

# RESEARCH BULLETIN

No. 157

June 1981

End of Season Report: York Factory National Historic Site

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The 1980 field season was the third year at York Factory. It was characterized by the usual problems of excavating in that area. Logistics, bad weather and unforeseen features combined to reduce the output below the original estimations. However, the season did result in the complete excavation of an unidentified structure and the partial excavation of the ice house, a cabin, the dog meat house, several drains, the east palisade and a firepit as well as some testing. The entire excavation program totalled 127 m<sup>2</sup>. The average number of excavators was 5.5 for a mean number of 23 m<sup>2</sup> per person.

The following report intends to summarize the results of the past summer by explaining what was excavated. No attempts at interpretation or conclusion are included but some superficial description is incorporated for clarification.

## Testing Program

The testing program for 1980 was intended to increase the size of the sample along the riverfront. The initial 1979 sample was 300 m long and 2-4 m wide. It roughly paralleled the length of the stockade plus about 50 m to the south. The new sample consisted of four lines, 100 m long, located within the central third of the previous test. This added 24 m<sup>2</sup> in an area 100 m long and 4 m wide extending from north of the sawpit to south of the flour store.

In these initial statements, little can be said about the results of this program per se; however, certain insights can be enumerated. While most of the units evidenced routine stratigraphy and the normal range of artifact types, one unit contained a brick pavement and burn that was right on the edge of an actively eroding gully (Figure 1). This feature was later explored archaeologically. Another unit, near the north end of the test, revealed a George III token (1760-1820), one of the earliest dated artifacts found in context thus far. The first of these two units demonstrated the real value of this



program by locating an endangered feature before it was damaged. The second unit secured a new insight into the occupation of a particular area.

One further note of interest was the relationship between the test units and the erosion of the riverbank. The original intent was to excavate a certain portion of the riverbank area each year to build up a buffer zone of land that was sufficiently well known to prevent the erosion from catching archaeologists unawares. However, this has not turned out to be the case. Rather, it was discovered that the relationship between the test pits and the riverbank was an excellent mechanism to monitor the erosion problem. A plot of the riverbank in 1980, when compared with the 1979 excavation units, revealed that three previous test pits and 33 m<sup>2</sup> of excavation had eroded into the river. It was also noted that while some areas showed virtually no damage, as much as 5 m of riverbank had dislodged in other vicinities.

The forthcoming analysis of the material from this program will be oriented towards an attempt to distinguish major settlement patterns across the front of the site. We are interested in discovering any specific activity areas or signs of differential utilization of the riverbank either by location or through time. We also hope to be able to compare the test assemblages with those of the more intensively excavated areas.

#### Sawpit Area Excavations

The testing program was followed by a small excavation to complete four small operations in and around the sawpit. Portions of this area had been partially excavated the previous year but there were still several information gaps. The initial program was supposed to provide information on five specific features: the unidentified brick pavement, the unexcavated north wall of the sawpit, two wood lined drainage ditches, and the front palisade. The excavation allotment was 4 m<sup>2</sup> for each of the first two and a total of 12 m<sup>2</sup> for the last three. The time allotment was to be 10 days. Ultimately it required 46 m<sup>2</sup> and a total of 25 working days to adequately describe the situation.

The brick pavement turned out to be a shallow, brick lined firepit, approximately 2 by 3 m and about 10 cm thick. It was used repeatedly to burn what may have been scrap lumber or wood chips. The only sizeable quantity of artifacts found within the hearth itself were nails and other wood fastenings or hardware. There was no charcoal but some ash was located and the underlying soils were all heavily fired (Figure 1).

The excavation within the sawpit was to locate the north wall of the structure which had not been found in the previous year. Virtually all the remaining unexcavated portions of the structure were taken out with the 4 m<sup>2</sup> unit but the north wall must have slid into the gully to the north for there was no longer any evidence of it.

The two wood lined drainage ditches or conduits were first discovered in 1979. One of these (conduit A) passed to the north of the sawpit and the other (conduit B) to the south. While the basic structure of the latter had been determined, there was very little information on the former so two small areas were opened up at a point where they intersected the east palisade wall; this allowed reinspection of the three features. Ultimately, 36 m<sup>2</sup> were opened as one feature kept superimposing on another. The largest of these was the entire substructure of an unusual, building-like feature. At this time it is still virtually impossible to reconstruct and interpret everything that was uncovered so this report will provide merely an annotated listing of features.

