Excavations in Housepit 109

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Housepit 109 is the only housepit structure on the first moraine terrace overlooking the core of the Keatley Creek site to the east (Vol. III, Preface, Fig. 1). It is a medium sized housepit 9 m in diameter (Fig. 1). Because of its unusual location and because of several unusual aspects encountered during the test trenching of this structure in 1989, I decided to extend excavations inside the housepit in 1998. The goal of the extended excavations was to determine if HP 109 was a special function structure or simply a normal residence. The unusual aspects of the deposits noted in the 1989 testing operation were:

1) the occurrence of a dog sacrum and vertebrae wrapped in birch bark associated with the upper floor;
2) an unusually deep cultural fill (over 75 cm of fill) under the upper floor seeming to represent a single intentional fill episode; and
3) the reporting of a dense lens of ochre at the bottom of the test excavations.

Moreover the 1989 testing operation never did reach the bottom of the cultural fill in HP 109 so that we had no information on the nature of the bottommost deposits. All of these aspects were unique at the site. I reasoned that if the structure was a special function structure, it should exhibit non-typical lithic and/or faunal assemblages and perhaps have non-typical features or even fragments of prestige objects or special function objects. After the 1998 excavations, the results were still ambiguous but intriguing. Carbonized roof beams laying on the upper floor were dated to
220 +/- 50 BP. This is exactly contemporaneous with HP 106 and very close in date to occupations in both HP 104 and 105, all on the second terrace above HP 109.

**Stratigraphy (Fig. 2)**

**Stratum I:** This is a moderately compact, medium dark brown (10 YR 3/1) sandy silt with <10% pebbles and 20-40% granules (Fig. 2). It is a typical surface colluvium inside housepit depressions derived from the roof surface and soil formation processes. This surface thickens at the juncture of the roof and wall, but thins and becomes more pebbly and gravelly as one ascends the wall slope.

**Stratum II:** This deposit is composed of roof collapse material and is a moderately compact black (10 YR 3/2) sandy silt with about 10-20% pebbles. The roof is relatively thin throughout Squares A and B and is absent from Square C. The thinness of these roof deposits and their absence above much of the upper floor implies that this housepit depression may have been last used as a mat lodge with a thin earthen embankment around the roof edges, probably for a fairly short time period. Charred, semicharred, and uncharred roof beams occurred in the bottom of this stratum, often resting directly on the Stratum III floor. In some cases, bark slabs lay over the roof beams, and mold seemed to be actively growing on uncharred sections of beams, indicating a relatively recent construction and collapse of the structure.

**Stratum III:** This is a floor deposit composed of moderately compact gray black (10 YR 3/2) sandy silt with 10-25% pebbles. It is highly organic and there are many exotic lithic materials in the floor and its associated pit features (e.g., Feature 1). There were abundant lithic and faunal remains
associated with the floor seeming to reflect an intense occupation over a short time period as indicated by the thin roof and probably temporary structure erected within the basin of an earlier collapsed structure. There was an enigmatic charcoal-filled depression below the floor of Subsquare 2 of Square B.

Stratum IV: This stratum seems to represent both cultural and sterile fill material that was intentionally dumped into an unusually deep housepit depression. I refer to it as “construction fill.” It is a mottled gray/black and yellow brown (10 YR 4/1 and 10 YR 5/4) sandy silt with up to 60% pebbles. Substantial numbers of lithics (almost all exotic cherts and chalcedonies) were associated with this stratum in localized pockets while other zones of this fill were almost sterile, lacking even FCR. Occasional faunal remains including fish, large fragments of deer bones, shellfish fragments plus indications of hearths may represent temporary fires built for work feasts or work snacks. There were several examples of veritable lithic “dumps” of exotic material debitage with flakes piled on top of each other. These probably were generated by lithic production activities adjacent to the housepit being filled in and simply represent the discard of waste material to help fill in the old depression.

