summary of the various operations that were undertaken. To date, there has been no attempt made to present structural interpretation and in-depth artifact analyses have yet to be undertaken.

#### Site Survey

In actuality, there were two different archaeological survey programs undertaken in the 1979 field season. The first was an excavation project that entailed the removal of specific units all along the riverbank. To accomplish this a random sampling procedure was used within given sections that paralleled the river. There were two objectives to this survey. The first was to accumulate an excavated collection of a five percent sample of the artifacts deposited in the danger zone, an area defined as being within 20 metres of the riverbank edge. The second objective was to obtain a subjective evaluation of stratigraphy, features and structures to be found within the same danger zone.

This program lasted 12 days. The method of determining units was to establish a 100 m line along the riverbank, then choose six squares to excavate at random. Over the 12 days, eight lines of six units were set covering 300 m along the riverfront of the site. When these units had been excavated, the emergency nature of some of the salvage excavation necessitated the termination of the survey.

The results of this survey were somewhat varied. One structure was discovered by this method while one known structure and one major feature had units fall within their perimeter. The stratigraphy proved to be more illuminating. It became apparent that the occupation zones were considerably thinner and less complicated than those further inland. There was a relatively homogeneous stratigraphic sequence along the entire bank within the historic compound area. Anomalies almost invariably indicated cultural disturbances. Also, there was a thin, discontinuous band that suggested a spring flood at some time.

The first impression of the artifacts was that the riverfront was not intensively utilized. Future analysis may reveal specific information on the occurrence of certain classes of artifacts in different areas.

The second survey to be initiated was a reconnaissance of historic resources outside the factory compound per se. This year, three different areas were partially surveyed. The riverbank danger zone north of the site was examined for cabins and outlying structures. This survey recorded eight cabins from Sloop Creek (immediately north of the compound area) to Water Creek (immediately south of the York Factory II area). This was an overall distance of approximately 640 m. At each cabin notes were taken on cabin dimensions, outlying features, structural techniques, method of cabin destruction and danger due to erosion. Of the eight sites, four were already partially lost and four were still intact. Finally, at each site, one or two slump blocks were excavated to provide a small artifact sample.

A survey of the drydock was also conducted although dense bush and lack of proper instruments precluded a detailed survey. However, a general description of the feature was provided. The drydock was an excavated trench that inclined from the beach to the level of the land. It was about 16 m wide and 8 m deep at the mouth and had three wooden tracks at the bottom that probably served as ramps. The remaining section was 30 m long with two anchored winches (Figure 1) and a deadman near the head of the trench (32.5 m from beach).

The third area to be examined was at the graveyard. A total of 79 graves was inventoried. The relative location of each was recorded along with information on size, fence decoration, identification of interred individuals, grave orientation and condition. This survey mapped approximately two-thirds of the visible graves (Figure 2).

# Excavations

Over the course of the season, excavations were conducted at nine locations. These locations revealed four structures and eight features, none of which was completely excavated. Operation 1 was at the docking facilities. A total of 25 m<sup>2</sup> were excavated to obtain structural information on the plank loading ramp and on the adjacent boat ramp.

The ramp was constructed on four, parallel sill logs that lay in an east-west direction from the river. They were flattened on top and bottom, set about 2 m apart and sunk into prepared trenches. Over these logs were laid planks varying from 17 cm to 25 cm in width and from 5 cm to 12 cm in thickness (Figure 3). They were approximately 6 m long and the thicker planks were notched to fit over the logs. The overall length of the ramp was 13.9 m from the west end to the point where it was suspended upon pylons. Historic photos indicate that the suspended dock reached well out into the Hayes River.

The boat launch, located about 2.3 m north, consisted of two boards laid side by side. Each was 30 cm wide by 9 cm thick and the entire length was at least 15 m.

Operation 2 was conducted at an unidentified feature that was partially eroded. The feature itself consisted of four logs used to create some form of support system. A trench was excavated in the shape of a cross with one length paralleling the river. Each arm was about 390 cm long, 90 cm wide and 90 cm deep. Into each side were set two parallel logs, each approximately 320 cm long and 20 cm wide with a 30 cm gap between (Figure 4). Both ends of each log have been notched and one large nail was found in several notches. The entire frame was covered with rocks and the trench was re-filled.