North of the sawpit the drain (conduit A) was never found and probably never will be. The entire feature has collapsed into a small gully so any attempt at interpretation will be sketchy at best. It probably never was a drain; the possibility that it was a loading ramp is being explored.

The drain south of the sawpit (conduit B) was discovered. The excavation finally reached the top of it the day that it collapsed down a two foot cavity so it, too, has never been re-examined.

However, at least three more drains were discovered in the process so all was not a total loss. One simple wood frame (conduit C) was uncovered that appears to drain from west to east from the back of the fur stores to the river. A more sophisticated wood conduit (conduit D) makes a right angle from this to the east end of the run south of the sawpit where it is suspected there was another right angle. A third channel (conduit E) that drained along the outside of the east palisade had its north terminus in the same location. Finally, some unexcavated remains suggest the possibility of another wood encased trench (conduit F) extending straight east from the same location (Figure 2).

Fragments of the east palisade wall ran through the centre of this excavation area. The wall consisted of short, 50-70 cm long, sections of log. They were usually pointed on the lower end and cut off just below the surface. Relatively intact lengths of palisade existed at both the north and south ends of the excavation while no posts were located in some of the central sections (Figure 2).

A variety of other features was also found in association with drains. Rocks were piled up on either side of conduit D, perhaps to provide additional stabilization for the trench. There was a log pile over conduit E and a series of short poles making a sort of platform were located north of conduit C. At the north end of the excavation there was a frame of two logs laid in an east-west direction over a single, perpendicular log (see Figure 2). Finally, to the west, there was a single log on sleepers at a depth of about 80 cm.

These excavations also uncovered one as yet unidentified feature. It was actually composed of two sections separated

by the possible drain, conduit F. Conduit C extended along the immediate north while conduits D and E lay a metre to the east. The palisade lay midway between the two. The appearance of this feature was similar to that of two small structures. The one to the north measured approximately 2.8 m by 1.6 m with the long axis east-west. The second section was separated from the first by one metre and was close to 3.4 m north-south by 2.8 m east-west. Both sections were built up of round logs, slightly saddle notched. In most places the remains were three courses high though in one area they consisted of four layers of logs. There was some evidence of the sections having been nailed in place in the smaller segment but no nails were located in the larger frame. The most interesting aspect of the construction is that both sections were internally divided with log walls. The smaller part had a single north-south wall dividing the structure into two roughly square segments. The larger section had an interior wall extending in both directions to create four, equal sized, rectangular cubicles (Figure 3 & 4). Context and structural details continued to enhance the mystery rather than explain it. The entire structure was laid on a fill that underlay virtually everything in the vicinity. This fill sealed a former excavation that was at least 17 m long, 8 m wide and 1 m deep. It also predated the sawpit which was constructed over it. The bottom of each cubicle was filled with wood chips, scrap wood and, in some cases, garbage. However, each cubicle was filled to a different height and subsequent fills often varied from cubicle to cubicle. There were also indications of vertical post reinforcements in some of the corners. Finally, three of the walls also had wood slabs laid along the wall to cover the spaces between the logs.

The analysis of the sawpit area will take on several different aspects. The first priority will be to provide a structural and use analysis of the sawpit and its associated features. This will be followed by a similar study of the drainage systems. We hope that these two projects will provide some insight into the function of the unidentified structure. Finally, we have some hints of unrelated activity areas stratified into the designated area. These minor activities may be of considerable value in the analysis of riverfront usage.

#### Ice House

While the ice house was not originally a high priority for the 1980 season, two mitigating circumstances forced a partial excavation of the interior of this structure. First, the complex logistics involved in excavating the above unidentified structure forced a situation whereby the crew had to be on hand for a couple of weeks but often there was not work for several hours or a few days. Second, the unanticipated structure required excavation units right up to the outside edge of the ice house. The knowledge that this would enhance erosion



helped force the decision to excavate. This operation eventually required that 10 m<sup>2</sup> be opened to remove approximately two-thirds of the interior of the ice house structure and a portion of the doorway.