Stratum V: This deposit also represents material intentionally dumped into the HP 109 depression in order to raise the floor level to the height of the upper floor. The extended excavations of 1998 failed to identify a clear distinction between Stratum IV and V deposits, and thus, Stratum V has been subsumed under the Stratum IV heading. In 1989, a concentration of red ochre powder was reported near the bottom of this fill deposit (at 100 cm BS) in the southwest corner of the Square B test trench, however, it now appears that this was more likely an intensely fire-reddened deposit. As in
Stratum IV, lithics occur in locally variable concentrations and are almost entirely exotic cherts and chalcedonies.

Stratum Va was defined as a light colored (10 YR 6/4) sterile lens of dumped material within Stratum V.

Stratum VI: is a curious deposit of brown (10 YR 6/6) loam resembling aeolian loessic deposits with few pebbles that usually overly sterile till in offsite areas. However, in this case, the loam which is up to 20 cm thick, lies over the distinctive lower floor deposit (Stratum VII). Since there is no roof deposit, or any other kind of deposit between this loam and the floor, it seems most likely that this loam was brought into the structure by the lower floor occupants and was used to raise the level of the floor (possibly to counteract water seepage?) and provide a soft and dry floor cover. An intentional covering of the floor is also indicated by the occurrence of a large flake found resting on a rock laying on the bottom of this deposit and by the occurrence of relatively abundant fish remains in Subsquares 6 and 10 of Square B. An early date for this deposit is indicated by the predominance of trachydacite flakes and caliche evaporite deposits on the bottom of many flakes and rocks. There appears to be no roof deposit or slope colluvium covering any of the lower floor deposits which seems curious given the long interval that is implied between the abandonment of the lower floor and the construction infilling of the depression in preparation for the upper floor occupation. A Shuswap style point (Vol. I, Chap. 3, Fig. 6) was found in a deposit that may have either been construction fill (Stratum IV) or early floor fill (Stratum VI).

Stratum VII: This constitutes the lower floor of HP 109 and rests directly upon sterile till in some areas, but is underlain by lenses of till-like material and an additional black lens in some places. In some areas this floor
was very distinctive, while in other cases there seems to be no appreciable floor accumulation or deposit and the material used to fill the original house depression (Stratum IV and V) seems to rest directly on sterile till. Where it was easily identifiable, the lower floor was more silty and loamy than the construction fill (Stratum IV) or the underlying till and appears to have been composed of soil that was largely brought in. In Subsquare 11 of Square B, there was a clear deposit of clean silt under the floor and some was banked up against the wall indicating that special flooring soil had indeed been brought in and deposited on top of the till surface. The floor varied in color from black to brown. Trachydacite dominated the lithic assemblage and many flakes and pebbles had caliche evaporite deposits on their undersides. Fish remains were the most common faunal element in the floor deposits.

Stratum X: This was sterile till which contained up to 60% pebbles in some areas.

**Features**

Feature 1989-1: This was recorded as a very shallow depression in the center of the test trench in Square A. Excavators had difficulty determining if this depression was simply a local dip in the floor (Stratum III) since its fill is similar to floor deposits, or if it was an intentional excavation. This still seems unclear.

Feature 1989-2: This feature consisted of relatively deep rubified sediments beneath the floor (Stratum III) in the south end of the test trench in Square B (Fig. 3). Reddening extended about 10 cm into the underlying deposit (Stratum IV) which is a depth consistent with an intensely used hearth.
Feature 1989-3: This is another shallow depression in the upper floor (Stratum III) filled with floor-like sediments and seemed to be lined in places with birch bark with a mat of burned fir needles beneath the bark. Some fish ribs and ochre occurred in the fill. This feature also occurs in the south portion of the test trench in Square B and, according to field notes, would seem to occupy the same position as Feature 2. Excavators again had difficulty determining if this was simply a localized dip (8 cm deep) in the floor deposits or an intentionally excavated depression.

