



Back on the horse: Recent developments in archaeological and palaeontological research in Alberta

ARCHAEOLOGICAL SURVEY OF ALBERTA

OCCASIONAL PAPER NO. 36

Archaeological investigations at Fort Vermilion: Inside, outside, and further afield

Heinz W. Pyszczuk^{a*}

^aIndependent Researcher, 50041 Hwy 814, Leduc County, Alberta, Canada, T4X 0K2

*contact: blackgoldkennels@gmail.com

ABSTRACT

Archaeological investigations at the Northwest Company/Hudson's Bay Company Fort Vermilion I (ca.1798-1830) started in 1999. This paper summarizes some of our major findings and results of the 2004-2014 excavations. Those results indicate that the site is stratified in places, as it was flooded at least once, during its 30-year history. A fine screening experiment in 2014 not only recovered more artifacts but also showed bias towards the selection of certain artifacts, especially in certain glass trade bead colors. We found that the very large depressions on the site were barely discernible with the use of LiDAR imagery, but we did locate another large historic depression near the site with this method. Also, the constant rebuilding at the site created difficulties in obtaining accurate building construction information although excavation of at least two hearths was informative. We have now found three palisaded sides of the fort and at least two north palisades. Our investigations also reveal that the site stands dangerously close to the edge of the Peace River and has already been affected by the river erosion. This paper concludes with a discussion about what future work should be done both inside and outside the fort, and perhaps further afield.

KEYWORDS

Northwest Company (NWC), Hudson's Bay Company (HBC), Fort Vermilion, Peace River, log building construction, stratigraphy, fur trade, First Nations, Métis, French Canadians, English, Scottish, Iroquois

1. Introduction

The purpose of this article is to describe and summarize recent archaeological investigations at the Northwest Company/Hudson's Bay Company Fort Vermilion I (ca.1798-1830). Since I have already written extensively about our work at this fort up to 2002 (Pyszczuk 2015), I focus on the results from 2004 onwards (which include the 2004, 2009, 2013 and 2014 field seasons). I conclude by briefly describing plans for future research at this northern Alberta fur trade post.

2. A short history of Fort Vermilion and region

To better orient the readers and provide a solid historic context for this article, I will first include a short history

of this post, its inhabitants, and its role in the larger fur trade operations of northern Alberta. More detailed information on all these topics can be found in Pyszczuk (2002, 2015).

2.1 *The fur trade comes west*

In 1778, the American trader Peter Pond journeyed up the Clearwater River and entered the Athabasca River. He established a small fur trade post below Lake Athabasca. Pond opened up what was to become one of the richest fur trade regions in North America. His total return in furs during that first winter was so large that he was forced to cache parts of it until his return the next year (Smythe 1968). Soon after Pond's inland

excursions, eastern Canadian entrepreneurs realized that not only did the Athabasca River and Peace River drainages hold a wealth of furs, but by establishing more direct trade relations with First Nations people in these regions they gained a distinct logistical advantage over the Hudson's Bay Company (HBC) who were reluctant to move their operations inland from Hudson Bay.

By 1788, the fur trade along the Athabasca River and Peace River began in earnest. The newly formed Northwest Company (NWC), composed of a consortium of eastern Canadians, established a series of fur trade posts along Lake Athabasca and eventually in the Fort Vermilion - High Level region along the Peace River (Figure 1). The new company's chief investors, or partners, participated directly in the trade, leading their men inland to construct and live at their western posts. In so doing, the new company was copying the method of going to the trade, rather than having Aboriginal people come to them, from the French who had cut off the HBC's trade along the Saskatchewan River drainage system 40 years earlier. By the 1790s, the NWC reached the Rocky Mountains with their line of fur trade posts on the Peace River. The HBC had no choice but to follow and compete directly with the eastern Canadians in the interior of western Canada.

By the early 1800s, the HBC also had established posts along Lake Athabasca and by 1802, had ventured up the Peace River as far as the present community of Fort Vermilion. However, through often ruthless trade tactics the NWC dominated the fur trade along the Peace River, and the HBC was often forced to withdraw their trade from the region. For the next 20 or more years, the two fur trade companies battled for supremacy. Judging by profit returns from the region, the NWC prevailed. Finally, the two fur trade companies amalgamated in 1821 to form the HBC, which controlled most of the central and northern Alberta fur trade for the rest of the 19th century.

2.2 The first Fort Vermilion (IaQf-1)

The first Fort Vermilion, also known as LaFleur's Post, named after its French Canadian builder Jean Baptiste LaFleur, was one of the many posts the NWC built along the Peace River as it advanced west. LaFleur was born in 1754 in Lachine, Quebec. In 1786, the NWC hired LaFleur for service along the Peace River. He may have also been one of Pond's canoe men when he journeyed into the Athabasca region in 1778. He was chosen by Charles Boyer to winter at NWC Boyer's Post (1788-1792) located near the present community of Fort Vermilion.

In 1798, Jean Baptiste built the LaFleur's Post, located approximately 63 kilometres (39 miles) upstream from present day community of Fort Vermilion. This post was also sometimes called Upper Fort Vermilion. There is never any mention of why it was called "vermilion" although some local people claim that there are vermilion pigment sources in the region which we have yet to find. It was a strategic post for the NWC (and later the HBC) in the central Peace Region until the HBC moved the fort to today's Fort Vermilion, between 1828 and 1830. Jean Baptiste LaFleur lived at this post until 1806. He continued working as interpreter for the NWC until 1821 when the two companies merged. LaFleur retired to Canada in 1826 (HBCA B.239/g/2, 55). Many of his descendants still live in the region today.

The post, whether occupied by the NWC or the HBC, was never a very grandiose affair – a fact supported by the few documents and the archaeological record. It was small and contained a few structures used to carry out the trade, house the men and their families, and store furs, meat and vegetables from the extensive gardens that surrounded it. The gardens were vital for survival of the inhabitants, as noted by Sir George Simpson, who visited the post in 1821: "The N.W. Co. (who evince great ability in all their plans and arrangements and avail in every advantage the Country affords) derive great benefit from this source, at

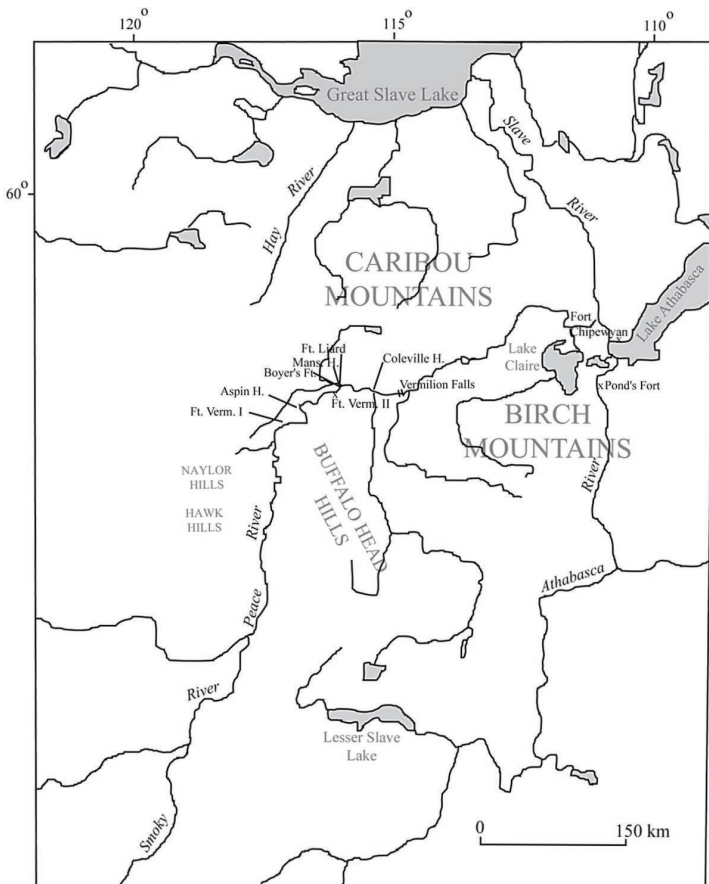


Figure 1. Location of Fort Vermilion and other fur trade posts along the lower Peace River in Alberta.