Operation 3 began the excavation of two logs exposed in the cutbank. However, as soon as the ground was disturbed a section about 3 m long and 0.5 m wide collapsed, taking the last of the feature along.

Operation 4 was initiated to delineate the foundation of a structure indicated by the survey program. It was decided that this excavation would act as the test of a methodology for structure recording. It had been proposed in earlier reports that endangered structures would be isolated by positioning one metre units in strategic locations until all four corners were located. Whether the structure was anomalous or the methodology ill-suited must now be assessed for it required 24 m<sup>2</sup> to isolate the perimeter. At that, only one definite corner has been identified. It would have taken exactly the same number of units to excavate two perpendicular trenches and recover considerably more data.

The above noted structure was ultimately identified from historic maps as the dog meat/blubber house. It was approximately 15 m north-south by 8 m east-west with sill logs on three sides and a trench filled with rocks along the east wall. There were east-west floor joists at irregular intervals inside the structure and no evidence of doors or windows to date. Though there were no apparent indications of its function in the artifact record, a log compound in the northwest corner corresponded with historic photos of the dog yard. None of the structural remains appeared to be of a very substantial size.

During excavation of this building, 5 m<sup>2</sup> were completed that intercepted the east wall of another structure. This wall was parallel to the west wall of the dog meat/blubber house and it was adjacent to the northwest corner. This second structure was 8.1 m north-south and consisted of a square timber set upon squared log sleepers which in turn were set on two or three round logs sunk into a trench. This has been tentatively identified as the two-storey tailor house.

Operation 5 was initiated to determine the nature of a complex of eroding logs and timbers between the ice house and the river. What was originally believed to be one large structure turned out to be two buildings, a drainage ditch and a loading ramp or second drain.

The first building has subsequently been identified as the York Factory III B sawmill. It was found in a 0.3 m deep pile of wood chips. The intact west wall measured about 4 m and rested on a series of sleepers. The longest east-west log was one that underlay the centre of the west wall and was 4.8 m long. The entire east side was gone. The second structure had only the west wall remaining so, precluding extensive documentation, very little could be noted about it. The overall length of the west wall appeared to be about 12 m with logs resting on large log sleepers. There was about 2 m of remains to the east of the wall so that the original length of the north-south wall was totally undefined. Most of the building was covered in a thick layer of wood chips, particularly at the north end (Figure 5).

The first drainage ditch was a well constructed, covered wood sluice that appeared to have been used to drain the ice house. The excavated section was collapsed but reconstruction appeared to be a feasible venture. It lay between the two structures.

The drainage ditch or ramp was not adequately excavated to allow interpretation. It too had collapsed, but a local informant maintained that there was a ramp to haul ice up to the ice house and this is the most likely location for such a feature.

Beyond the preceding features, there was a large, filled depression, possibly a cellar. It ran under both structures, making a relationship to either unlikely. Very little of this pit was excavated as it appeared to lack wood remains; it was 6.8 m north-south, at least 5 m east-west and about 0.9 m deep. Artifacts recovered from the fill seemed to date between the late 18th and early 19th century, suggesting a relatively early date for the feature.

Operations 6 and 7 were numbers assigned to specific surface collections.

The artifact collection for Operation 6 occurred when about a 30 m length of boardwalk collapsed into the river, exposing some cannonballs and a few other small items (Figure 6). Operation 7 artifacts were collected from the mouth of a collapsed drain or ramp feature to the immediate north of the sawmills.

Operation 8 included 6 m<sup>2</sup> excavated to discern the nature of the eroding southeast corner of the York Factory palisade. The palisade was found to be constructed of round logs, set on end in a 40 cm deep trench. There was no sign of support posts in the area excavated (Figure 7).

Operation 9 was adjacent to Operation 8 and was excavated to identify an unknown feature which was eventually identified as a drainage ditch. This ditch ran north-south, just outside the palisade, and was wood encased. The south end of it has eroded into a gully (Figure 8).

## Interpretation and Conclusions

As the archaeological remains have not yet been properly analysed, the preceding interpretation is subject to revision. However, it is appropriate to make some general comments on the summer's activities and on the future research stages.