Feature 1998-1: This is an unusual hearth-like feature since it occurs at the very bottom of the fill (Stratum IV) and extends through the loam fill (Stratum VI) covering the bottom floor. The remaining rubification was only 1-2 cm thick (the upper portion having been removed in 1989), but it is extremely intense and may have been mistaken for ochre powder by excavators in 1989 when they encountered the upper portion of this feature. It is unclear if this was a fire set in the lower portions of Stratum IV (in which case it would have had to be a work fire lit during the infilling of the housepit depression with Stratum IV deposits), or whether this feature represents a fire lit on the surface of the loam (Stratum VI) after it was deposited over the lower floor when the earlier structure was still in use.

Feature 1998-2: This is another hearth that clearly occurs within the construction fill represented by Stratum IV. It is situated in Subsquare 15 of Square B and can be seen in the stratigraphic profiles (Fig. 2) 26 cm below the upper floor and 50 cm above the lower floor. There are a number of faunal remains associated with it including several broken deer long bones, one piece of antler, one rabbit-like scapula. The upper part of this deposit is dark black, while fire-reddening extends to a depth of about 9 cm. It seems
that this may have been a work feast hearth for preparing meals for workers filling in the housepit depression.

Feature 1998-3: This was originally thought to be a pit depression dug into the upper floor (Stratum III) and construction fill (Stratum IV). It had a distinctive basin shape and some color differences with the surrounding Stratum IV matrix in Subsquares 12 and 16 of Square B. However, the shape was unusual and boundaries were not always clear cut. Moreover, the exotic chert artifacts in the fill of this “feature” were exactly the same as those in the rest of Stratum IV. It became apparent that this was more likely simply a fortuitous basin shape created by the infilling of the older house depression with construction fill originating from different colored deposits. This seems the most likely interpretation at present.

Feature 1998-4: This was one of the most difficult to define features encountered at Keatley Creek. It is a large storage pit about 80 cm deep dug down from the upper floor (Stratum III) through all of the Stratum IV, VI, and VII deposits, stopping at sterile till. The outline of this pit is very clear where it cut through the west wall of the earlier house both in section and in plan view (Figs. 2 and 4), however, the boundary of the east side of the pit with Stratum IV is very indistinct. The existence of this pit is supported by the concave nature of the fill units visible in stratigraphic sections in the center of the pit (Fig. 2) and by the complete absence of any lower floor deposits immediately under the inferrable boundaries of the pit. It is also a size and shape that is consistent with other large storage pits that have been excavated in small structures apparently used for rituals. Interestingly, as in other large storage pits (notably some of those in HP 7—see Vol. I, Chap. 10, Appendix 3), a deer scapula was left in the pit in an almost vertical position against the pit wall (Fig. 2). Such scapula may have been used for
excavating the large amount of dirt needed to be removed from these pits and to fill them. An earlier storage pit may have existed to the east of Feature 1998-4, however, this is even less certain.

**Artifacts:**

Lithic artifacts from HP 109 pose some of the most interesting problems at Keatley Creek. The chipped stone associated with the upper floor (Stratum III) and the construction fill (Stratum IV) is almost exclusively made from exotic cherts and chalcedonies. This is the complete reversal of the pattern in virtually every other housepit at the site where vitreous trachydacites characteristically make up 80-95% of the assemblages. The predominance of cherts at HP 109 is even more enigmatic since almost none of the chipped stone in the construction fill appears to have been used or modified, and it occurs very abundantly in local pockets sometimes as piles of flakes touching each other. Clearly, these must have been thrown into the construction fill as a coherent dump of flakes probably produced by someone flintknapping adjacent to the fill activities very possibly for the production of bifaces which may have been used as gifts to workers since the scale of production seems so large. One hesitates to invoke ritual explanations yet again for such an unusual occurrence, however the occurrence of so much exotic raw material is extremely enigmatic and practical explanations do not come easily to mind unless there was a major shift in access to raw materials that accompanied the Protohistoric period. This seems possible. For instance, during a brief period after the horse was introduced and before metal became commonly available, the horse may have enabled individuals to travel farther to obtain better quality lithic materials thus completely changing the character of early Protohistoric raw
material procurement and use. Horse remains were recovered from a cache pit at the southern end of the site in association with Kamloops points, thus indicating that horses were present in Protohistoric times (see the description of EHPE 21 in Vol. III, Chap. 11.22). The analysis of lithic materials recovered from the 1989 test trench is reported by Spafford (Vol. II, Chap. 14). Of note is the unusually high percentage of bifaces, probably indicating male dominated activities. A floor plan of artifacts recovered from the upper floor is presented in Fig. 5.