Dunvegan, Vermilion & Fort de Pinnette they have extensive Gardens, which are of the most essential importance to them” (Simpson 1938:379). And later in 1828 Archibald McDonald of the NWC wrote: “They seem to have good gardens here, in potatoes and barley” (McDonald 1872:14).

The fort is located on the lower river terrace very near the edge of the Peace River (Figure 2). There is not one historic statement about the size or configuration of the post, but our investigations show that it was roughly 30 metres (east-west) by 40+ metres (north-south). It was palisaded but, based on our discovery of very shallow footer trenches in which the wooden pickets were placed (Figure 3), the palisades may have only been about 2 metres high at most and served more as solid fences than major defensive works. There is one reference by Colin Campbell, chief clerk at the fort for the HBC, to the men constructing new palisades in 1827: “the men have been employed at our Gardens erecting new Pickets around the Fort” (HBCA B.224/a/3). By the end of our investigations in 2014, we had found at least two north fort walls and there could be more. Apparently new walls were not always placed in the same spot as former walls.

There are very few historic descriptions of the post and its location prior to 1821. In 1804 David Thompson often stayed at the post during his extensive travels on the Peace River. In 1804, he noted that the post was approximately 27 kilometres (17 miles) down river from the mouth of the Keg River on the “right bank” (PAC, MG19, A8, Vol VI:224). In 1821, after the HBC and NWC amalgamated, the HBC occupied the old NWC fort. The fort remained the principal trading establishment in the central Peace River region. Due to unrest by the Beaver Indians further upriver in the Fort St. John’s area in 1823, the HBC had closed all their posts along the Peace River by 1826, except Fort Vermilion (and then by 1828 began to open them again as tensions between parties eased).

3. Discovery and recovery techniques

We archaeologists spend a good deal of time testing new technologies and methods to find sites, deal with site stratigraphy, or improve the recovery of artifacts, faunal and botanical remains from the archaeological record. We grappled with a few of these issues at Fort Vermilion over the years, often with mixed results.

3.1 LiDAR imagery

In 2012 we obtained aerial LiDAR imagery from both the Fort Vermilion I site and the NWC Aspin House (1792-1798) located further down river from our site (Figure 4). We wanted to see whether this method, which can measure



Figure 2. Aerial view of the location of Fort Vermilion I (1aQf-1) near the edge of the Peace River.



Figure 3. Cross section of the narrow and shallow north palisade footer trench, Fort Vermilion.

distance to a target by illuminating the target with a laser light, could detect the surface remains of our site. The technology is used to make high-resolution contour maps, stripping away the ground vegetation and leaving only bare ground contours, but we wondered if it had a high enough resolution to find the many surface features, composed of depressions and mounds, present at Fort Vermilion. The results of these investigations are mixed. Figure 4 shows both the vegetated Fort Vermilion site (upper panel) and the LiDAR image of the site (lower panel). The larger circle marks the location of the site, while the other two circles

mark other anomalies. One very large depression does show up in the LiDAR image but, if one did not know in advance where the site was located, these features might be overlooked and interpreted as being part of the natural landscape. We did find another very large depression southwest of the Fort Vermilion site (Figure 4), which I will discuss later in this work.

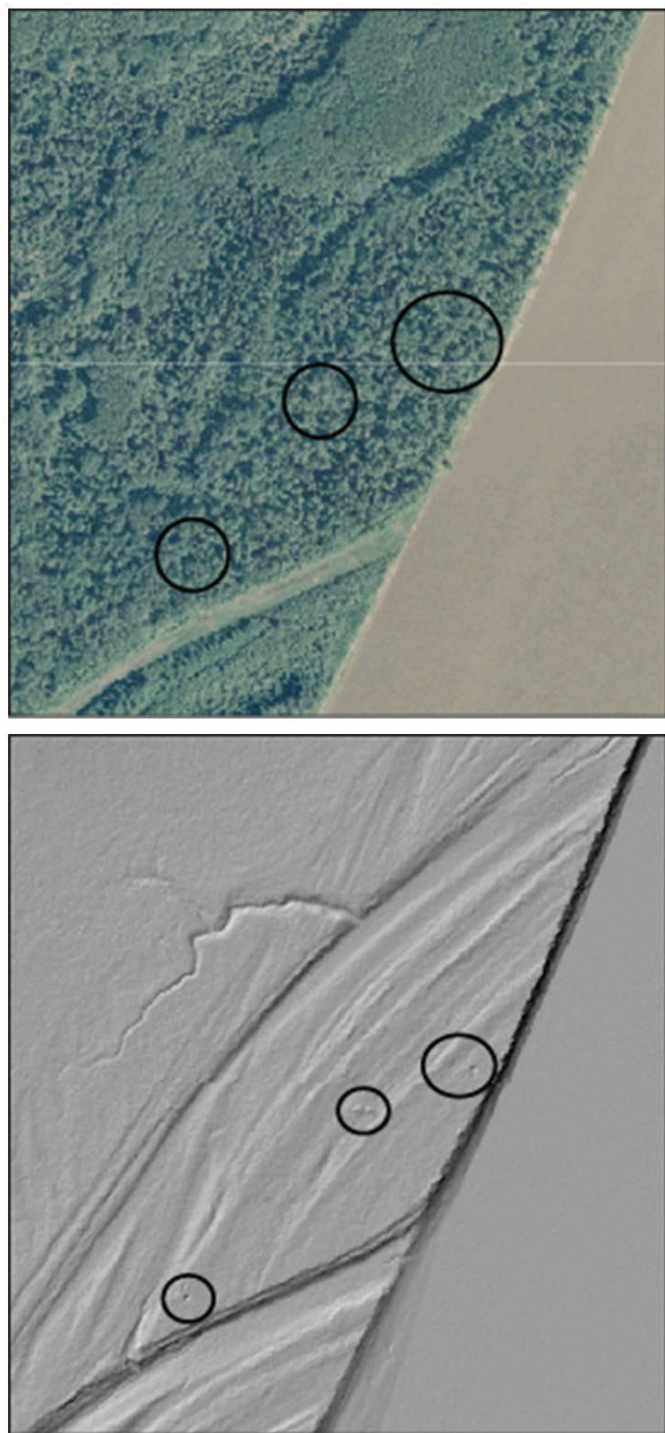


Figure 4. Aerial view of forest over Fort Vermilion (top) and LiDAR imagery of the site surface without vegetation (bottom).

3.2. *Experimenting with artifact recovery techniques*

In 2014, Alwynne Beaudoin and her team from the Royal Alberta Museum (RAM) took bulk soil samples from various site features (hearths, cellar and pit fill) in hopes of recovering botanical remains. The results of that analysis are not yet completed, thus not reported here. We also ran a fine-screening experiment (running matrix through a 2-millimetre mesh) using soil matrix recovered from one of the cellars that contained a high frequency of artifacts and, presumably, also many small artifacts and faunal remains. We wanted to see just how biased our returns were from just excavating and screening our matrix through a standard 6-millimetre screen. The cellar 1-metre unit was divided into four quadrats. One quadrat for each 5-centimetre level was chosen for fine screening, while matrix from the other three quadrats simply went through the normal excavation process and through a 6-millimetre mesh screen. We did this for 10 5-centimetre levels. I focus here on only the glass bead results.

The results of bead recovery frequencies (Table 1) indicate that the fine-screened sample from the combined 10 excavated levels recovered roughly two-thirds of all the glass beads, most of which were seed beads much smaller than 6 millimetres (often 3 to 4 millimetres in diameter), even though it represented only one-quarter of the unit. Secondly, we found that there was bias in the recovery of the white-colored seed beads, which were less frequent in the fine screen sample than in the standard screen sample (Figure 5). In other words, because they were more visible they were found more often when excavating. These results stand in stark contrast to a similar study undertaken by Bundy et al. (2003) who found that seed bead color ratios in the fine and standard screen samples were similar. It is uncertain at this time why our results differ from theirs, since there are numerous potential variables that may have been different at each site (such as excavation methods, personnel, soil color and composition) that could affect the results.

Table 1. Results of glass seed bead recovery from fine screening and standard screening methods, Fort Vermilion..