The ice house itself was said to be 10.6 m to a side. The inside dimensions were 7.3 by 3.7 m and the walls, complete with earth mounds, were about 6 m wide making the external dimensions 13.3 by 9.7 m. It was originally a two storey structure but the remaining walls were only about 1.5 m high. Little could be said of the roof except that it was covered with planks, probably laid in an east-west direction and covered with asphalt shingles.

The wall system for this structure was quite complex. They were made of squared logs 12 to 18 cm thick and 14 cm wide. Most corners appeared to be some form of mortised construction. There were four to six courses remaining of all walls. The most intriguing feature, however, was the use of multiple walls. The east side was double walled with a 50 cm intervening space. There were three walls to the north. The first two were separated by a 15 cm gap while the space between the second and third walls was 110 cm. There were at least two walls to the west and south but measurements have not been taken.

The final floor was constructed of 7 cm thick planks of 16 to 20 cm widths. They aligned in a north-south direction and were set on a raised joist foundation. There was an approximately 1 m space, filled with wood chips, between the top of the floor and the base of the outer wall. However the inner wall was only as deep as the floor. One of the supports for this raised floor and inner wall system was one half of a barrel, laid on end. It was still intact and frozen into place.

While considerably more excavation is required to fully reveal the nature of the ice house, some basic interpretation on construction techniques, layout and dates of use will be forthcoming. Furthermore, there are some interesting artifacts that may reveal much about its use and the utilization of the area after roof collapse had made it unserviceable as an ice house.

#### Indian Camp & Dog Meat House

Time constraints forced a reorganization of effort after the ice house had been excavated. To obtain some pertinent information on the dog meat house and to locate a possible native campsite two projects were combined into one. The most crucial aspect of the dog meat house project was to find the southeast corner of the structure. The other priority project was to test for a possible Indian encampment suspected to have existed southeast of the building. The entire project was accomplished by placing three 3 x 3 m units on a diagonal to cut through both of these features.

The corner of the structure was located to finally establish the east-west dimensions of the dog meat house and confirm the previous excavation of the southwest corner.

The search for an Indian encampment was equally successful. The area that was opened revealed two hearths, a large pit, two smaller, brick filled pits on either side of a hearth, 10 pegs and 13 post holes. It was of further interest that the entire encampment seemed to be associated with the first soil horizon. Most areas on the site have richer deposits in the lower layers.

In the following months we hope to fully characterize the campsite stratigraphically. This should provide a valuable tool in separating dog meat house related activities from the campsite activities. It should also provide the beginnings of a recognizable artifact assemblage that can be attributed to York Factory transients.

#### Cabin

The last week of the summer was spent in the test of a cabin to the north of the graveyard, a structure that had already partially eroded into the river. There were several dozen cabins in and around York Factory and though some of them were over a century old, nothing has been learned about them to date. As this particular building was easily accessible, close to or on Parks Canada property, partially eroded and known to be rich in artifacts, it was chosen as the sample site.

Over a week's time 24 m<sup>2</sup> were excavated in a checkerboard of 2 x 2 m units. Structurally, very little was left of the remains. The walls had been banked with clay so that mud sills, sleepers and lower construction timbers were intact (Figure 5). The foundations were 9.4 m long in a north-south direction and over 6 m long in an east-west direction. It appears to have been a frame construction on squared timbers. The foundation timbers were put together with hand forged nails but there was an abundance of wire nails and machine cut nails also laying around.

The only other structural remains were scattered, square timbers aligned in an east-west direction. Each was about a metre in length and under 30 cm wide. They appear to have been sleepers, laid on the original ground surface to support the floor joists. Most of the interpretation that will be gained from an analysis of this structure will be taken from artifacts and artifact distribution patterns. There appears to be a considerable amount of information available on the social and economic lifestyles of the occupants of this building. Also, patterns of nails, fastenings, hardware and pane glass may lead to some additional structural interpretation.

The primary values of this site lie in its architectural and artifact analyses. The structural analysis will be very enlightening and should provide much needed information for the

surface recording of the several cabins that are actively eroding. The artifacts should provide a basic assemblage that can be attributed to York Factory residents. As it appears to conform favourably to the period of the Indian encampment, we hope to be able to make some intrasite comparisons of artifact assemblages.

### Other Projects

The pressures caused by time and excavation setbacks prevented the initiation or completion of a number of smaller projects that were also slated for the 1980 season. One of the most important was a small testing program that was to be conducted in the depot area. That was to be part of an ongoing program to locate the earlier occupation remains.