The lithic assemblage associated with the lower, earlier floor (Stratum VII; see also Fig. 4) was remarkable in terms of its paucity. The few flakes and modified artifacts that did occur there were all almost entirely vitreous trachydacite. Since the 1989 excavations stopped before reaching the lower floor, these have not been analyzed in detail, but field observations noted the prevalence of both pressure flakes and bipolar flakes/cores. If detailed analysis supports the field observations, this would constitute a very unusual composition of modified lithic artifacts compared with virtually all other floor assemblages at the site. A sandstone abrader or saw was found on the floor and there were an unusual number of large cobbles and boulders on the floor. There was also an unusually smooth round cobble in the southeast corner of Square B, reminiscent of some of the special cobbles venerated by New Guinea Highlanders in their sanctuaries (Hampton 1999).

There were also some unusual faunal remains associated with the upper floor (Stratum III). In particular, the sacrum and a few articulating lower lumbar vertebrae of a dog together with some salmon bones were found covered with a thick layer of fir needles with the sacrum wrapped in birch bark under a rock in Square B (Fig. 5 and 6). These appear to represent the remains of a meal and constitute the best evidence that we
have for the consumption of canids at Keatley Creek. There were 33 canid bones from the floor (including the sacrum and several lumbar vertebrae already mentioned) recovered in 1989. In 1998, many more salmon bones were recovered from the floor in some places forming “carpets” of small fin and rib elements. These have not yet been analyzed in detail.

It is interesting to note that both the upper and lower floors contained bird bones, although these have not yet been identified to species.

Discussion

There are certainly a number of odd aspects to HP 109. It is the only substantial structure on Terrace 1 which overlooks the core of the site (Vol. III, Preface, Fig. 1). There is a very small, insubstantial and enigmatic structure only a few meters to the south (EHPE 26, Vol. III, Chap. 11.27), and there is some sort of roasting pit immediately to the east (EHPE 24, Vol. III, Chap. 11.25) as well as a series of cache pits somewhat farther away on the terrace that may or may not be associated with HP 109. It is certainly interesting that one of these cache pits (EHPE 10; Vol. III, Chap. 11.12) that we tested was notable for the large number of deer or elk bones left in it which seems to indicate stored feasting foods (Romanoff 1992). Thus, HP 109 has a unique location and unusual associations with other features.

There are two occupations represented in HP 109. The lower, undated floor lacked any significant charcoal but seems to be associated with a Shuswap point. The deposits appear quite old due to caliche evaporite deposits on the undersides of many artifacts and rocks, and the
occupation may be contemporaneous with the use of the roasting pit only a few meters to the east. The lower occupation is remarkable among all the structures at Keatley Creek for its extraordinary depth, especially for such a small structure. The lower floor was covered with loams and sands brought in which may indicate a ritual or high status structure. There are few lithic remains, most of which appear to be atypical of normal residential assemblages, and there are a moderate number of faunal remains, mostly fish but including a probable bird wing bone. The occurrence of numerous large cobbles and a boulder on the floor is also unusual as was the occurrence of a particularly round and smooth cobble near the wall. There are no deposits that seem to represent an earth covered roof over the bottom occupation, nor are there any carbonized beams indicating that the structure was burned as was usually the case at Keatley Creek. The lack of an earth covered roof is consistent with other interpretations of the earlier structures at the site (Vol. I, Chap. 17). If this was the case, it may well be that the earlier structures were not intentionally burned either since burning may have only been employed to facilitate the removal of earth for re-roofing events.