Method	Frequency	Percent
Normal	46	64.6
Fine Screen	84	35.4

3.3 *Grappling with site stratigraphy*

“Grappling” is a good word to describe our work on the site’s stratigraphy and the sometimes contradictory results we obtained. The site sits on the first river terrace or floodplain, and periodic flooding over the many centuries

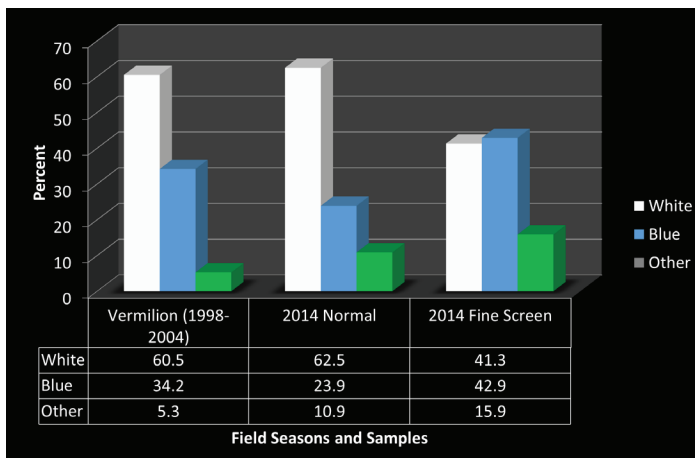


Figure 5. Glass trade bead frequencies and color ratios from fine screening and standard screening recoveries, IaQf-1.

has laid down layers of silts of variable thicknesses. These activities lead to the accumulation of palesols or at least buried dark organic soil Ah horizons observable when we dig down into the terrace. Figure 6 shows the natural silt and Ah layers in a unit that we excavated outside the fort in 2009. In 1822, Colin Campbell stated that: “The water has rose to such a height that the only spot above water is our dwelling House and we are obliged to go about in Canoes – all our gardens are entirely under water” (HBCA B.224/a/2). Based on his description, this was a major flooding event which would have laid down a sufficient layer of river silt on the terrace and fort site to potential covering any earlier occupation. And, this flood occurred at a time in the history of the fort when a new company occupied the fort, potentially separating the NWC occupation from the HBC occupation. So we wondered: is that separation discernable in the archaeological record and can we use it to investigate the site in discrete cultural layers?



Figure 6. North wall of Unit 42, IaQf-1 showing the natural stratigraphy outside the fort showing the numerous well defined flooding layers.

Trying to find the answer to that question has plagued us for many years and continues to do so to this day. We have recorded the stratigraphy carefully and tried to separate these flooding events from one another. After 2002, we began excavating in 5-centimetre layers instead of 10-centimetre levels as we had done previously. We excavated areas outside the fort to get a better idea of flooding events in an unoccupied area. In some areas of the site, we find clear evidence of stratigraphy with artifacts appearing above and below flood and silts (Figure 7). In unit 78, there is a well formed anthrosol (culturally made soil horizon) at about 25 to 30 centimetres and then another one appearing between 45 to 50 centimetres below ground surface (bs), with a layer of silt in between. The wood in the foreground is a building sill that rests on silt 50 centimetre bs.



Figure 7. East wall of Unit 78 showing distinct cultural layers (anthrosols) separated by river silts, IaQf-1.

But, in other areas there is only a thick layer of cultural “goo” where many years of walking and trampling have created a thick homogenous anthrosol seemingly obliterating all flooding evidence (Figure 8). And what is perhaps equally frustrating is that the areas that have good clear stratigraphy have a very low artifact yield, likely because they were not used much, while areas of high activity around and in buildings have high artifact yields but poor stratigraphic resolution. Finally, to compound the problem, even where there is clear vertical separation of layers, trying to dig those layers naturally would be a monumental undertaking and not for the inexperienced. Unfortunately, I cannot expand further on this topic here and readers are referred to my other reports which go into considerably more detail on the site’s stratigraphy (Pyszczuk 2002, 2015:94-95).

Another potential way of dealing with site stratigraphy and superposition is to determine depths and positions of historic horizons on which some of the building features were constructed. For example, two major north palisade footer trenches most likely represent individual building

to lose your Chevy truck in), the layout of

Gray compacted horizon is a major anthrosol.

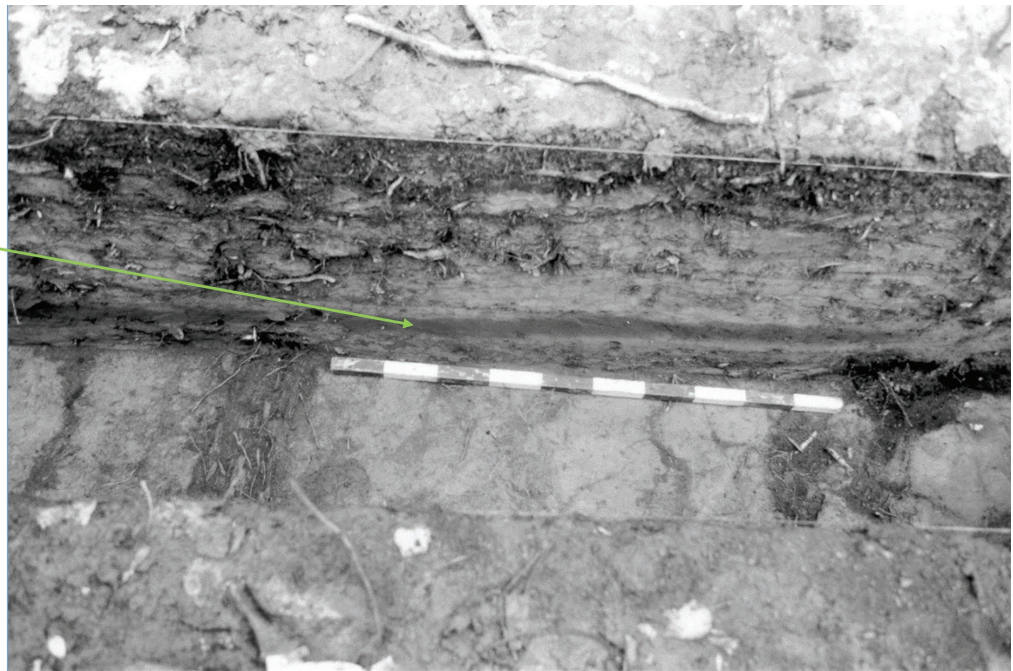


Figure 8. Profile of wall near living quarters showing the gray mass of an anthrosol where artifacts, silts and organic matter have been trampled and compacted into a thick layer, obliterating any clear stratigraphy.

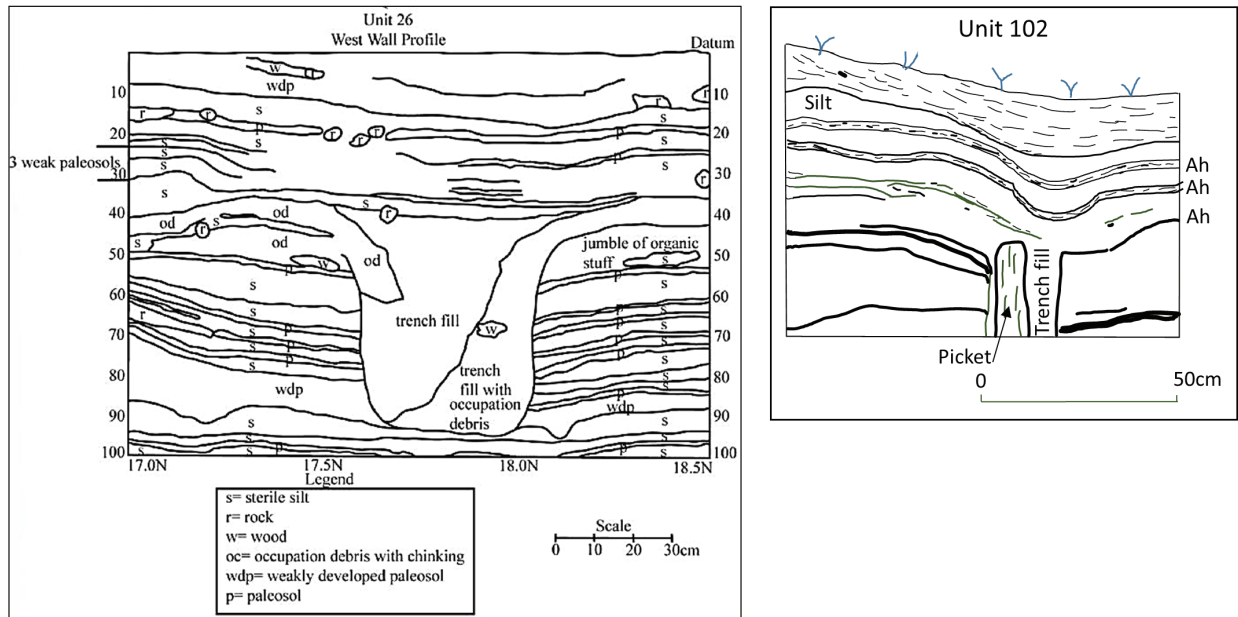


Figure 9. The depth and historic horizons of two north palisade footer trenches, IaQf-1.