A second project was thwarted by circumstance. A survey of the over 100 graves that exist at York was initiated in 1979 but not completed. However, as each grave was recorded, it was numbered and tagged with a piece of flagging. It was the only way to keep track of what was finished in that tangle of underbrush. However, upon returning this year, it was discovered that all the flagging had been removed. The story goes that a group of natives were touring in the spring and were horrified to find red flagging (the devil's colour) adorning each and every grave. Therefore, they were removed. Consequently, the survey will now wait until the brush is cleared.

One small project that was accomplished was to completely clean out a mid-twentieth century garbage dump that suddenly spilled out into the river. One day was spent in recording and surface collecting tin cans, bottle fragments and the like from the edge of an eroding section of riverbank and from the talus slope below. About three quarters of a twentieth century garbage dump was removed from a cabin site in this way.

A second small project was the one day excavation of a filled pit at the York Factory II location. This first showed as a disturbed area along the riverbank profile. A local informant (Fred Beardy) suggested that there was a graveyard located at the same spot. Anticipating that this might be an actively eroding grave, some tentative probing was done along the profile. The result was that the pit turned out to be about 3.1 m long, 1.3 m deep and something over 1.3 m wide. There was a layer of cut branches laid east-west along the bottom of the pit and a few scattered artifact remains but no sign of either a grave or structural remnants.

### Laboratory Results

This Research Bulletin is not intended to provide either extensive data or unsubstantial conclusions. It is mostly a record of what was uncovered and why. It is hoped that this will be sufficient to permit readers to gain a basic understanding of the state of the art at York Factory.

However, it would be incomplete to circulate this without a word about the field lab. In an attempt to cut costs this year, the field lab was maintained in Winnipeg. All artifacts were bagged by provenience in the field, coated with Lysol Spray and shipped at periodic intervals along with provenience information, inventory sheets, duplicate lot bag cards, field notes, maps and letters of explanation. This multiplicity of recording techniques was encouraged to reduce errors.

In Winnipeg, the artifacts were opened, washed and sorted. Conservation needs were considered first and then the remainder of the artifacts were processed for coding of basic attributes. The entire lab procedure was to be offset by two weeks. As the season progressed it fell behind by an extra two weeks but, to the credit of all involved, there were very few problems that could not be easily sorted out.

At this time there is still no final count on artifacts, nor has there been any artifact handling to gauge the success of the split crew. However, it does appear that the lack of direct communication between lab and field (limited to letters every two weeks) was offset, in part, by increased lab efficiency and access to resources.

Submitted for publication: November, 1980

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Figure 1. View of firepit after excavation. Note excavated pit and brick pavement.



Figure 2. This photo shows some of the features northwest of the sawpit. In foreground is an unidentified feature, possibly a ramp. In the center is a log platform. Conduit C and the rock or rock-pile showing in the south wall. Fragments of the palisade are along the left edge.