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The surveys have already proven useful for the identification of areas of archaeological interest and for on-site assessments of the urgency of excavation. It is hoped that analysis of artifacts from this season's test units will provide some useful indicators of riverside activities. Analysis of the artifacts from the cabins should provide rough dates of occupation. Finally, it is intended that a specialized study of the graveyard including a detailed map will be carried out.

All structural and feature reports will be incomplete in that no operation represents a complete excavation. The primary concern is to study as many eroding features as possible. As a result, all but one feature along the compound areas is excavated to some extent. It is hoped that analysis, in some cases, will result in definite questions that can possibly be answered in ensuing years.

Finally, as an initial assessment, the minimum work required next year will have to include a continuation of the riverbank survey, excavation of five partially eroding structures and the finishing of the graveyard survey. It is also hoped that excavations can commence at two locations that will be endangered within the next few years.

Submitted for publication November 1979.

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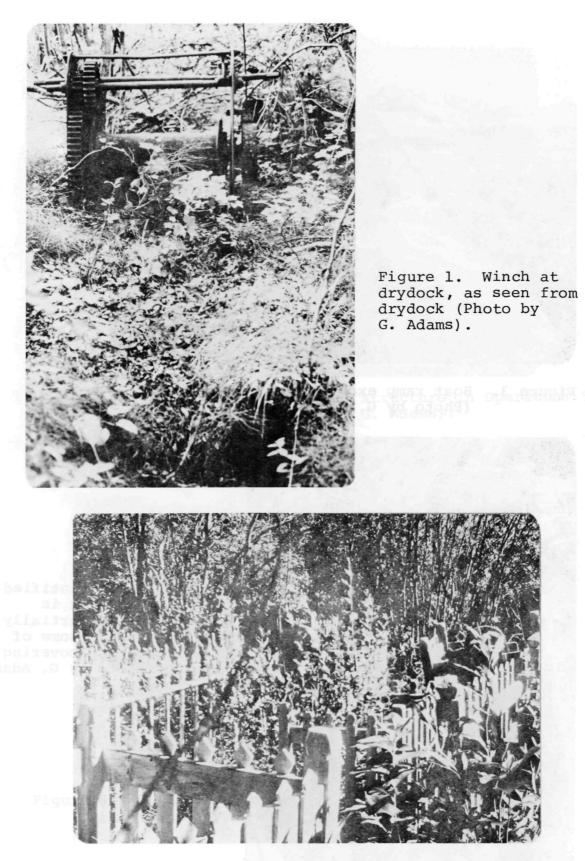


Figure 2. View of graves at York Factory (Photo by D. Tataryn).



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Figure 3. Boat ramp excavations, looking east (Photo by G. Adams).



Figure 4. Unidentified log feature. It is shown here as partially excavated with some of the stone pile covering intact (Photo by G. Adams).

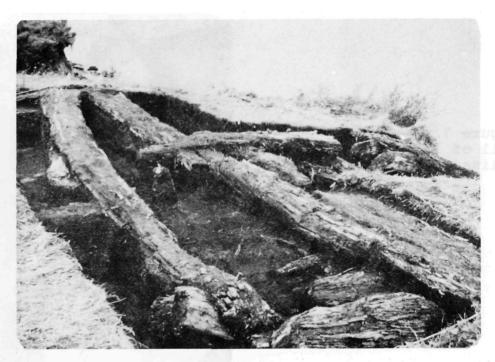


Figure 5. Portion of unidentified structure in Operation 5, looking north (Photo by G. Adams).

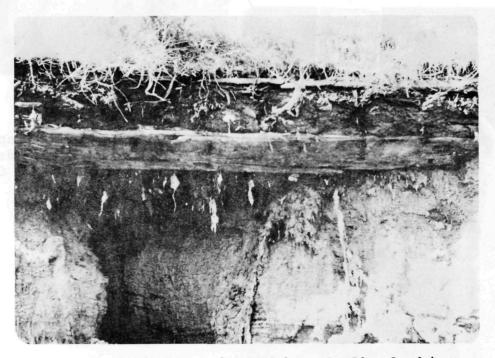


Figure 6. Collapsing section of boardwalk, looking west (Photo by J. Hamilton).



Figure 8. Collapsed south end of a drainage ditch (Photo by G. Adams).

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Figure 7. Section of south wall of 1830-1927 occupation palisade (Photo by G. Adams).