episodes at different periods of the fort's existence – one replacing the other at a certain point in time. One of those palisades connects to the west palisade and the other one has yet to connect to anything. When we look at the depth of where the palisade footer trench starts for both north palisades (Figure 9), it is evident that the second northernmost trench (pictured at right) is slightly closer to the present ground surface than the one further south. This difference in

depth suggests that the southern-most trench is the older of the two, with the top starting at least 10 centimetres deeper beneath the present ground surface than the northern-most trench. With careful examination of where other features (such as base stones for hearths, building sills and other structural features) occur, we can perhaps refine stratigraphy somewhat or at least state if one building or structural feature is older or younger than the other one.

3.4 The drone

In 2014 we used a drone equipped with a small ‘GoPro’ camera to take aerial shots of the site (Figure 10). Getting good vertical imagery of archaeological sites and features has been a long standing problem in archaeology. Most of the time, this small flyer worked quite well and we got some spectacular shots of the site, site features, and of our camp (Figures 11 and 12), but, all new technology has its drawbacks, and this one is no exception. Because the drone relies on a GPS system for control, it became unruly at times because we were located in a deep river valley and occasionally lost satellite reception. When this happened, the drone would fly uncontrollably through the woods but, thankfully, not into the nearby Peace River. Well, back to the drawing board.



Figure 10. Our small drone with a GoPro mounted camera.



Figure 11. High aerial view of IaQf-1 beside the Peace River taken with the drone and GoPro camera.



Figure 12. Aerial view of our field camp across the river captured by the drone.

4. Inside the fort

4.1 IaQf-1 site excavation plan and grid layout

The site grid is slightly off present day magnetic north ($\sim 350^\circ$) (Figure 13). Units have been laid out and numbered in chronological order over the years. In total we have excavated approximately 86 square metres, both inside and outside known fort walls. Given that the fort interior alone might be over 1200 square metres, our sample thus far is slightly less than 7 percent of the total area. Most excavations occurred after 2002 (Figure 13). For example, in 2014, with a large crew and one month in the field, we excavated approximately 41 square metres, which is about 48 percent of the total area excavated to date. The positioning of our excavation units has been primarily judgemental, focusing on those areas of the site that would give us vital information about its structure size, building construction, and proximity to the terrace edge, with particular emphasis on those areas of the site in imminent danger from erosion. As Figure 13 indicates the east palisade is dangerously close to the terrace edge, which has receded over the last 15 years, and the south end may already be lost. By 2114, the terrace may be close to the center of the site. There are plans to combine both a random and judgemental excavation plan to ensure that the eventual sample is not biased (Pyszczuk 2015:405).

4.2 Buildings and layout

Extensive searches at the HBC archives have produced no maps of the layout of the post or any detailed descriptions or lists of functions of the buildings that once stood in it. What we know about the size and layout of buildings comes primarily from our archaeological investigations over the last 18 years. Based on the surface evidence, which includes mounds and depressions (some of the latter are large enough

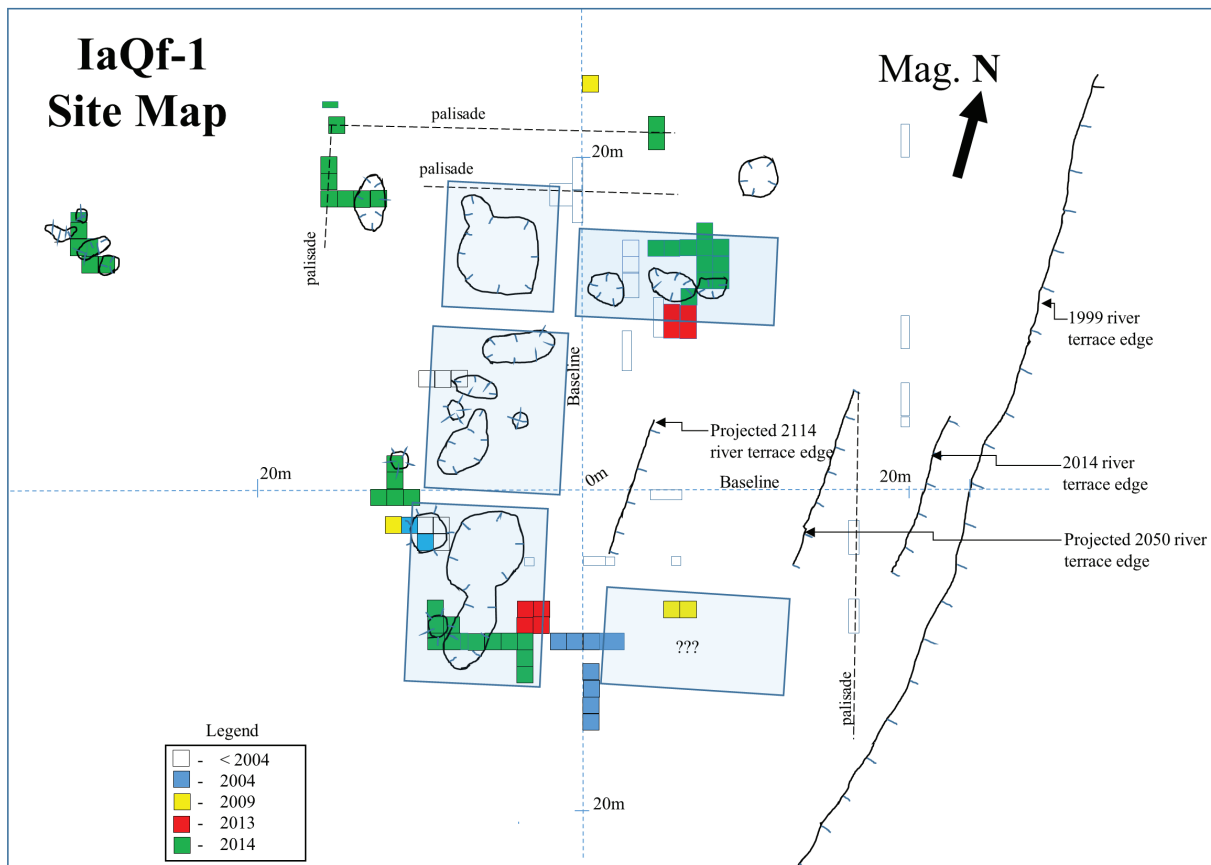


Figure 13. Surface map of mounds and depressions, grid and unit layout, and possible building locations and palisades at IaQf-1.

buildings and structures is not very uniform and does not resemble the common U-shaped fort with buildings surrounding a central courtyard and usually facing the river (Figure 13). Instead, there is a row of buildings running in an east-west direction near the north end of the fort and another row of buildings near the west end of the fort, running a north-south (also slightly angled off our grid). Most of these buildings contained cellars and fireplaces, suggesting they were the living quarters for the company men and their families. The fort's configuration currently then is an "L"-shape with the courtyard facing the river. As far as we know, it was palisaded on at least three sides. (We still have not found the south palisade.) It is possible that another row of buildings runs east-west at the south end of the "L," but without cellars or hearths and chimneys, thereby, leaving no visible surface imprint (as storage buildings or tool sheds would not have cellars) (Figure 13). Our investigations in this area have been very preliminary, and we cannot rule out this possibility.