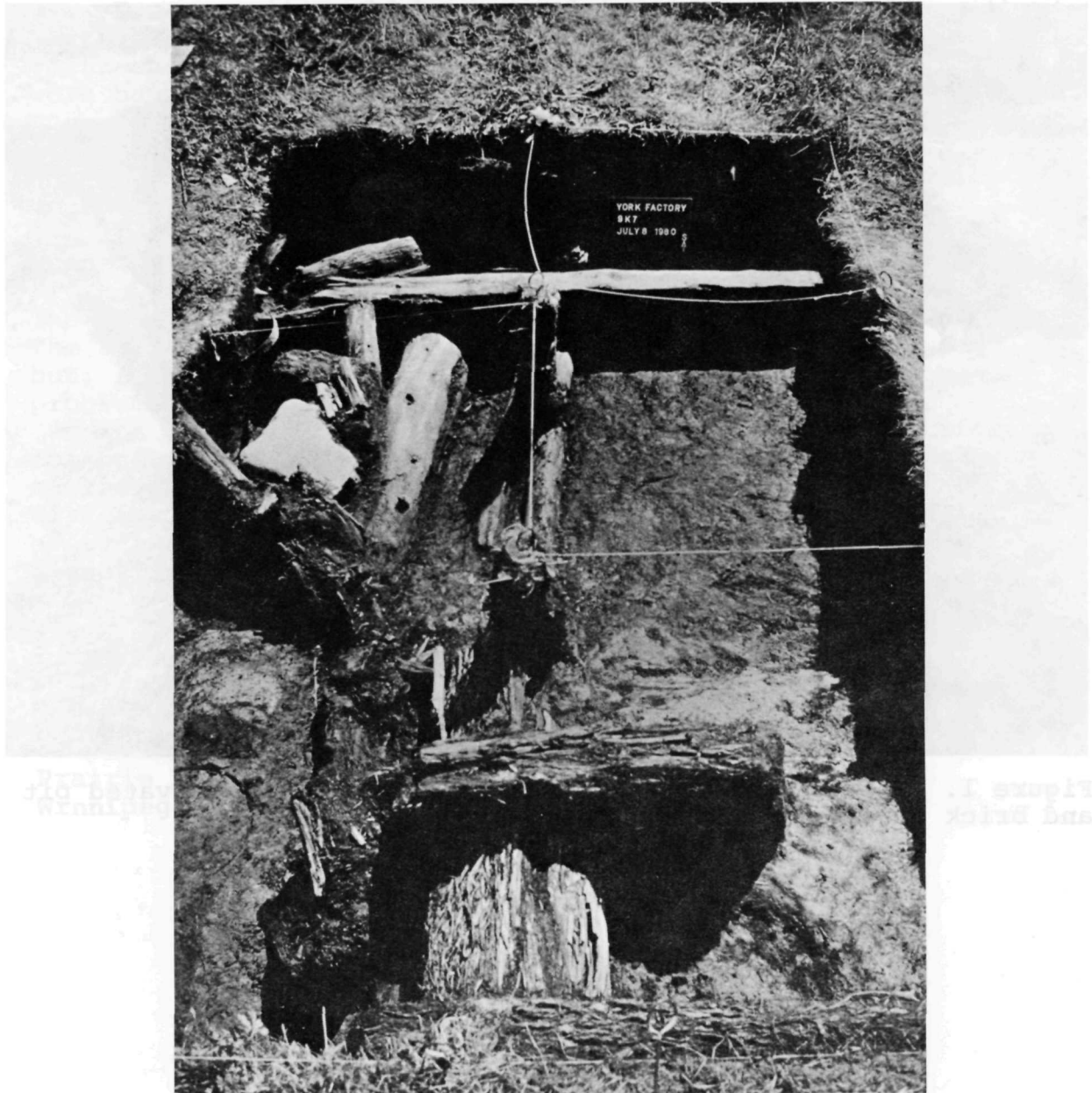


Figure 2. This photo shows some of the features northwest of the sawpit. In foreground is an unidentified feature, possibly a ramp. In the centre is a log platform. Conduit C and the rock or rock-pile showing in the south wall. Fragments of the palisade are along the left edge.



Figure 3. Crew at work on unidentified feature, looking east.

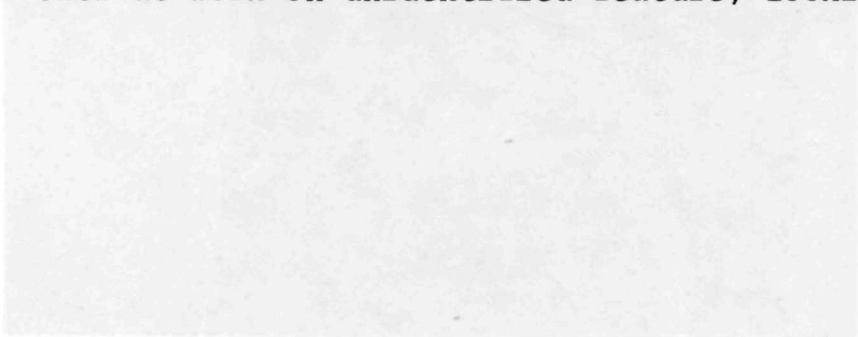


Figure 4. Detail of two wooden beams in unidentified feature, looking east.



Figure 4. Detail of two northern cubicles in unidentified feature, looking east. In the centre is a log platform. Conduit C and the rock or rock-pile showing in the south wall. Fragments of the palisade are along the left edge.





Figure 5. View of cabin excavation, looking north.

ISSN 0228-1228

Published by authority of  
the Minister of the Environment  
© Minister of Supply and  
Services Canada 1981

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Canada