The upper floor also has its enigmatic aspects. This occupation was dated to 220 +/- 50 BP which is exactly contemporaneous with HP 106 on Terrace 2, immediately above HP 109, and is essentially contemporaneous with the occupation of HP 104 and 105, also situated on Terrace 2. It seems clear that whoever decided to occupy HP 109 in the Protohistoric period put in a great deal of effort to fill in a pre-existing housepit with about 75 cm of “construction fill” before establishing a new, and apparently not very substantial structure, given the thinness of deposits that can be interpreted as roof covering soil. One wonders why a new, less labor-demanding
housepit excavation was not undertaken, or even more shallow housepit depressions re-occupied. The people who went to great effort to fill in HP 109 used a very unusual suite of lithic raw materials that differed dramatically from those previously used at the site, and they manufactured more bifaces than at other structures. A bird bone was also associated with the upper floor as were very high densities of salmon ribs and fin elements. Bird bones may be related to ritual work, depending upon species, while dense concentrations of fin and rib elements also characterized several other structures suspected of having specialized ritual functions (e.g., HP’s 9, 104, and 105). Also, like some of these other suspected ritual structures, HP 109 seems unusual in having a very large storage pit associated with its relatively small size. In the cases of the smaller structures such as HP’s 9 and 107, the large pits seem clearly out of proportion to the number of probable residents in the structure, and it is hypothesized that the large interior storage pits may have been for the storage of secret society food resources, wealth, and ritual paraphernalia.

One other unique feature of the upper floor of HP 109 are the clear indications of using canids for food. In Simon Fraser’s journals, dogs seem to have been used as delicacies and were consumed primarily at feasts. This is consistent with the special role of dog consumption in other traditional societies in the world (see Vol. II, Chap. 10; see also Swartz 1997).

All in all, there are enough indicators of specialized or unusual activities and contexts associated with HP 109 that we may tentatively propose that it may have been a special function structure used for feasting or ritual. However, a better assessment of this proposition would be possible if the entire structure could be excavated, an undertaking for which we lacked sufficient resources. It is unfortunate that so few artifacts
occurred on the lower floor, since a larger sample of artifacts could potentially reveal more about the nature of the activities in this early structure and how it was integrated into the rest of the community at Keatley Creek.

References

Hampton, O.W.
1999 *Culture of Stone*. Texas A & M University Press, College Station.

Romanoff, Steven

Schwartz, Marion

Figure Captions

Figure 1: A schematic plan of HP 109 showing the location of excavated squares.

Figure 2: Stratigraphic profiles (A) of the original test trench; (B) of the east, south, and west walls of Square B (excavated in 1998) in HP 109.

Figure 3: Plan view of Feature 1989-2.

Figure 4: Plan view of the lower floor (Stratum VII) of HP 109.

Figure 5: Plan view of the upper floor (Stratum III) of HP 109.
Figure 6: Plan view of the canid sacrum and vertebrae found wrapped in fir needles and birch bark on the upper floor (Stratum III) of Squares B and D.
A

HP 109: ORIGINAL TEST TRENCH

SQUARE A

SQUARE B

SQUARE C

Extent of excavation

Dog sacrum and lumbar vertebrae wrapped in bark and fir needles

Extent of excavation

Extent of excavation

0 20 40 60 80 100 cm
Burned beams at ~30 cm B.S.

14C sample of beams taken

31 cm NE

Fir needles

Birch bark

Canid lumbar vertebrae

Salmon ribs

Sacrum

34 cm D.B.S.

26 cm D.B.S.

50 cm