4.3 Building size and construction details

One of the primary aims of any archaeological investigation of fur trade posts is to obtain as much information as possible about the fort buildings and layout. How big were they, and

how were they partitioned? How were they built, and what function(s) did they perform? Who and how many people lived in them? Thus far, we have not been able to acquire this baseline data about many of the buildings for a number of reasons. First, the historic horizon is buried under 30 to 40 centimetres of river silt; therefore, large amounts of earth must be moved before cultural remains are exposed. And, large areas have to be opened to really understand building construction and layout. Initially that was not our objective. Instead, we wanted to explore a large area of the site in order to understand the overall site layout. Second, the post was occupied for 30 years, first by the NWC and then by the HBC. Palisades and buildings were probably torn down and rebuilt by both companies, causing considerable complexity in interpreting the structural remains.

Evidence of this process is provided when, in 1822 Colin Campbell, then in charge of the fort, remarked that the men were covering the new store roof with pine bark (HBCA B.224/e/1). He further states on May 11, 1822 that: "Four men who are gone up to Isle aux [Saurow] to raft down a House from there, for the purpose of repairing our Store..." (HBCA B.224/e/1). On May 14th, he goes on: "The men arrived with the timber from above and all

hands employed in taking down the old Store and clearing away to erect it a new” (HBCA B.224/e/1). His last remark strongly suggests that the new building was built in the same area as the old one. It is very evident that the HBC carried out considerable repairs and rebuilding when they took over the old fort. In the early years of investigations we examined the east-west line of shallow depressions which we thought represented a row of buildings. In 2013 and 2014, we extensively excavated in this area (Figure 14). We have found a confusion of building remains, cellars and possible privy depressions which certainly represent more than one building construction episode. Excavations in the cellar depressions suggest that they were filled and reused many times, and there is evidence of one pit being dug into another pit that was filled with garbage and debris. These pits contained a very interesting array of artifacts and faunal remains, such as a complete iron adze, and beaver bones (Figures 15 and 16). Evidence also indicates fireplaces had been removed from the old buildings (Figure 17). Suffice it to say that trying to determine building size and construction details in this particular area is proving to be a very difficult endeavor.

In those places where we could make sense of the construction evidence, we found that buildings were of log construction, but we have not yet determined if the companies were using the post-in-ground construction method of the period or some other vertical log construction technique. The French Canadian method of piece-on-piece construction was most common at these early posts built



Figure 14. General view of excavations at the north row of buildings, IaQf-1.



Figure 15. Large iron adze found in the cellar/pit of the north dwellings at IaQf-1.



Figure 16. Beaver bones, whose meat and fat provided good nutrition, discarded at the bottom of a cellar/pit feature, IaQf-1.



Figure 17. Remnants (fire-cracked rocks and ash) of an old hearth in the north line of dwellings.

along both the Peace and North Saskatchewan Rivers. At the Boyer River post that we excavated 1988, the building sill was separated by a vertical post placed in a pit in the ground (Figure 18). At the HBC's Nottingham House, a combination of post-in-ground and possibly post-on-sill log construction was used to erect building walls. When either method were used, vertical posts were placed at building corners (either in a pit or on a foundation log) and along the walls and then horizontal timbers were infilled to construct the walls. The method seems to have switched from post in ground to post-on-sill sometime after 1830 in Alberta (Pyszczyk 1992). We did find building sills and possible joists in some areas that we excavated, however. In one instance we chased a sill for nearly 5 metres and still did not find evidence of vertical post-in-ground construction (Figure 19). It will take considerably more effort to retrieve more details of wall construction and building partitioning for many parts of this site.

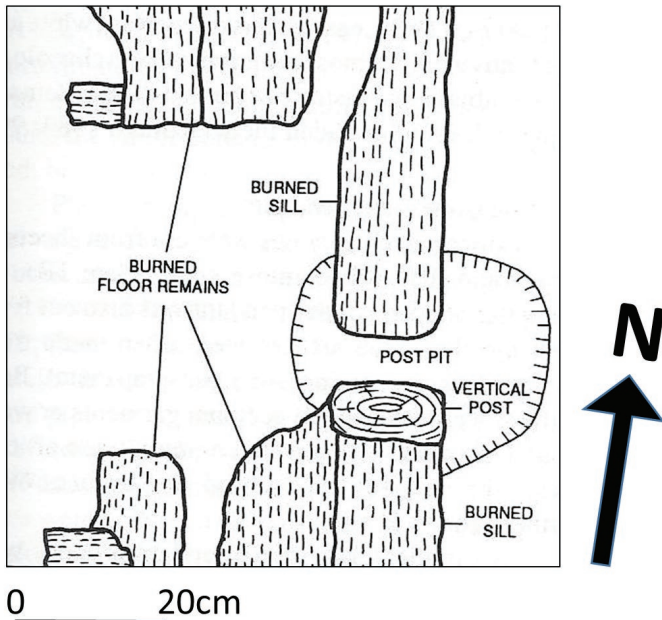


Figure 18. Building sill and vertical post remains, Boyer River post, downstream from Fort Vermilion (from Pyszczyk 1993).

Thus far, we have uncovered two complete hearths (one in 2004, one in 2014) and partially excavated a third hearth in 2014 (Figures 20-22). Hearths are visible as mounds on the ground surface which are formed when both the chimney, made of logs and mud, and the base stones eventually collapse. The base of the hearth is made of three to four courses of large stones which are mortared together with a clay/silt mixture to form a U-shape (for a single hearth), or an H-shape (for a double hearth). The hearth contains a clay firebox and generally is placed along one of the building walls (Figure 20). Hearths can be double, with a firebox at



Figure 19. Two views of building sill or foundation log, north row buildings, IaQf-1. A tree root runs right along the sill remains.

each side separated by a row of stones (Figure 21) providing heat for two separate rooms in the building. This double hearth contained a copper kettle lid in one of the fire boxes, that was either lost or forgotten when the site was abandoned (Figure 22). The partially excavated hearth may have fit into one of the corners of a dwelling (Figure 23).



Figure 20. Double hearth exposed in southern end of the fort, 1aQf-1.



Figure 22. Possible corner hearth at 1aQf-1 showing fallen rocks, possible building sill and thick ash layer in the unit wall.



Figure 23. Complete copper kettle lid found in the firebox of the double fireplace, 1aQf-1.



Figure 21. Single U-shaped hearth in the south end of the fort, 1aQf-1.

Trying to determine building cellar size and construction method also turned out to be a process of futility in the north set of building remains because of the constant rebuilding and infilling. We did not find any cellar cribbing but that may have been destroyed by the rebuilding and tearing down of these features. Or, as was the case at other fur trade posts of the period, such as Nottingham House, cellars were simply crude holes in the ground underneath the floor boards (if there were any) containing neither flooring nor cribbing but were sufficient to keep meat and vegetables cool. In 2014, we examined a depression just in front of a fireplace inside a dwelling, in the southern area of the fort. We hoped that this area of the site was not as rebuilt and disturbed as the north area and that more construction details of cellars would be preserved. This turned out not to be the case. We sectioned the depression and found no structural remains

and determined it also had been filled with debris similar to other depressions we had investigated (Figure 24). That depression turned out to be quite shallow for a cellar. There are still two unexcavated enormous depressions that may not have been filled in prior to abandonment. These probably offer the best chance of finding preserved structural data if it exists. The large south depression certainly was beneath a dwelling since the double fireplace sits close to its edge on the west side, and we have found the east sill of this building on the other side. It appears to have been a building of substantial proportions and quite possibly housed the chief clerk or trader and his family.



Figure 24. Section of a pit/depression that might have been a cellar in front of the U-shaped fireplace.

4.4. *The people and their way of life*

The NWC did not keep records, or perhaps lost them, so little is known about the names or the lives of the fort personnel prior to 1821. Some HBC documents do exist that give information about the fort inhabitants for at least a few years of its operation. I have compiled a set of names and information about the health and the lives of these people elsewhere (Pyszczyk 2015:59-83). I repeat some of that information here as context in which to interpret both the structural remains and some of the artifacts found at the site. Table 2 contains the list of some of the men who lived and worked at the fort after 1821. This list also shows some general information about fort personnel and the type of work each man did to help operate the fort and carry out the trade in northern Alberta. Most of these men performed the labour at the post over the winter and moved the furs east in the spring and brought back the trade goods west in the fall in the canoe brigades. They often also fulfilled multiple roles as carpenters, hunters, and other trade skills at the post since it was of insufficient size to have individual tradesmen. There were interpreters, such as Jean B. LaFleur, and later

Louis Landrie and Francois Hoole for the HBC. These men were vital for the trade to be carried out. The clerks and chief trader made up the officer group at the fort (Table 2). Even after 1821, the HBC kept on many French Canadians who came out with the NWC to work at the Peace River posts. All these men were paid according to their skill level and occupation - labourers receiving the lowest wages, clerks and traders the highest wages.

The population of the fort was never very large, ranging from a maximum of 36 individuals in the winter to as low as 10 people in the summer months when most of the men went east with the canoe brigades (Pyszczyk 2015:62). Many of the men had families who lived with them at the forts (Table 3). The women were either of First Nations descent (in the early period) or of Métis descent (during later times), and they contributed considerably to the operation of the fort and the conduct of the trade. There were also substantial numbers of children (Table 4). At any given time there was a considerable ethnic mixture, consisting of English, Scottish, French Canadian, First Nations and Métis people, living and working together at the fort. The power positions were almost always filled by the English and Scottish clerks and traders and rarely did French Canadians or Metis move into those higher ranks (Pyszczyk 1987).

4.5. *Material culture*

The material culture recovered from Fort Vermilion represents goods and tools necessary to construct and repair the fort, goods to carry out the trade, and the personal belongings of the fort residents, which often reflect the diversity of ethnic backgrounds, gender, and economic standing of the fort. We found an array of iron nails, pintles, and metal strapping for the doors of buildings (Figure 25). Typically, hand-forged nails would have been made from nail rod by the fort smithy. However, we know that the post had no blacksmith because Colin Campbell begged the Company to send him a blacksmith but it never did. We have not found any evidence that a blacksmith shop existed at the fort, so the origin of these nails is somewhat baffling. It is possible that they were made at the larger forts that had a blacksmith, such as Fort Chipewyan, and then shipped to Fort Vermilion. It is clear from comparing the amount of metal building materials at these northern posts to the more southern-based posts, that the northern posts generally used less metal materials to build their posts, likely because of the weight of the material and length of the supply lines (Pyszczyk 2015).

Trade goods were an integral part of the material culture at these posts necessary to acquire both furs and provisions from First Nations and freemen who lived in the region.

Table 2. List of men employed by the HBC at Fort Vermilion in, their place of birth, age, occupations and ethnic backgrounds.

NAME	Place of Birth	Date of Birth	Date of Death	Age	District	Position	Ethnic
Campbell, Colin	New Johnstown, ON	c.1787	1853	66	Athabasca/Peace	Clerk-Chief Trader	Canadian/U. Canada
Beauchemin, Joseph	?	?	?	?	Athabasca	?	French Canadian
Beauchemin, Michelle	?	?	?	?	Athabasca	?	French Canadian
Bouchard, Olivier	La Prairie	1794	?		Athabasca/Columbia	Steersman	French Canadian
Belhumeur, Louis	Berthier, QC	1799	?	?	Athabasca	Middleman	French Canadian
Cataphaar, Antoine	Riviere du Chien	1795	1840	45	Athabasca	Middleman	?
Charbonneau, Jean Baptiste	Boucherville	1795	1882	87	Athabasca/Others	Bowsman	French Canadian
Constantin, Joseph	?	?	?	?	Athabasca	?	French Canadian
Dupuis, Leon	Constant QC	1798	?	?	Athabasca	Canoeman	French Canadian
Errand, Jean Baptiste	?	?	?	?	Athabasca	?	?
Faries, Hugh	Montreal	1779	1852	73	Athabasca	Chief Trader	Canadian
Finalayson, Duncan	Dingwall	1795	1862	67	Athabasca/Others	Chief Trader	English/Scottish
Francour, Jean Baptiste	Yamaska, Quebec	1797	?	?	Athabasca	Canoeman	French Canadian
Fraser, Paul	?	?	?	?	Athabasca	Clerk	?
Gibonteau, P.	?	?	?	?	Athabasca	Canoeman	French Canadian
Gibron, Louis	?	?	?	?	Athabasca	?	French Canadian
Grigoni, Igna	?	?	?	?	Athabasca	Engage	?
Hoole, Francois	St. Boniface, Red River	1798	1885	87	Athabasca/MacK	Interpreter	Metis/Native
Lamprant, Joseph	Machiche [QC]	1798	?	?	Athabasca	Middleman	French Canadian
Landrie, Louis	?	1797	?	?	Athabasca	Interpreter	Metis/Native
La Fleur, Jean Baptiste	?	?	?	?	Athabasca	Labourer	French Canadian
LaPointe, Joseph	?	?	?	?	Athabasca	Canoeman	French Canadian
Lariviere, Francois	L'assomption	1797	?	?	Athabasca/MacK	Middleman	French Canadian
Leith, William A.	Firth, Orkney	1767	?	?	Athabasca	Canoeman	Orkney
Marois, Pierre	?	?	?	?	Athabasca	Engage	French Canadian?
Piche(r), Francois	?	1798	?	?	Athabasca	Bowsman/Steersman	Metis/Native
Ross, David	Maskinongé	?	?	?	Athabasca/Others	Guide	?
Roy, Joseph	?	?	?	?	Athabasca	Clerk	French Canadian?
Sinclair, William Sr.	Lyking, Sandwick	1766	1818	52	Athabasca/Others	Interpreter/Labourer	Orkney
Stewart, Alexander	-	1780	1840	60	Athabasca/Others	Clerk/Trader	-
Tourangeau, Jean Baptiste	Montreal	1803	?	?	Athabasca	Middleman/Guide	Metis

Table 3. List of men and their marital status at Fort Vermilion.

NAME	1822-1823	1826-1827	1827-1828	Age (at that date)	Marital Status at Fort Vermilion
Campbell, Colin	present	present	present	44-50	yes
Roy, Joseph	present	-	-	?	no
Landrie, Louis	present	present	present	25-31	yes
Grigoni, Igna	present	-	-	?	yes
Beauchemin, Joseph	present	-	-	?	no
Beauchemin, Michelle	present	-	-	?	no
??, Michel	present	-	-	?	no
Constantin, Joseph	present	-	-	?	no
Cataphaar, Antoine	present	-	present	27-33	no
Errand, Jean Baptiste	present	present	present	?	yes

Table 3. (continued)

NAME	1822-1823	1826-1827	1827-1828	Age (at that date)	Marital Status at Fort Vermilion
Lamprant, Joseph	present	present	present	24-30	yes
Piche(r), Francois	present	-	-	24-30	yes
Gibran, Louis	present	-	-	?	no
La Pointe, Joseph	present	-	-	?	no
Dupuis, Leon	present	-	-	24-30	no
Gibonteau, P.	present	-	-	?	no
Francour, Jean Baptiste	present	-	-	25-31	no
Roy, Jean Baptiste	present	-	-	?	no
Fraser, Paul	resent	present	-	?	yes
Hoole, Francois	present	-	-	24-30	no
Marois, Pierre	present	-	-	yes	yes

Table 4. List of men and their family members at Fort Vermilion in 1822-23, 1826-27, 1827-28.

YEAR/NAME	Wife	Ethnicity	Girls	Boys	TOTAL
1822-1823					
Campbell, Colin	Elizabeth	Metis	1	1	4
Landrie, Louis	yes	-	-	-	2
Grigoni, Inga	yes	-	-	-	2
Piche, Francois	yes	-	1	-	3
Errand, Jean Baptiste	yes	-	1	-	3
1826-1827					
Campbell, Colin	yes	-	5	-	7
Fraser, Paul	yes	-	-	-	2
Landrie, Louis	yes	-	1	1	4
Lamprant, Joseph	yes	-	-	-	2
Marois, Pierre	yes	-	-	1	3
Errand, Jean Baptiste	yes	-	-	-	2
1827-1828					
Campbell, Colin	yes	-	6	-	8
Fraser, Paul	-	-	1	-	2
Errand, Jean Baptiste	yes	-	-	-	2
Landrie, Louis	yes	-	1	1	4
Lamprant, Joseph	yes	-	-	-	2
Marois, Pierre	yes	-	1	-	3

Many of these goods, such as tobacco, alcohol, glass beads, guns, and assorted clothing were also bought at the company stores by the fort personnel. A review of fort records shows what Francois Hoole and Joseph Lamprant, for example, bought in 1827 for their families while living at the fort. Some of these articles enter the archaeological record of the fort and give us a glimpse of the variety of goods the companies brought west for the trade and the employees. Among the most common articles are glass beads of assorted

colours, number in the thousands (Figure 26). They were not only in great demand for trade to First Nations and Métis but also were bought by the Company men for their wives to make decorative garments. Some items, such as the trade silver items, were brought by the NWC who commissioned Quebec silversmiths to make silver trade items for use in the west (Figure 27). Often this silver was snipped into smaller pieces at the fort to make articles of adornment.



Figure 25. Ironworks found at IaQf-1: iron hand-forged nails (top); pintle used to hang a door (middle); and, metal door strapping (bottom).

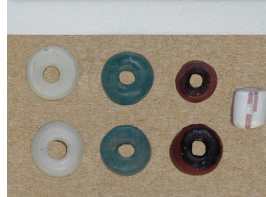
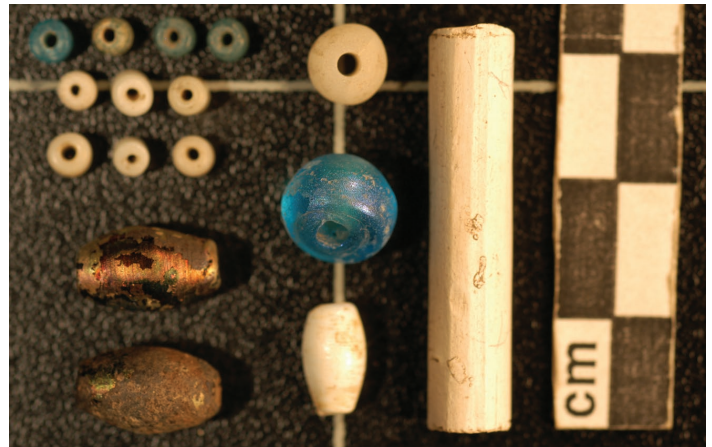


Figure 26. An assortment of small glass trade beads found at Fort Vermilion.

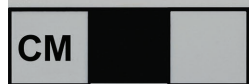


Figure 27. Fragments of trade silver used for adornment, IaQf-1.

Perhaps the most interesting of the many of the personal objects we have found over the years at these early northern posts are the items that speak strongly to ethnic and gender affiliations and to the complexity and diversity of groups of people present. The small silver cross of Lorraine with the maker's mark initials stamped on it (Figure 28), and a Jew's harp, (not to mention the log building techniques used) represent the strong French Canadian presence at these posts. The Scottish and English officers enjoyed more spacious living arrangements, with better quality construction and specific room partitioning, while smaller cabins, sometimes with dirt floors and holes for cellars were for labourers. This speaks to the inequality that existed even at this small, remote post. The locally made bone and shell pendants, various colored beads and some utilitarian tools such as a snowshoe netting needle (Figure 29) all reflect the very strong First Nations presence at the site and particularly the women who used these tools in their everyday work and activities at the fort.



Figure 28. Small silver cross of Lorraine.

We found some surprising and mysterious articles, some of which are difficult to identify. There are highly decorated bone objects (Figure 30), the function and affiliation of which remain unknown. We found several platform stone pipes, which are common in eastern Canada along the St. Lawrence River, but which have also been found in domestic contexts at Vermilion and other posts (Figure 31). Their origins and ethnic affiliation are also somewhat baffling, but we think they were brought out by French Canadians or Iroquois working for the NWC (Pyszczuk 1988, 2015).

5. Outside the fort

We assumed that all buildings, with the exception of stables, would be located within fort palisade walls. That turned out not to be the case, or we have an even larger post than originally thought (and there exists yet another palisade even further north), and we have not found all palisades yet.



Figure 29. Locally made bone objects from IaQf-1. Bone pendant with scalloped edge (top); highly polished snowshoe netting needle (bottom).



Figure 30. Bone objects of unknown function, IaQf-1.



Figure 31. Stone platform tobacco pipe bowls (top) and a base (bottom), IaQf-1.

5.1 North building structure

In 2009, we excavated a number of units further north of the site in an attempt to examine the natural stratigraphy of the river terrace. To our surprise, building structural remains appeared at least 3 metres north of the north palisade wall (Figure 32). Because our investigations are still preliminary, we do not know the size or configuration of this structure, which had no visible surface evidence, or its possible function. The HBC did have stables, but documents seem to suggest they were much further away from the fort than this structure. Another possibility is that this structure post-dates the fort occupation since the local freemen population remained in the general region when the fort was moved downriver in 1830.

5.2 Southwest structure and footer trenches

In 2014, the site was completely cleared of brush, and the old dangerous trees (ready to fall on people below) were removed (Figure 33). Afterwards, we could clearly see the ground surface contours, which yielded a few more surprises. Another depression was located outside the southwest corner of the fort. We could also discern



Figure 32. Structural remains, north of the north palisade, IaQf-1. Large wooden timber in the foreground and a small piece of wood running beneath it at a right angle.



Figure 33. The Fort Vermilion site before (left) and after bush removal and tree cutting (right).

shallow linear trenches running east-west and north-south, which upon excavation, turned out to be footer trenches for palisades (Figure 34). At some forts that I have visited, such as the 1792-1798 NWC Aspin House downriver from our site, these trenches were still quite deep and visible even in the dense bush. But not so in the case of Fort Vermilion.

5.3 West depressions

During our initial mapping of surface features at the site in 1999, we found a series of five to six depressions about 30 metres west of the fort. These ranged between 1 and 2 metres in diameter and .5 metres deep, and sometimes overlapped one another (Figure 13 and 35). Based on their surface configuration, these features could be privies, trash pits, cellars, or possibly burials (according to the HBC documents, a cemetery does exist somewhere near the fort). In 2014, we began to investigate a few of these features in hopes of identifying their function and retrieving an artifact and faunal sample from them. Although we did not finish

excavating them, the upper portions were filled with refuse containing ash, faunal remains and some artifacts (Figure 35). Their function is still not clear, but they appear to be most likely privies and/or trash pits that had been re-dug. We plan to complete our excavations of these features at some future date.



Figure 34. Cross section showing outline of the west palisade footer trench, IaQf-1.



Figure 35. Excavation and sectioning of pits/privies west of the fort.

There is a mysterious large depression on an old river channel bank west of the site, which we found in 2004. It looked like a cellar depression, and we thought it might have been an outbuilding related to the fort or perhaps related to a later occupation after the fort was abandoned. In 2009, we investigated this feature by placing a long linear trench (Figure 36) near it which we thought would catch any building structural remains, recover artifacts, and possibly intercept the west palisade which we still had not found at that point. The feature also seemed to be on higher ground than the surrounding area; according to Colin Campbell when the river flooded in 1826, his house was the only one not flooded.

We found absolutely no structural remains and very few artifacts, and careful measurement of the height of this feature relative to the rest of the fort surface revealed that it is not any higher. The artifacts we did find suggest that the feature was contemporaneous to the fort occupation but what exactly it was we were looking at is still a mystery. Furthermore, the feature is definitely outside the fort because we eventually found the west palisade which turned out to be over 30 metres east of it.



Figure 36. Bob Dawe excavating near a large depression on the banks of an old meander channel west of the fort.

6. Conclusion

As this brief synopsis of previous work at the site has demonstrated, there are still many issues and questions that need to be answered about this fort. This is a particular concern since the site sits precariously close to the river terrace edge and is eroding away every year (Figure 37). The east palisade is approximately 5 metres from the edge (Figure 13), and we have already lost some fort remains (a stone hearth) that were lying by the water's edge when we first arrived in 1999 (Figure 13). If this site were to slide into the Peace River tomorrow, we would not have sufficient evidence about its configuration, how it was built and how its inhabitants lived.



Figure 37. The river terrace beside IaQf-1 eroding away year by year and exposing archaeological deposits.

It is not just the inside of the fort that needs further investigation but also those features outside its confines which are still a mystery. As mentioned earlier, LiDAR survey picked up a very large depression located about 500 metres southwest of the fort (Figure 4). In 2014, Eric

Damkjar, Archaeological Survey of Alberta and Bob Dawe, Royal Alberta Museum, located the feature. They believe it is likely man-made but whether it is related to the fort, post-dates it or belongs to a rival trader or one of those freeman families that Colin Campbell lists in his journals is presently unknown. This feature should be more thoroughly investigated and tested.

Aside from investigating these features, perhaps we should further expand our research design to include more examination of the history and archaeology of the surrounding populations. If we are to write a regional history eventually, our investigations have to be more all-encompassing, both spatially and temporally. While the fort was an important component of that history, so were the people who lived outside it in the region. There are two aspects to this work that are both necessary and interesting: 1) investigations including shovel testing of the upper river terraces near the fort; 2) research of the Métis freemen that were possibly living in the region when the fort was occupied. The first part would be aimed at identifying if a prehistoric component exists nearby and in part derives from a statement made by Colin Campbell in 1822: “The advantages of this place are very few over any other except that it is that ground is tilled for our Gardens and being a critical place for the Natives to bring in their find.” (HBCA B.224/e/1). The last part of Campbell’s statement begs the question of whether this particular spot on the Peace River had a long and extensive use by First Nations people, or if it became important only once Europeans began to build along the Peace River. Extensive shovel testing on the river terraces may eventually help answer that question. Many of the early forts were placed in those areas where there was a prior high native presence and land use (Pyszczyk 2015).

The second part, that of beginning to investigate how the local population of freemen lived in the area, involves finding those early period (pre-1830) cabin sites in the region. From the HBC documents, we know that freemen regularly came to the fort to trade and consisted of both Métis and Iroquois who settled in the area after the two companies amalgamated in 1821 (Table 5). We even know the names of these people (as listed in Table 5) but not the goods that they bought from the company stores. We have debt lists of what the company men, including Métis such as Francois Hoole, bought at the stores, but there are no similar lists of goods bought by the freemen who lived outside the fort walls. Furthermore, we have no idea where those freemen lived and how long they stayed after the post was closed. This is an avenue of research that is very important but it may turn out to be like looking for a needle in about ten haystacks. The area is large, the bush is dense, bears are plentiful and the bugs and rose bushes bite!

Table 5. A list of names of ‘freemen’ families who traded at Fort Vermilion, 1826-27.

54

List of Freemen in Peace River 1826/27

	Abnaki			Dumalis				
	1826/27	1827/28	1828/29	Men	Wives	Male Children	Female Children	Total
Michel Annonciade (Sagouis)	136	126	31	1	1	1	1	3
Jacques Annonciade	28	14	50	1	1	1	1	1
Jos. Cananawiche	126	35	91	1	1	1	1	3
Ignace Namimantle	35	35	1	1	1	2	2	6
J. P. L. L. L. L.	35	35	1	1	1	1	1	3
J. P. L. L. L.	7	7	162	1	1	1	1	4
J. P. L. L. L.	7	7	84	1	1	1	1	1
J. P. L. L. L.	28	31	34	1	1	1	1	3
J. P. L. L. L.	28	31	34	1	1	1	1	4
J. P. L. L. L.	42	37	1	1	1	1	1	1
				10	7	7	3	27

Recapitulation

	Men	Women	Male Children		Female Children		Total
			Abnaki	Dumalis	Abnaki	Dumalis	
Upper Peace River Indians	35	32	13	32	1	11	294
Lower " " "	47	63	12	69	5	37	247
Total Nations	102	145	25	101	6	48	531
Chippewy and Dumalis	12	21	4	18	1	7	62
Grand Total	124	166	29	119	7	55	622

The intriguing aspect of this avenue of research is that the settlement of Carcajou, located approximately 27 kilometres upriver from Fort Vermilion has a long history as a primary Metis area. Furthermore, the east boundary of Métis Settlement Number One (Paddle Prairie), established in 1950s for the Métis by the Province of Alberta, butts right up against the Fort Vermilion site. I doubt that this is a coincidence. The Métis probably had a long history of land use in that area which led to the official designation of that settlement. During our cursory drive along the west bank upriver on the Métis settlement one afternoon in 2014 we observed an open pine forest, high terraces over the river and some very good places for settlement. And, we also know from the many forts in Alberta, including Fort Vermilion II downriver, that the freemen would often settle close to the fort, so perhaps finding those sites may not be as elusive as we think. In fact, we may have already done so with that large depression located southwest of the Fort Vermilion site.

This project, from its inception, has taken us on a remarkable journey towards a better understanding of our

northern history and what it means to the people of the region. By engaging members of the local community with their own history, instead of simply recording it, both its meaning and value are certainly enhanced. We have had the direct descendants of Jean Baptiste LaFleur visit the site, and we hope in the future that others will step forward to help us investigate it as they have in the past. The site is dangerously close to the edge of the Peace River, and with the rate of erosion that we have witnessed over nearly the last 20 years suggests it may soon succumb to the river. The Peace River is not a very predictable waterway and in times of raging floods, has been known destroy many metres of river terrace in mere hours. While we may not be able to save the entire site, at least we should attempt to obtain a sample before we lose it outright.

Interpreting and writing about history from a materialist perspective leads to insights about the everyday life of the inhabitants not always attainable with any other evidence. However, by combining both the documentary and archaeological record that history becomes richer and more complete than with only one or the other type of evidence. For large segments of time there is no documentary record of this fur trade post and we are left with only an archaeological record that has preserved some facets of this fort, its construction and the lives of its people. Details about First Nations and Freemen ways of life in the surrounding area, further afield, presently remains even more elusive.

7. References

Bundy, B. E., A. P. McCartney, and D. W. Veltre. 2003. Glass trade beads from Reese Bay, Unalaska Island: Spatial and temporal patterns. *Arctic Anthropology* 40:29-47

Hudson's Bay Company Archives.
 Abstract of Servants' Accounts pre-1873. HBCA B.239/g/2, 55.
 Fort Vermillion Post Journals, 1822-1823. HBCA B.224/e/1
 Fort Vermillion Post Journals, 1826-1827. HBCA B.224/a/2
 Fort Vermillion Post Journals, 1827-1828. HBCA 224/a/3

McDonald, A. 1872. *Peace River; a Canoe Voyage from Hudson's Bay to Pacific, by the Late Sir George Simpson in 1828. Journal of the Late Chief Factor, Archibald McDonald.* J. Durie & Son, Ottawa, Ontario.

PAC, MG19, A8, Vol VI:224. David Thompson's Notebooks.

Pyszczuk, H. W. 1987. *Economic and Social Factors in the Consumption of Material Goods in the Fur Trade of Western Canada.* Ph.D. dissertation. Department of Archaeology, Simon Fraser University, Burnaby, British Columbia.

Pyszczuk, H. W. 1988. Consumption and ethnicity: An example from the Fur Trade in Western Canada. *Journal of Anthropological Archaeology* 8:213-49.

- Pyszczyk, H. W. 1992. The architecture of the Western Canadian Fur Trade: A cultural - historical perspective. *Society for the Study of Architecture in Canada*, Bulletin 17:32-41.
- Pyszczyk, H. W. 1993. A "Parchment Skin" is all: The archaeology of the Boyer River Site, Fort Vermilion, Alberta. In: *The Uncovered Past: Roots of Northern Alberta Societies*, edited by P. A. McCormack and R. G. Ironside, pp. 33-44. Circumpolar Research Series Number 3. Canadian Circumpolar Institute, University of Alberta, Edmonton, Alberta.
- Pyszczyk, H. W. 2002. Archaeological Investigations: Fort Vermilion I (IaQf - 1) and Unknown Fur Trade Site (IaQf-2). Final Report, Permit 2002-227. Report on file, Archaeological Survey of Alberta, Edmonton, Alberta.
- Pyszczyk, H. W. 2015. *The Last Fort Standing. Fort Vermilion and the Peace River Fur Trade, 1798-1830*. Occasional Papers of the Archaeological Society of Alberta. Number 14. Calgary, Alberta.
- Simpson, G. 1938. *Journal of Occurrences in the Athabasca Department, 1820 and 1821, and Report*. Champlain Society. Toronto, Ontario.
- Smythe, T. 1968. Thematic Study of the Fur Trade in the Canadian West: 1670-1870. Preliminary Report Prepared for Historic Sites and Monuments Board of Canada. Ottawa, Ontario.